ASSESSING THE ECONOMIC IMPACT OF COPYRIGHT REFORM IN THE AREA OF TECHNOLOGY-ENHANCED LEARNING

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Marketplace Framework Policy Branch, Industry Canada

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CONTENTS

EXECUTIVE SUMMARY

This report examines the economic impact of a number of possible changes in the provisions of the *Copyright Act* applying to educational institutions. The legislative proposals being examined would broaden the "exceptions" in the Act applying to non-profit educational institutions in two respects: by extending them to distance instruction; and by expanding them to include the educational use of films, videos and certain publicly available material on the Internet.

The proposals are aimed at addressing concerns about the costs and difficulties of licensing non-print materials for educational use. The significant transactions costs involved in arranging licenses, along in some cases with the costs of royalty payments, are a deterrent to the use of digital content and other non-print materials in ways that are not covered by the educational exceptions in Sections 29.4 to 30 of the Act. These issues have taken on increased importance with the growth in distance education courses delivered online or with online enhancements and the rising use of computer-based technologies within the classroom, in research and in other education-related activities. Although the licensing of digital content is being facilitated by new online search and rights management systems, these developments only partly address the problems schools and universities face in responding to the growing demand of staff and students for access to electronically transmitted content.

Changes in copyright law can be assessed in terms of their consequences for natural or moral rights and on the basis of their expected economic impacts. The latter, which is the focus of this study, requires an estimation of the opposing impact of changes in copyright protection on incentives for the production of intellectual products and on access to these works by consumers, including those who would draw on these works to create new intellectual products. An assessment was made of these and other impacts of a number of the options stakeholders have proposed for reforming the provisions of the Act pertaining to educational institutions.

Extending Current Exceptions to Distance Education

Under Sections 29.4 to 29.6 (1) of the Act, reproduction of certain types (handwritten material onto a dry erase-board or flip chart, copies for use in a overhead projector) or for specified purposes (tests or examinations), the playing of radio and television programs at the time they are aired, and the copying of a news program or news commentary for showing later over the year are exempt from licensing requirements, so long as these occur "on the premises of an educational institution". These are all activities that tend to occur with little advance planning. While the exceptions introduced in the 1997 amendments to the Act facilitate these activities in classroom instruction, current licensing requirements essentially preclude these activities in distance education. Extending the exceptions to distance education would be beneficial since it would encourage schools to make greater use of materials that confer gains in excess of their costs of provision. At the same time, this reform would not have any significant impact on incentives for creation of the relevant content.

Under Section 29.5 (b) of the Act, an exception is provided for sound recordings played within classrooms. In distance education where this exception does not apply, the

complicated pattern of ownership rights and the difficult and lengthy processes involved in obtaining clearances have been a deterrent to the use of sound recordings. Extending the exception in the Act to distance education would allow instructors to take advantage of new opportunities for presenting their material and not have any significant negative impact on incentives for production of sound recordings.

Instead of extending these exceptions, the government could create a conditional exception that would be terminated when and if the requirements of educational institutions could be met through blanket licences. A conditional exception creates the incentive for strategic responses by stakeholders and would be very difficult to successfully implement. If these difficulties could be overcome, the net benefits are still likely to be less than those that would result from simply extending existing exceptions to distance education.

Facilitating the Showing of Films and Videos

Two options to facilitate the showing of films and videos were examined: extending the list of exceptions in Section 29.5 of the Act to the showing of films and videos on school premises; and expanding the definition of the classroom so that rights obtained for the performance of films and videos would apply to all showings, including those to distance education students. Both reforms would likely to produce significant social benefits. Providing an exception for classroom showings would allow institutions that are under budgetary constraints to take fuller advantage of educationally useful films and also reduce the outflow of royalty payments to foreign rightsholders. The second proposed reform directly addresses the problems institutions face in clearing rights for the use of films and videos in televised and on-line distant education courses. As with the other reforms discussed above, the consequences for producers and creators, who are generally targeting the overall North American if not the global market, would be extremely small.

Facilitating Access to Materials on the Internet

Under one proposed reform, an exception would be introduced in the Act to allow educational institutions to freely access content that has lawfully been made available on public Websites. This measure would respond to the concern that most use of the Internet as a learning vehicle occurs outside of schools. The *Copyright Act* would facilitate and encourage the use of Internet materials in coursepacks, distance learning, and classroom instruction and support the growth of online learning, which is seen to be important to Canada's evolution as a knowledge-based economy. A policy to facilitate access cannot affect creative incentives where works have been produced without any expectation of compensation, which is the situation for the vast majority of material available on public Websites. The reform of copyright law would complement technological changes that are making it easier for those who want to charge for use of their material to control access and negotiate licensing agreements.

An alternative option would be to allow free access to public material on the Internet until a suitable blanket licence becomes available. It would be very difficult to establish criteria for an "adequate blanket licence". Moreover, while a licence offering access to all Internet material of potential interest to students and teachers could be financially burdensome for some educational institutions, much of the royalty income it would

generate would be owing to foreign rightsholders. Hence, as with the other reforms being considered, the preferable option is simply to extend the exceptions in the Act relating to educational institutions.

1. INTRODUCTION

In a multi-media world, there are many ways to develop instructional content and deliver it to students. Educational institutions have been increasingly taking advantage of new learning materials and advanced information and communications technologies in their efforts to develop instruction that is better tailored to the needs of different types of learners and to the demands of a knowledge-based economy. As educational institutions adapt to the opportunities provided by new technologies, however, new questions are arising about the appropriateness of the constraints they are subject to under Canada's copyright law. This report examines the economic impact of a number of possible changes in the provisions of the law applying to educational institutions.

The legislative proposals being examined would broaden the "exceptions" in the Act applying to non-profit educational institutions in two respects: by extending them to distance instruction; and by expanding them to include the educational use of films, videos and certain publicly available material on the Internet. The first set of reforms would provide the same privileges to distance education as were provided to classroom instruction under the amendments made to the *Copyright Act* in 1997. The second set of proposals is aimed at updating Canada's law and bringing it in line with reforms recently introduced in some other countries. Notable among the latter is the *Technology, Education and Copyright Harmonization Act* (TEACH Act) that was signed into law in the U.S. in November 2002. This allows accredited non-profit educational institutions to display and perform nearly all types of works, including films and digitalized works, in classroom and distance education, without the permission of the copyright holder, subject to certain restrictions and safeguards.

The Copyright SubCommittee of the Information Highway Advisory Council (1995, p.3) concluded that Canada's *Copyright Act* provided sufficient protection for new works, "including multimedia works that are created or distributed in a digital medium". This leaves open a number of questions about the application of Act. For example, should some content on the Internet be considered "published" works, so that teachers and/or students who reproduce a portion of a work from a Web site, without the consent of the copyright owner, qualify for protection under the fair dealing defense in Canadian law? More significantly, the IHAC Subcommittee does not address the question of whether the Act continues to be appropriate in a digital environment. If a balance had been previously achieved between the interests of owners and users of copyrighted material, does that balance still hold? In the educational sector, where new technologies are having a major impact, there is no reason to expect that this is the case. Although the major technological changes that have occurred may not have affected the underpinnings of the law that derive from considerations of natural or moral rights, it would be surprising if they had a similarly benign impact on the tradeoff between economic costs and benefits.

There is very little published data on the use of copyrighted material in the educational sector. Within the time and budgetary constraints of this report, it was not possible to undertake a major survey and build the database needed for a full cost-benefit evaluation of proposed reforms. Accordingly, the objective of the report is to provide some sense of the *relative* size of the economic costs and benefits associated with various proposals. To

make these assessments, a number of individuals involved in various aspects of licensing materials for educational use were consulted and an extensive literature was reviewed.

The next section sets out an economic framework for the evaluation of proposed changes to copyright law. Since a number of the proposals being examined would impact primarily on distance education, Section 3 assembles information on the extent of distance education and the nature of technology-enhanced learning (TEL) in Canada. As further background for the assessment of the proposals, Section 4 examines major issues connected with the licensing of non-print materials for use in classroom and distance instruction. Proposals to extend a number of the current exceptions in the Act to distance education are examined in Section 5. The alternative of a possibly temporary or "conditional exception" that would expire when licensing concerns have been addressed is also examined. The following sections look at the impact of some proposed new exceptions. Section 6 of the report considers some exceptions that could be applied to films and videos and Section 7 examines various proposals to facilitate access by educational institutions to material on the Internet.

2. FRAMEWORK FOR ANALYSIS

2.1 The Economic Analysis of Copyright

The rationales for copyright law fall into two broad categories: entitlement rationales that are grounded in European philosophy and emphasize the natural right of individuals to the fruit of their labour; and economic rationales that view copyright as a mechanism for maximizing the economic well-being of both producers and consumers of intellectual property. Although natural right arguments were seen to be influential in the Phase II reforms to Canada's *Copyright Act* that were enacted in 1997,[1] the focus of this analysis is on the economic impact of changes in copyright law.

From an economic perspective, the central challenge, as Besen and Raskind (1991, p.5) observe, is "to create incentives that maximize the difference between the value of the intellectual property that is created and used and the social cost of its creation, including the cost of administering the system". Copyright protection provides incentives for creative activity that would be weak or non-existent in a world where traders, who had not borne any of the costs of creation, were free to copy and sell intellectual works. At the same time, protection increases the price of intellectual works and thereby limits distribution of such works to consumers, including those who may borrow from these works to develop new intellectual products.

The costs and benefits that must be balanced in copyright policy are illustrated in a model developed by Landes and Posner (1989). They examine a situation in which authors must compete against copiers that can produce perfect substitutes of the original. The authors who produce intellectual works use the completed works of others as inputs in their own production process. Copyright protection increases the costs of creating the work and the price consumers must pay for the original and for copies. As a result the combination of producer and consumer surplus generated by the work is likely to decline. Total welfare will only increase to the extent that copyright protection encourages the creation of more works and the resulting benefits more than offset the decline in surplus from the given work along with the costs of administering the copyright system.

In the economic approach, copyright protection is a "second-best" response to the market failure that would otherwise result in an inadequate investment in intellectual works. The focus is on developing a solution that maximizes social welfare, which is calculated by adding together the net benefits consumers and producers enjoy from all created works and deducting the costs of operating the copyright system. Among the significant features of this approach is, first, its reliance on market evaluations; the benefits of intellectual works are based on consumers' "willingness to pay" as indicated by market demand. Second, no attention is generally given to the distribution of costs and benefits of government intervention; the objective is to maximize the combined surplus, without regard to the differential impact on consumers and creators.

Landes and Posner derive a number of implications from their model. They find, for example, that copyright protection should be stronger for works that are more socially valuable. If it is possible to distinguish between literal infringers and those who use

[1] See, for example, Rushton (1997).

copyright material to create new works, there should be broader copyright protection against the former group than against the latter. The model also indicates that stronger protection is more desirable, the lower the costs of administering and enforcing the copyright system and the more responsive authors creators are to pecuniary incentives.

2.2 Assessing the Impact of Adjustments in Copyright Law

Although, they model copyrights as a single index, Landes and Posner recognize that there are a number of dimensions to copyright protection. The central policymaking issues involve making "intelligent estimates" with respect to such matters as the scope and term of copyright protection, the type of works that are protected, exemptions, and accepted defenses against infringement. With an understanding of the factors influencing the costs and benefits of copyright protection, policymakers can make adjustments in the various features of copyright law to move towards a system that maximizes social welfare.

Similarly, in a recent study of copyright reform, the Australian Productivity Commission (1995) observes that, while its is extremely difficult to determine the level of copyright protection that jointly maximizes producer and consumer interests, policymakers can adopt a "cautious incremental approach" that will lead to a level of protection that is closer to optimal than otherwise. This requires that specific proposals to alter the protection afforded particular works be carefully assessed to determine whether they increase social welfare, as measured by the impact on consumers and producers. Stronger protection may increase welfare if it leads to significantly increased production of copyrightable works. Welfare would not increase, however, if the additional protection is unnecessary or if the costs to consumers outweigh the benefits of increased production. In Australia, multimedia producers have argued that they need stronger protection. From its examination, however, the Commission found that some multimedia products are more likely at a point where protection is excessive so that stronger protection would reduce rather than increase welfare.

A policy will move the system towards the point of welfare maximization if benefits exceed costs. Consider a measure that would weaken copyright protection. The expected return from creative activity will decline leading to less investment in the production of intellectual works. These social losses must be compared with the benefits resulting from:

- the improved access of consumers to the works;
- the lower cost of creating new works that draw upon earlier intellectual products; and
- savings in public sector administrative and private sector transactions costs.

The costs of a reduction protection will be small if prestige and other types of nonpecuniary income rather than financial rewards are the primary motivation for creators. Costs will also be minimal if current protection generates adequate investment incentives. For example, it has been argued that, for films, copyright protection longer than 30 years is excessive since firms would seldom take income streams extending

beyond 30 years into their investment decision.[2] As well, the development of new works may not be significantly affected if the measure impacts primarily on others rather than the creators of the intellectual products.[3]

The potential savings in transactions costs (the third benefit identified above) has been an important consideration in the application of copyright to the educational sector. Landes and Posner argue that one of the justifications for the U.S. "fair use" doctrine is that it provides access to works in situations where high transactions preclude voluntary negotiations. Allowing teachers to use such works under fair use benefits students but does not harm the creator since there is no loss in sales revenue. The appropriate application of fair use - or "fair dealing", the doctrine that applies in Canada – must take account of market mechanisms that have developed to reduce transactions costs and facilitate arrangements between copyright holders and users. Access Copyright, COPIBEC and other collectives that negotiate broad licences on behalf of a number of copyright holders have substantially reduced the costs of transacting licences in the educational sector.[4]

The evaluation of copyright policy will differ, depending on whether the focus is on what is best from a global or national perspective. When the focus is on the welfare of Canadian citizens, copyright licence payments to foreign producers are costs and not simply transfers. In addition, in a global context, it is necessary to be sensitive to differences in copyright protection in Canada and other countries that may affect the ability of Canadians to compete against U.S. and other foreign producers. In the educational sector, copyright costs will influence the costs of providing distance education targeted at students in other countries.

As a net importer of intellectual products, Canada must give particular attention to how adjustments in copyright law will impact on the outflow of copyright payments to foreign producers. The benefits of a weakening in protection that would reduce payments to foreigners and also lessen the deadweight loss associated with non-competitive pricing must be balanced against this country's long-term interest in an international system that encourages the growth in global intellectual property. Adjustments aimed at maximizing the net benefits from copyright law must also take account of Canada's commitments under WIPO and other international agreements, including its "national treatment" obligations to provide foreigners with the same copyright protection that is provided to Canadian nationals.[5]

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[2] Australian Productivity Commission (1995), p. 21.

[3] This would occur, for example, if the measure were directed towards the "neighbouring rights" that benefit performers and producers of sound recordings.

[4] Besen, Kirby and Salop (1992) describe how the benefits in terms of transactions cost savings might be counterbalanced by the anticompetitive behaviour of collectives. However, Hollander (1984), who uses a model to investigate the general welfare impacts of collectives, finds thee is no evidence that collectives discourage membership and thereby entry.

[5] An exception applies to the public performance rights for performers and record companies. These rights are governed by the Rome Convention, which requires reciprocity rather than national treatment.

3. DISTANCE EDUCATION AND TEL IN CANADA

3.1 The Extent of Distance Education

Distance education can be defined very generally as "a form of education in which students are separated from their instructors by time and/or space".[6] This broad definition incorporates a variety of delivery approaches, variously described by terms such as alternate delivery, distributed learning, self-directed learning and online learning. With Canada's vast expanse and its relatively small population, the development of a system to deliver education to students in remote and sparsely populated regions was an important undertaking. Over time, distance education has also become important in meeting the needs of students with disabilities and special needs, students outside of Canada, adults returning to school, workers undertaking professional development, and graduate researchers needing to draw on the scholarly resources within different institutions.

There are no comprehensive data on distance education in Canada. At the k-12 level, distance education consortia linking elementary and secondary institutions have been established in a number of jurisdictions. Major responsibilities for delivery of distance education courses has in some cases been given to independent organizations, such as British Columbia's Open Learning Agency and Ontario's Independent Learning Centre, which recently became part of TVOntario. The Council of Ministers of Education, Canada (CMEC) indicated that, in 1994, correspondence enrollments totaled 225,321 for 953 elementary and secondary courses.[7] If growth occurred at the same pace as overall enrollment in primary and secondary schools, correspondence enrollment would be up to around 226,200 by 2001.

At the post-secondary level, the Canadian University Distance Education Directory provides a list of distance education courses Canadian universities offer in some 40 subject areas. All but 3 of the 56 universities covered in the 2001/2002 directory offered distance education courses, with some institutions (most notably, Athabasca University, but also Acadia, Waterloo and the University of Manitoba) providing instruction in most of the listed subject areas. Universities do not provide enrolment data for distance education, but the Council of Ontario Universities (2000) estimates that in 1998/99 there were well over 26,000 full course equivalent registrations in "distributed learning courses" in the province, with many of these from on-campus students. This suggests that participants in distributed learning account for about one of every 9 university students - a ratio that if applied at the national level leads to an estimate of almost 65,000 full course equivalent registrations for 1998/99.

Community colleges are also active in providing distance education. Through OntarioLearn.com, for example, a consortium of 22 Ontario Community colleges offers 400 on-line courses. To estimate the provision of distance education, it is necessary, as well, to take account of the offerings of some open universities, such as Télé-université du Québec and the Open Learning Agency of British Columbia, that are not included in the university directory, and of various collaborative arrangements to facilitate the

[6] This is the definition used in U.S. Copyright Office (1999).
[7] Council of Ministers of Education, Canada (1997),

delivery of courses to distance learners. The latter include Contact North, which serves residents in Northern Ontario, the Franco-Ontarian Distance Education Network and Inter-Universities North, a co-operative arrangement to deliver courses to communities in Northern Manitoba. In addition, the statistics cited above exclude the large number of non-credit personal and professional development courses provided by universities.

Although distance education serves a broad range of students, one of the main markets consists of older learners who value the flexibility and convenience of distance learning. Statistics Canada sheds light on this segment through its Adult Education and Training Survey, which measures all the education and training activities of people 17 and over who do not attend regular school and university.[8] The survey indicates that, in 1997, more than 6 million people aged 17 or over, or nearly 28% of adults participated in education and training activities. Participation was higher for the employed than the unemployed population and was sharply higher for adults under 55 than those 55 and over. While public schools, colleges and universities accounted for three-quarters of all programs and one-quarter of all courses taken in 1997, the survey indicates that commercial schools and employers are also important providers of adult education.[9]

3.2 Technologies Used to Deliver Distance Education

While there is growing interest in new information technologies, much distance education continues to be based on print materials. The Adult Education and Training Survey found, for example, that "recent developments in educational technology, such as educational software and particularly the Internet, are still used sparsely by learners".[10] Within educational institutions, new learning technologies were the medium of instruction in only about a quarter of the courses taken by adult learners. The majority of the offerings listed in the Canadian University Distance Education Directory consist of print supplemented by other tools, including audiotaped lectures, voice communication and Web sites. At Athabasca, Canada's largest distance education university, graduate courses are delivered online to cohorts of students and undergraduate courses are mainly provided through print with on-line enhancements such as Web pages, e-mail and computer conferencing.[11] At the elementary and secondary level, as well, reports point to the continued importance of print-based materials in distance education.[12]

Although they are not yet dominant, computer-based technologies, which have considerable appeal because of their versatility and ability to support a variety of real-time and asynchronous communications, are growing in importance. A variety of computer-based learning systems are in use. Some courses are delivered in real time through the Internet or using audiographics or compressed video and some are provided in a form that allow for independent self-paced learning. Courses may be prepared by the instructor, developed by subject experts with the assistance of instructional designers provided by the institution, or created through the collaborative efforts of a number of

[8] Full-time students are only included if: employers are subsidizing them; they are 20 or over and enrolled in elementary or secondary programs; or, they are 25 and over and enrolled in postsecondary programs.
[9] In 1997, commercial schools and employers each supplied 20% of adult education and training courses.
[10] Statistics Canada and HRDC, *A Report on Adult Education and Training in Canada: Learning and Living*, Cat.# 81-586-XPE, p.25.
[11] This draws on Davis (2001).
[12] For example, Council of Minister of Education, Canada (1997).

institutions. Computer-based learning systems utilize a variety of commercial software. WebCT, the most popular educational software, offers a suite of tools to support the creation of customized courses, facilitate course management and delivery, and enable communication among students and between the students and instructor.

In a recent study of online learning in post-secondary education, Cuneo et al. (2000) found that 57% of colleges and universities offered online courses over 1999/2000 and that the median offerings of these "online institutions" was 25 courses. Although online learning or "e-learning" may describe a form of distance study, these terms are also used to describe technology-enhanced learning that occurs within a traditional classroom.[13] In the study by Cuneo and his associates, twelve criteria were use to identify online learning and courses were counted as "online" only if they satisfied a majority of the criteria.[14] Among those institutions at the forefront in the use of online learning are Acadia University, where all students and staff have notebook computers and are linked to network resources everywhere are campus; the Technical University of British Columbia, a new public university that delivers the majority of its courses online; and Collège Boréal, a recently established college that uses advanced technologies to deliver programs to Francophones at 6 remote Northern Ontario campuses.

Institutions involved in online education are investing in a number of activities to strengthen their physical and organizational infrastructure. A recent survey found that, over the recent period, online institutions have been giving particular attention to: instructor training in teaching technologies; recruitment of more technical staff; cooperation with other institutions in software licensing; policies to encourage students to acquire computers; and provision of open access computers to students.[15]

At the primary-secondary level, examples of the application of new learning technologies include the Contact North's use of audiographic and computer conferencing facilities to deliver secondary courses to Northern Ontario residents; the Saskatchewan Government Correspondence Schools' use of satellites to deliver one way, and in some cases, interactive two-way video programs; and Nova Scotia's provision of distance education courses through sites equipped for interactive audiographics on Ednet, the Wide Area Network administered by the provincial education department. Provincial government's have joined together and also formed partnerships with private firms to promote the development of digital content and services. Along with the delivering course content to students, computer-based technologies are being used to provide support to teachers and inform parents about their child's program of study.[16]

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[13] Both are included in the definition used by the Advisory Committee for Online Learning (2001).

[14] The criteria include, for example, the following: course materials are delivered through digital networks; students submit assignments via digital networks; the course curricula is in electronic rather than print form; registration in the program is by the Internet; computer-mediated communications are enabled between students and instructors or tutors.

[15] Cuneo and Campbell (2000).

[16] A notable example is the LearnAlberta.ca project.

3.3 Significant Developments

Among the changes underway in distance education, three developments stand out as being potentially significant for copyright policy. First, distance education at the post-secondary level is growing rapidly. Registrations for distance education courses at Canadian universities have been increasing much faster than registrations for campus courses[17]. A recent survey by Ipsos-Reid reveals considerable interest among Canadians in online study, with 26% of the respondents indicating they had searched the Internet for courses and 59% stating they were likely to take an online course in the future.[18] In the U.S., where the conditions are similarly favourable for online study, International Data Corp. estimates that college students enrolled in distance education study increased from 710,000 in 1998 to 2.2 million in 2002 – and grew from 5 percent to 15 percent of all higher education students.[19]

The growth in distance education and online learning is being fuelled by a number of forces, including technological changes that have made it feasible for 9 out of every 10 students to have a computer at home[20] and the trend to a increasingly knowledge-based economy in which jobs require problem-solving ability and continued learning. Distance education has strong appeal to adults who are looking for a flexible, convenient form of learning they can combine with work and home responsibilities. Distance education can be expected to grow as the demands for skill upgrading and for knowledge acquisition increase. Looking out to the year 2005, the Advisory Committee for Online Learning (2001) outlines the vision of a Canada in which lifelong learning is "an accepted fact of life":

> Even if job and family commitments prevent Canadians from attending a campus, they will find online the learning opportunities they need as a basis for personal fulfillment, not to mention keeping their job, finding a new one, seeking a promotion or creating their own business. E-learning will allow learners to choose among an unprecedented range of courses and programs from different colleges and universities to find the precise mix that meets their needs.

Second, a wider variety of materials and of resources is being used in distance education courses. This is partly the result of the movement from strictly print-based correspondence courses to online programs or courses that involve both print and online components. In addition, it reflects the expanding role of distance education technologies, which now includes delivering materials that supplement in-class instruction and supporting advanced research training. Within both K-12 and post-secondary institutions, there is an increasing emphasis on computer-mediated systems that allow students to access a variety of supplementary content, develop their research skills and engage in practice and self-testing.[21] For students involved in advanced research, new learning technologies offer an opportunity to participate in "distributed research communities" and benefit from the advice and guidance of scholars in different

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[17] Athabasca University, for example, experienced about a 23% growth in course registrations over 1999/2000 when overall university enrolment was increasing in the 2 to 3 percent range.
[18] This is from: http: cyberatlas.internet.com/markets/education/article/0,,5951_1405141,00.html
[19] This is from: http://cyberatlas.internet.com/markets/education/article/0,,5951_152731,00.html
[20] Statistics Canada, *Education Quarterly Review*, vol.8, no.4, 2002.
[21] Developments were discussed in Hirshhorn (1999).

universities within and outside Canada. The Canadian Arctic Shelf Exchange Study, for example, brings together students and scientists working on a ship in the Beaufort Sea and in laboratories at various universities and private facilities in Canada and other countries.[22]

Third, the market for post-secondary distance education is becoming global and competition among providers in various countries is increasing. Canadian students can now choose from a wide range of online courses offered by public institutions and commercial providers in various countries. The directory, World Wide Learn, for example, provides information on accredited online degree programs, training programs and continuing education programs available globally in 144 subject areas.[23] As one response, Canadian institutions are establishing collaborative arrangements to better position themselves in the market. The Canadian Virtual University, for example, is a consortium of 13 Canadian universities that have collaborated to provide a single doorway to over 250 programs and 2000 distance education courses. Universitas 21 is an international network of 17 leading universities, including McGill University and the University of British Columbia. A major purpose is to establish a quality assurance framework that supports the efforts member institutions to compete in "the emerging global market for educational services". To the extent they affect course content and quality or the costs of delivery to distant education students, copyright policies will affect the ability of Canadian institutions to compete in this growing market.

[22] This is discussed in Canadian Association of Research Libraries (2002).
[23] Information is available at: http://www.worldwidelearn.com

4. LICENSING ISSUES

4.1 General Issues

Of interest for this report are issues related to the licensing of distance education materials and of various non-print materials for classroom teaching. Exceptions introduced in the 1997 revisions to the *Copyright Act* allow educational institutions to reproduce and perform certain works without seeking the permission of the copyright holder. These exceptions (which are discussed in Section 5 below) do not relieve institutions of the need to obtain licences for the reproduction of print material and the reproduction and/or performance of films and videos and digital content. Moreover, there are no exceptions in the Act that apply to distance learning; institutions must obtain the necessary clearance for all materials used to instruct students that are not on the school's premises.

Digitalization, which involves the conversion of various forms of information (including text, sound, images and video) into a binary code consisting of ones and zeroes for manipulation, processing, storage and transmission, implicates a number of the rights over which a copyright owner has exclusive control. When content is digitally transmitted, temporary RAM copies are made in the computers through which the material passes. Therefore, the copyright owner's rights of reproduction are implicated. The use of digital content in education are also likely to raise issues with respect to other rights specified in the Act, including especially public performance and telecommunication to the public.

In both classroom and distance education, most licensing is to acquire rights for the reproduction of print material. Institutional requirements for the copying of print materials have mainly been met through blanket agreements with the relevant collectives, Access Copyright (for institutions outside of Quebec) and COPIBEC (for institutions within Quebec). Licence payments by schools, colleges and universities pertaining primarily to reproduction rights for print material accounted for 72% of the $22.7 million in Access Copyright's 2001 revenues.

Although interest in the use of digital materials is growing, licensing activity is limited and relates mostly to supplemental material for use on Web sites and in electronic coursepacks. Licensing requirements will presumably increase as online instruction grows and as computers become more fully integrated into classroom programs. Access Copyright offers digital licences on a transactional basis for some works in its repertoire, but, at this point, this remains a small-scale activity.[24] Media officers dealing with publishers and rightsholders report various difficulties clearing materials for digital transmission. Significant time must be invested in some instances in tracking down the owners or multiple owners of individual works. Institutions have experienced difficulties gaining clearance for the digital use of some materials because of authors' concerns about the risk of unauthorized use. While institutions have been able to gain access to some digital materials at no cost, in other cases they have been required to pay fees well above those for analog uses to acquire licences that are highly restrictive. The Open Learning

[24] Access Copyright's Annual Report for 2001 indicates that 37 digital projects were completed, providing revenue of just over $18,000.

Agency, for example, sends course material to distance education students in print rather than electronic format because the latter would involve copyright fees that are 3 to 4 times higher.

Fewer problems have been encountered negotiating rights for the showing of films and videos in classrooms. There are a number of well-known distributors of feature films and documentaries. While performance rights for feature films are typically negotiated per showing, a number of institutions have entered into site licence agreements under which they pay a specified fee per student per year for public performance rights to films in the distributor's repertoire.[25] In B.C., the Advanced Education Media Acquisition Centre (AEMAC) negotiates public performance on behalf of all post-secondary institutions in the province with the two major feature film distributors, Audio Ciné Films and Criterion. AEMAC also provides post-secondary schools with copies of selected videos.[26] In other provinces, institutions can directly purchase documentaries, with the accompanying right for unlimited public showings, for a flat fee that is generally under $200. Media officers have experienced difficulties, however, tracking down rightsholders and gaining clearance for certain videos that are no longer in distribution. In addition, the site licences that institutions have negotiated apply only to classroom showings; obtaining rights for the inclusion of films in educational television broadcasts tends to be more costly and difficult. Similarly, gaining permission to digitalize films or film segments and incorporate them in online course materials can be problematic. Distributors that license classroom showings are not always authorized to provide the needed rights for reproduction and telecommunication to the public. Annual licence fees for the unlimited use of documentaries in online courses can run to thousands of dollars.

Still images present some unique problems for media officers in educational institutions. Image repositories that have been created partially address the needs of institutions. The University of Waterloo, for example, obtains most of the still images it uses in its online courses from an image bank under a site licence agreement. The needs of instructors, however, often relate to specific images that portray a particular point. In this case, identifying and locating copyright holders can be difficult and costly. Moreover, some institutions have found studios to be reluctant to grant permission for the use of images.

As a result of the exceptions added to the Act in 1997, it is not necessary to obtain performance rights to play a sound recording in a classroom. However, in distance education where this exception does not apply, recording rights have been among the most difficult to clear. This is due to the particularly complicated pattern of copyright ownership and the number of parties that have a claim to royalties. Institutions need to obtain rights to publicly perform a musical work from SOCAN, the collective society representing composers, lyricists, songwriters and their publishers, and pay additional royalties to another collective (Neighbouring Rights Collective of Canada) for the neighbouring rights held by sound recording performers and producers. If use of the sound recording in distance education involves reproduction of the musical work,

[25] Per student fees tend to be higher for smaller schools and schools with film studies courses. Data provided to the author indicate that, in site agreements negotiated by 12 Ontario Universities in 2000, the average cost per student was 23 cents.

[26] AEMAC purchases duplication rights for the documentaries it decides to purchase. The government covers these costs so that individual institutions must only pay minor dubbing costs ($21) to use the videos in AEMAC's repertoire.

institutions must also obtain the requisite clearance from the publishers or the Canadian Musical Reproduction Rights Agency, the society representing a large number of music publishers in Canada and abroad. To make a digital sound recording that can be used as part of an online course, mechanical rights need to be cleared, as well, from the copyright owners of the work or their representative. One media officer estimated that it would take 6 months to get all the required clearances for the use of one small excerpt of recorded music. As a result, the media officers that were consulted reported that their institutions' distance education schools tended to avoid the use of musical recordings that were not in the public domain.

4.2 Distance Education Licensing Costs

A questionnaire was sent to a small number of institutions to obtain some illustrative data on distance education licensing costs. The table below presents the results collected from two unimodal institutions that concentrate on the provision of distance education (Athabasca and the Open Learning Agency) and two dual mode universities that offer distance education as a supplement to traditional classroom instruction (Guelph and Waterloo). The data in the table pertain only to post-secondary courses, although the Open Learning Agency (OLA) also offers K-12 instruction through distance education. Since the dollar figures requested are not readily available, the amounts in the table are estimates in most cases.

Distance Education Licensing Costs, 2001-02

Institution	*No. of Courses*	*Enrollment*	*No. of Courses Requiring Clearances in 2001-02*	*Number of Clearances*	*Copyright Licence Fees*	*Administrative Costs*
Athabasca	558	24,130	500	5,293	$42,102	$67,400
OLA	542	15,990	71	349	$45,000	$46,697
Guelph	156	14,000 plus	96	1,301	$16,339	$50,000
Waterloo	275	6,000 plus	137	695	$18,840	$10,000

Licence fees and administrative costs over 2001-2002 varied greatly among the four institutions. The differences between the two unimodal universities are particularly marked; at OLA licence fees per clearance are more than 15 times and administrative costs per clearance are more than 10 times the level at Athabasca. Costs depend on a number of factors, including whether a licence is being renewed or newly negotiated, the number of students affected, and the type of material being cleared. At OLA, a much higher percentage of clearances pertain to non-print material than at Athabasca and the average number of students covered by each clearance is much higher - about 10 times that at Athabasca. In addition, OLA sells many of its courses at cost to other institutions and therefore must acquire licences that include the necessary publication rights.

Licensing activity and licensing fees can vary substantially from year-to year and too much should not be read into a one period snapshot. Among the general points highlighted by the table is the significant number of clearances required for each course. Although clearances are required for only a portion of an institution's distance education courses in any given year, for each of those courses requiring clearance, an average of 5 to over 10 separate rights must be obtained. Second, the table indicates the significance

of the administrative costs associated with copyright clearance. In all but one institution, administrative costs exceed licensing fees and, for two of the institutions, administrative costs are far above fees. These figures, of course, do not take account of the expenses incurred by copyright holders and their representatives and therefore only indicate part of the overall transactions costs of licensing.[27] Third, information provided by the institutions (not shown in the table) indicates that administrative costs for obtaining clearances tend to be much higher for non-print than print materials. Some institutions noted that the clearance of print material was facilitated by the use of a collective. Fourth, it was indicated that non-Canadians hold rights for a substantial portion of the required material. One institution volunteered data indicating that the share of its licence payments made directly to non-Canadians amounted to about 40% overall, but to over 90% in the case of non-print materials.[28]

4.3 Trends

Approaches to the licensing of digital technology are still evolving. Media officers have found that copyright owners are becoming more responsive to requests for digital rights. As compared to 5 years ago, publishers are much more likely to be in a position to license digital rights to the material they publish. Indeed, a number of publishers have themselves invested in the development of cybercourse content and the accompanying Web infrastructure for some widely used texts. It has been noted, for example, that publishers of the major textbooks used in first year economics courses offer a variety of online content – including study guides, slide presentations and links to economics subjects on the Web – and that this is often provided free as a "loss leader" to help sell textbooks.[29]

Concerns about licensing digital uses should further decline in future years as technologies to protect against unauthorized use improve and become more widely available. As Lessig (1999) explains, the computer code that underlies the use of digital technology can be used to regulate behaviour, thereby making it possible for authors and publishers to actually exercise greater control over digital works than over print materials. For example, through the use of trusted systems that include encryption and rights management, content providers could charge every time a file is copied or opened and arrange for the content to expire after a certain period. Software companies are working to improve the reliability of such systems and to increase their commercial appeal.

In addition, new technologies are facilitating the licensing of digital along with other materials. Online directories and other reference tools are helping media officers identify and locate owners and distributors of copyrighted works. At the same time, electronic copyright management systems are expediting the processing of licensing requests by collectives and private information aggregators and distributors.[30] Access Copyright, for

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[27] In 2001, Access Copyright 's administrative expenses amounted to 13.7 percent of revenues. This might be viewed as a rough "lower bound" estimate of the missing component of transactions costs.

[28] These are direct payments made in foreign currencies and exclude those fees the institution made to a Canadian collective for distribution to foreign rightsholders.

[29] This is discussed in Navarro (2000).

[30] Two major commercial firms actively involved in rights acquisition and management are International Thomson Publishing and Scholastic Inc.

example, is in the process of implementing a new online rights management system that will allow instant online transactional licensing.

4.4 Conclusions

While most licensing by education institutions is for the reproduction of print materials, demands for the use of non-print and especially digital content are growing. This trend reflects the growth in distance education courses delivered online or with online enhancements and the increasing importance of computer-based technologies in other activities, including supplementing classroom instruction, communicating with teachers and parents, and supporting advanced research. Licensing tends to be significantly more complicated and more costly for non-print than for print materials. The exceptions introduced into the 1997 revisions to the *Copyright Act* responded to some of the concerns associated with the use of non-print materials, but did not address the licensing of films and videos or digital content and the issues that arise in clearing rights for content delivered in distance education.

A number of developments are facilitating the licensing of non-print and especially digital content. As digital technology becomes more familiar and the technology for protecting works and controlling their use improves, copyright owners are becoming more willing to permit digital uses. At the same time, online search and rights management systems are making it easier for educational institutions to identify rightsholders and acquire licences. But while these developments are mitigating licensing problems, educational institutions still face significant concerns as they attempt to meet growing demands of staff and students for wide access to electronically transmitted content. In some cases, the need to deal with multiple rightsholders is a deterrent, while in other cases, costs of acquiring rights that provide the desired degree of access is a significant problem. Stakeholders have proposed a number of options for reforming the provisions of the Act pertaining to educational institutions. The following sections of the paper look at the economic impact of some of the proposed options.

5. EXTENDING CURRENT EXCEPTIONS TO DISTANCE EDUCATION

Sections 29.4 to 29.9 of the *Copyright Act* contain exceptions permitting non-profit educational institutions to undertake certain activities "on their premises". While some of these "exceptions" are more in the nature of compulsory licensing requirements that allow certain activities subject to the payment of royalties established by the Copyright Board, Sections 29.4 to 29.6(1) allow some works to be copied and some works to be performed, for classroom purposes, free of charge. This section looks at the economic impact of broadening these latter exceptions so they also apply to distance education. Such a change would involve extending the definition of the classroom in the Act beyond "the premises of an educational institution" and creating exceptions to the bundle of "electronic rights" over which copyright owners have control, including those pertaining to reproduction and communication to the public by telecommunication.

In addition, the author was asked to examine a second option that would involve creating an exception in the Act until a blanket licence pertaining to the relevant activities and materials was available. Under this option, the exception in the Act would serve as incentive for Access Copyright and COPIBEC to expand their repertoires and broaden the works and activities covered by their blanket licensing agreements with schools and universities. If suitable blanket licences could not be arranged, the exception would remain in effect and there would be no difference between this and the first option.

The alternative to both these options is, of course, the status quo. In examining each of these proposed reforms, the focus is on the additional benefits and costs relative to the situation that exists under the current Act. The purpose of the inquiry is to determine, first, whether, compared to the "do-nothing option", proposed reforms are likely to result in net economic gains and, second, which of the possible reforms is likely to yield the largest net benefits for Canadians.

5.1 Dry-Erase Boards, Flip Charts, Test Questions, Live Telecasts and News Programs

Most of the exceptions in Sections 29.4 to 29.6(1) refer to intermittent activities that are likely to occur with little advance planning. They allow instructors to take advantage of opportunities that present themselves for illustrating or elaborating on points or testing students' knowledge. This applies to Sections 29.4 of the Act, which allows reproduction of certain types (handwritten material onto a dry erase-board or flip chart, copies for use in a overhead projector) or for specified purposes (tests or examinations); Section 29.5(c), which permits radio and television programs to be played at the time they are aired: and Section 29.6(1), which allows a single copy of news program or news commentary to be made for showing in the class later over the year. The impact of extending these exceptions to distance education is discussed below. Section 29.5(b) of the Act, pertaining to the playing of sound recordings, raises some distinct issues and will be examined later.

The discussion bellow follows the framework outlined in Section 2 of the report. While information gathered from the literature and from consultations does not allow numbers to be put to the benefits and costs identified in Section 2, it does point to certain conclusions about their likely size and significance. The next two subsections examine

the impact of extending existing exceptions in the Act to distance education while the final subsection considers the alternative of a "conditional exception" that would be removed when and if a suitable blanket licence becomes available.

Benefits of Extending the Exceptions to Distance Education

(1) The Reduction in the Costs of Creating New Works

Broadening the educational exceptions is unlikely to affect the costs of creating new works. While the changes could encourage the production of some intellectual works by students, it will not result in an expansion of the public domain and make it easier for creators to acquire the raw materials needed for the development of new works.

(2) The Reduction in the Payments to Foreigners

The gain, here as well, is likely to be trivial. Under the current law, educational institutions engaged in the activities specified in 29.4 are not excepted from copyright requirements if a suitable work is commercially available. Therefore, institutions delivering distance education courses would need to continue to make payments where the images and other display material they require can be licensed. By extending the law to allow live performances and taped newscasts and news commentaries to be played in distance education classes, royalty payments to non-Canadians could conceivably be reduced; but the saving would be very small. Distance educators scarcely ever license such material and so extending the relevant provisions to distance education is unlikely to dent the $1 billion Canada pays annually for film/broadcasting service imports.[31]

(3) Savings in Transactions Costs

The savings in transactions costs are also likely to be insignificant. Although the costs of tracking down copyright owners and negotiating licences for the individual activities covered under Sections 29.4 to 29.6 can be significant, overall expenditures by distance educators on these reproduction and performance rights appears to be trifling.

(4) Increase in Consumer Surplus

The main benefit would come from the elimination of the social loss that occurs when goods or services are priced above marginal costs, thereby denying access to some consumers who are prepared to more than cover the costs of provision. Distant educators might reasonably be expected to have a downward sloping demand curve for the materials covered under Sections 29.4 to 29.6, so that, as licensing requirements are eased and the cost of using these materials declines, consumption will increase. The use of learning materials that are largely ignored by distant educators under the current regime would result in a growth in consumer surplus – representing the difference between what distant educators are prepared to pay for educational materials and the costs of meeting this demand – and an increase in economic welfare.

[31] According to Statistics Canada, royalty payments for imports of film/broadcasting services amounted to $986.9 million in 1998.

In discussions, it was reported that classroom instructors value the flexibility they gained from the educational exceptions in the *Copyright Act*. Sections 29.4, 29.5(c) and 29.6(1), in particular, pertain to activities that are very difficult to plan in advance. With the easing of licensing requirements in 1997, classroom educators were encouraged to look for materials they could adopt "on the fly" to supplement and enrich standard course content. This suggests that the impact of extending these educational exceptions to distance education is likely to be greater than one would expect from looking only at the savings to institutions in royalty fess and transactions costs.

In addition, it is likely that the demand of distance educators for the materials covered in these Sections of the Act is fairly elastic. Elasticity is a measure of the responsiveness of the quantity demanded to a change in price. Demand tends to be more elastic for items that are less essential and for which reasonable substitutes are available. Sections 29.4, 29.5(c), and 29.6(1) pertain to supplementary rather than core course material and they largely represent alternative means to help demonstrate and reinforce particular content. As well, the provisions largely relate to topical materials that would be used in a single lecture. Licensing costs are a larger portion of course delivery costs and a more important consideration when the material is only to be used once.

Costs of Extending the Exceptions to Distance Education

As discussed in Section 2, the costs of reducing copyright protection come from the impact of the reduced revenues on incentives for the production of creative works. A reduction in payments for intellectual works may not impact significantly on creative activity; the result depends on how the returns for creative work are affected and how responsive authors, composers and other creators are to the reduced returns. However, a decline in copyright protection that does not result in lower revenues, will not affect the production of creative works. Since current payments by distance educators for the activities covered under Sections 29.4, 29.5(c) and 29.6(1) are close to zero, a change in legislation would not noticeably affect returns to producers of the relevant learning materials.

Comparative Impact of Conditional Exception

There are a number of difficult issues that must be addressed before a "conditional exception" could be introduced. As noted above, such an exception would be intended to induce collectives to incorporate the relevant activities and materials in their blanket licence agreements with educational institutions. To create a significant incentive for collectives to develop a blanket licence covering an expanded repertoire, however, it would probably be necessary for the conditional exception to apply to classroom as well as distance education activities. Therefore, while the intent of the reform is to take account of distance education, such a measure would also have implications for those activities on the premises of educational institutions that are covered by the current exceptions in Section 29.4, 29.5(c), and 29.6(1) of the Act

This option requires that criteria be established to determine whether suitable blanket licences have been made available and the removal of the conditional exception is justified. Given the broad and vague nature of the items covered by the relevant provisions of the Act, it would be difficult to establish the standards that must be met by

the blanket licences offered by collectives. Moreover, whether a blanket licence is suitable or adequate depends on its costs as well as its coverage and the assessment of licensing costs is an extremely complex and potentially controversial task.

The broad and vague nature of the items covered by the relevant provisions has no doubt been one of the factors discouraging the development of blanket licences in the past. (i.e. before 1997 when the exceptions were introduced into the Act). Another problem has been that the broadcast works addressed under Sections 29.5(c) and 29.6(1) are not among the type of materials licensed by Access Copyright and COPIBEC, the main collectives serving the licensing requirements of educational institutions. The latter would continue to complicate the development of suitable blanket licences if a conditional exception were to be introduced in the Act.

Due, in part, to these sorts of complications, a conditional exception is inferior to the previous option of extending the existing provisions in the Act to distance education. If a conditional exception was introduced and the conditions for removal of the exception were not satisfied, the only difference from the first options is that the government would incur somewhat increased costs because of the need to establish and administer the apparatus for adjudicating blanket licensing proposals. If the enactment of a conditional exception did lead to the development of a suitable blanket licence, distance educators, who would have ready access to an expanded range of supplementary materials, would be somewhat better off than they are now, and classroom instructors, who currently enjoy free access to these materials, would be marginally worse off. Accordingly, the benefits arising from the increase in consumer surplus would be less than under the previous option. In addition, government administrative costs would be higher because of the additional resources required for planning and administration. As under the first option, incentives for creative activity are likely to be unaffected.

Therefore, a provision conditionally excepting educational institutions from the requirement to clear certain rights until a blanket licence is available is not the most attractive option. Such a reform would be difficult to properly design and implement. If these difficulties could be satisfactorily addressed, the net benefits would still be less than those resulting from the alternative option of extending the exceptions under Sections 29.4, 29.5(c) and 29.6(1) to distance education activities.

5.2 Sound Recordings

Benefits of Extending the Exception to Distance Education

Educators also regard section 29.5(b), which allows the playing sound recordings in classroom instruction, as an important addition to the Act. In this case, much of the benefit has arisen from the ability of instructors to draw from a wider variety of recorded works. While sound recordings are used in drama, English and other courses, they are especially important component of music classes. One music instructor reported that before the exception was introduced, she often had to include works that were not representative in her classes or find an alternative (and inferior) ways of presentation, such as doing a reduction at the piano. With the addition of Section 29.5(b), difficulties in tracking down rights holders and the limited amounts allocated in departmental budgets for royalty payments are no longer constraints.

In distance education, the complex licensing requirements described in Section 4 have discouraged the "public performance" of sound recordings. Few music courses are offered through distance education and, in those courses that are available, the usual delivery mode is audiocassette, audio tape, video cassette or CD Rom. Generally, the cassettes or tapes are included in the package of material the institutions sends to registered students. Universities that televise their courses or deliver them online have been reluctant to offer music courses. Representatives of these latter institutions have indicated that the complexities and costs of obtaining rights were a key factor in their decision not to offer music course or to do so only where lecture material would suffice.

It is presumed that if Section 29.5(b) were to be amended to apply to distance education, the new exception would cover not only performance rights, but also reproduction, telecommunication to the public, and other rights that may be necessary to allow the non-infringing use of sound recordings in online courses. Extending the application of Section 29.5(b) in this way would significantly facilitate the use of sound recordings in televised and online courses and would encourage institutions using these delivery modes to introduce new offerings. Distance education music courses would become more attractive to institutions such as Carleton that uses instructional television and the University of Ottawa that employs audio and videoconferencing.

As with the exceptions discussed above, the benefits from lower creative costs, reduced royalty payments to foreigners and transactions costs savings would be small. The potential gains in these areas are limited because of the little licensing there currently is for performance of recorded music in distance education classes. Extending Section 29.5(b) to distance education, however, would provide benefits to instructors who have avoided the use of recorded works in their courses and to students whose choices have been restricted because courses that depend on sound recordings are not offered in some distance education programs. In the first case, the gain in economic welfare would result from the increase in consumer surplus as the cost of performing sound recordings falls and their use in online and televised courses increases. In the second case, the gain consists of the net benefits to those distance education students who could now take their preferred courses or who would now able to take music courses at the institution they prefer.

Costs of Extending the Exception to Distance Education

As with the exceptions discussed in Section 5.1, extending the measure to apply to distant education activities would have very little impact on producer revenues and be unlikely to have any noticeable effect on creative incentives. Even if the revenue effects of a broader exception were significant, this would not necessarily affect creative incentives because royalties from the sale of music and from performance and mechanical rights for songwriting and composing tend not to be an important source of income for artists.[32] But the revenue losses of a broader exception would clearly be trivial. The revenues from the Canadian distance education market are, at most, a tiny fraction of the overall

[32] This is discussed in Ku (2002). He observes that since record companies deduct the costs of production, marketing, promotion and other expenses from the musician's royalties, the vast majority of artists do not earn any income in the form of royalties from the sale of music. For most musicians, live performances are the principal source of income.

income the recording industry generates from international sales of music and various music rights. And actual revenues from royalty payments by Canadian schools, colleges and universities are well below potential revenues because, as discussed above, most institutions deliberately avoid the use of recorded music in their distance education courses.[33] While the proposed measure is likely to lead some schools that are now purchasing tapes and cassettes to shift to online or broadcast distribution, there is no reason for concern about the impact of this very marginal decline in recording sales on incentives.

Comparative Impact of Conditional Exception

Instead of extending the existing exception in the Act to distance education, the government could, as discussed above, create an exception until a suitable blanket licence is available. For sound recordings, blanket licences would need to issued by each of the collectives representing copyright holders or a consolidated licence would need to be created that included permissions to the variety of rights required by schools and universities. While the Copyright Board has established blanket licences to govern the arrangements between specific collectives, such as SOCAN, and users of recorded music, there is no precedent for the creation of a consolidated licence. It is not clear that collectives would find it in their interests to create blanket licences for educational institutions. In SOCAN's current tariff schedule, educational institutions are not even recognized as a distinct user group justifying a separate licence rate. For such a proposal to generate possible interest, however, it would need to apply to all uses of recorded music by schools and universities. Therefore, under this option, a conditional exception would replace the current classroom exception in Section 29.5(b) of the Act.

The economic impacts are likely to be similar to the impacts of the conditional exceptions discussed in Section 5.1 above. Conditions for removal of the exception may not be satisfied, in which case the net benefits are approximately the same as those that would result from extending the existing exception in the Act to distance education activities. The only difference is that, under this option, some resources may be wasted in attempting to develop, or preparing for the expected introduction of, blanket licences. If, as a result of this legislation, blanket licences come into effect, as compared to the current situation, distant educators would potentially benefit, while classroom educators would face some new licensing costs. Incentives for creative activity would be largely unaffected. Given the higher costs for the playing of recorded music in classrooms, it is not clear that there would be an overall improvement under a blanket-licensing regime.

Therefore based on a consideration of likely economic impacts, a conditional exception is not the preferred option. If it resulted in significant new costs for the classroom playing of music use, this option could indeed be inferior to the status quo. The alternative of extending the current exception in the Act to encompass recorded music used in distance education is more likely to result in significant economic gains for Canadians.

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[33] SOCAN could not provide information on the revenues derived from royalty payments by the educational sector, but, in the "general" category to which the educational sector belongs, revenue totaled $10.5 million in 2001. Canadian writers in the relevant SOCAN pool ("radio and general") received just under $500 on average in 2001. Even if the distant educational sector accounted for 5% of pool revenues – and the actual percentage is likely to be far below this – based on 2001 data, the impact of a broader educational exception on the annual income of the average writer member would only be $25.

6. FACILITATING THE SHOWING OF FILMS AND VIDEOS

6.1 Providing an Exception for the Showing of Films and Videos

Section 29.5 of the *Copyright Act*, which provides an exception for certain types of performances done "on the premises of educational institutions", does not extend to films and videos. This part of the report considers the impact of expanding Section 29.5 to include the showing of films and videos by non-profit educational institutions.

Benefits of Providing an Exception for the Showing of Films and Videos

(1) The Reduction in the Costs of Creating New Works

Including an exception for films and videos may facilitate certain types of creative endeavor within educational institutions, but it would not expand the free material that is available for writers to draw on. The obligation of writers to obtain licences for source material and the fees they pay for this material would not be affected.

(2) The Reduction in the Payments to Foreigners

Licence fees paid by schools, colleges and universities for the public performance rights to foreign-produced films constitute part of the annual payments Canada makes for imports of film and broadcasting services.[34] In 1999/2000, foreign productions (for which licence fees had to be paid to foreign copyright holders) accounted for 87% of the $965.6 million in revenues from distribution of films and videos within Canada. Separate data are not available for educational distributors, but the "non-theatrical" category that includes education (along with works for governments and private companies) generated $19.5 million in domestic revenues in 1999/2000. Although Canadian films were a more important factor in this category, foreign productions still accounted for 74% of distribution revenues.

Payments for performance rights to foreign productions would be higher were it not for the site licensing agreements discussed in Section 4. These have reduced university costs for in-class performance of feature films, where the degree of foreign content is especially high.[35] Although an amendment extending the educational exception in the Act to the showing of films and videos would not substantially reduce the overall value of Canada's film and broadcasting service imports, it would yield some modest annual savings.

(3) Savings in Transactions Costs

As noted in Section 4, films and videos have presented among the least problems for media officers charged with clearing rights. The most significant difficulties have related to the securing of rights for broadcast and or the digitalization of films and film clips, but these costs would not be affected unless the exception extended to showings for distance

[34] In 1998, Canadian payments for the import of film and broadcasting services of all types amounted to $986.9 million.

[35] Non-Canadian movies accounted for 97% of revenues from domestic distribution in 1999/2000. A similarly high degree of foreign content presumably characterizes feature film use in the educational sector.

education students. Introducing an exception into the Act for "on premise" showings would address the difficulties media officers occasionally experience in tracking down rightsholders for older material that is no longer in distribution. The exception would also provide a solution to the problems institutions encounter in gaining clearance for the showing of film segments or clips. However, since a small number of distributors handle most film and video rights and licensing negotiations are not a significant and time-consuming activity, the savings in transactions costs are likely to be small.

(4) Increase in Consumer Surplus

Film and video costs affect institutions differently. Video costs come out of the budget of the library or media centre at some institutions and are the responsibility of individual departments at others. In some instances, film studies departments supplement the library budget to ensure adequate funding for film and video acquisitions. The acquisition of requested videos along with required performance rights is not a problem for universities with centralized purchasing and relatively well-financed media centers, although there still may be resistance to purchasing costly videos that would have few showings. In other cases, limited departmental budgets have required that a lid be placed on the amount that could be spent on specific videos, as well as on the number of videos that could be used in individual courses. Departmental budget constraints may prevent the showing of feature films that are not covered by an institution's site licence and specialty documentaries with a significant price tag.

Introducing an exception into the Act would allow instructors that have been subject to budgetary constraints to use more film and video material in their courses. There would be a welfare gain represented by the difference between the low costs of making the required copies and instructors' valuation of the contribution of the new materials to the quality of their courses. In addition, some institutions may be encouraged to offer new courses that take advantage of the easing in the requirements for the use of films and videos. Students would thereby benefit from the opportunity to choose from among an increased range of course offerings. An amendment excepting film and video showings would likely have a smaller incremental impact than the amendments discussed in Section 5.1 above, which pertain to activities with a very low base level of activity. However, since the introduction of an exception to allow the showing and film and videos would affect full-time students, the overall gain in consumer surplus should be larger than the benefits from amendments that would only apply to distance education.

Costs of Providing an Exception for the Showing of Films and Videos

The costs of an exception depend, first, on how it impacts on the returns to creators and, second, on how the reduced returns affect incentives to engage in creative work. While a certain level of copyright protection is needed to generate the incentives for creative activity, the impact of incremental additions in protection above this base level is less clear. As Sterk (1996) points out, even if additional protection does affect returns, it may have little effect once returns to creative activity have become high relative to returns in other pursuits and most of the people who could be induced to engage in creative activity have already done so.

The main impact of an exemption for film showings would be to reduce the royalty fees Canadian educational institutions pay to distributors of U.S. films and videos. For foreign feature film companies, however, royalty payments from Canadian educational distributors are clearly a very minor source of revenue. Indeed, the overall Canadian market only serves as a supplementary source of revenue for foreign, primarily U.S., film companies, which depend on home market sales to recover the costs of production.[36] The Canadian market for films and videos, which represents about 6% to 8% of the U.S. market, is too small to influence the investment and production decisions of U.S. feature film companies.

U.S. productions dominate every segment of the Canadian market, including the educational film and video market. Educational sales can be important for U.S. producers of documentaries and special-interest films, but here as well, the small Canadian market is not likely to figure significantly in the decisions of creators or investors. Specialty filmmakers tend to direct their activities towards the international market for their niche product. Cost recovery is likely to depend on the film's success in the U.S. and major European markets. An amendment to Canada's copyright law would be unlikely to significantly affect returns or influence the incentives for production.

For Canadian film productions, as well, commercial success depends on international sales. Canada's film industry has been responding to the economic incentives to market their products internationally and, over the 1990s, exports of Canadian film and audio-visual products increased seven-fold. By 1999/200, exports accounted for over 40% of the production revenue of Canadian film and audio-visual producers and over 50% of the revenue Canadian producers derived from the sales of television and feature film rights.[37] Educational sales compromise a very small component of an overall domestic market that is declining in importance as a source of revenue for Canadian film companies. A profile of the Canadian industry found that, in 2000 - 01, for those film and television productions that qualify for the Canadian Film or Video Production Tax Credit (CAVCO), 12% of financing came from distributors, including Canadian companies distributing Canadian productions outside Canada.[38] Public performance fees paid by Canadian educational institutions made only a small contribution to the distributor revenues that are the source of these payments.

For CAVCO-certified documentaries, which presumably derive more of their funding from educational sales than general films, only 5% of revenues came from distributor financing in 2000-01. The main source of financing was government grants. While some Canadian documentary makers may be attracted by the possible returns from developing a product with international appeal, many are taking advantage of the availability of government support to create films that are not commercially viable. In neither of these cases, are the revenues from educational licences likely to appreciably affect incentives.

A different situation applies to films and videos created expressly for the educational market. Canadian producers of video and audio-visual materials for the educational

[36] This is discussed in Acheson and Maule (1999)
[37] From Statistics Canada, *The Daily*, July 22, 2002
[38] The Department of Canadian Heritage et al., *The Canadian Film and Television Production Industry: Profile 2002.*

sector earned revenues of $4.1 million in 1999-2000.[39] There would be little incentive for these producers to continue to develop material for the Canadian market if they were covered by the proposed exception. If an amendment were introduced to include film and video performances under the exceptions in Section 29.5 of the Act, it would be appropriate to exclude educational films, including non-Canadian productions that are entitled to national treatment.

6.2 Extending the Premises of the Classroom with Respect to Films and Videos

Under this proposal, the definition of the classroom would be expanded so that once an educational institutional had obtained rights for the performance of films and videos these would apply to all showings, including those to distant education students. While schools and universities would still be required to obtain public performance rights to show films and videos, they would be excepted from the need to license "electronic rights", including reproduction and telecommunication to the public. Below we consider the benefits and costs of this option compared to the current situation in which no exceptions are available for the showing of films and videos.

Benefits of Extending the Classroom for Film and Video Showings

The most important benefits from extending the definition of the classroom for film and video showings is likely to come from the gains in consumer surplus as video use increases. As discussed earlier, institutions have been discouraged from using films and videos in televised and on-line distant education courses because of the costs, along in some cases with the difficulties, of clearing the required rights. The proposed reform would eliminate the social loss that has resulted because current policies have created a disincentive for the use of films and videos in some situations where they can be a significant aid to learning. With an extension of the definition of the classroom, schools and universities would be encouraged to be incorporate documentaries and films for which they have site licences in their distance education courses. While distance education students would gain access to new learning materials, classroom students would also benefit as instructors take advantage of the increased opportunity to incorporate films and video content in courses delivered simultaneously to students on and off campus. The benefits of the proposed amendment are likely to increase in future years as more locations gain access to high-speed broadband, thereby eliminating the network constraints on the use of film and video content in computer-based distance learning courses.

The beneficial impacts of a reform extending the definition of the classroom for film and video showings would be reduced if it leads to an increase in the fees distributors charge educational institutions for public performance rights. But while distributors may attempt to raise fees to reflect the greater value of public performance rights to educational institutions, such increases are likely to be limited. Educational demand for films and videos is characterized by significant price-sensitivity. It would not be in the interests of rightsholders to establish fees that might jeopardize sales and reduce the overall revenue they derive from the educational market. The emphasis in recent negotiations has, on the

[39] Based on data made available by Statistics Canada.

contrary, been on arrangements, such as site licensing agreements, that encourage the use of films and videos by educational institutions.

Costs of Extending the Classroom for Film and Video Showings

The factors that were identified in Section 6.1 as limiting the costs of changes in the law applying to films and videos apply to measures to extend the definition of the classroom for film and video showings. An exception to facilitate film and video use in distance education courses would have less impact on rightsholders' revenues than the exception discussed in 6.1, which pertained to all film and video showings on institutional premises. In both cases, however, the impact on creative incentives would be negligible for all films except educational videos. Provided that videos produced expressly for educational use are excluded, there is no reason for concern about the costs of extending the definition of the classroom for film and video showings. With this measure, as with the measure to include film and videos showings on educational premises among the exceptions in Section 29.5 of the Act, net economic impacts are likely to be positive and significant.

7. FACILITATING ACCESS TO MATERIALS ON THE INTERNET

While the Internet has vastly increased the information available for learning, some believe that opportunities are not being fully realized under existing copyright law. The author was asked to examine the economic impact of two proposed measures: providing an exception to educational institutions for the use of freely available material on the public Internet; and providing a conditional exception to educational institutions until a blanket licence is available. The focus is on how these options compare with each other and with the status quo. To provide background for this assessment, some relevant data on Internet usage in Canada are first reviewed below.

7.1 Internet Usage

According to the Online Computer Library Center,[40] there were over 9 million sites on the World Wide Web in 2002, which is up from under 3 million sites in 1998. Public sites, which provide free, unrestricted access to all or at least a significant portion of content, account for 36% of the Web. Over half (55%)of the organizations and individuals responsible for the content of public Web sites reside in the U.S.; only 3% reside in Canada.

Canadians in general and Canadian students in particular, however, rank high as users of the Internet. Statistics Canada found that at the beginning of 2002, 51% of Canadian households were online.[41] An international comparison in 2000, found that the percentage of 15-year olds in Canada with Internet access at home was the same as in the U.S. (69%), but higher than Australia (67%), Finland (54%) and Japan (38%).[42] According to the OECD (2001), Canada also ranks high in terms of the percentage of elementary (88%) and secondary (97%) students attending a school that has Internet access for instructional purposes.

The evidence for Canada is consistent with recent research in the U.S. showing that the Internet has become "an increasingly important feature of the learning environment for teenagers."[43] In Canada, as in the U.S., the Internet is the instrument of choice for doing homework and completing projects. In a 2001 survey of Canadian youth, 44% reported that they used the Internet for homework information, which was more than twice the percentage using the library (19%) and books from school (16%).[44]

In a recent U.S. study, Levin and Arafeh (2002) report on a "digital disconnect" between Internet-savvy students and their schools. The study finds that students are discouraged from using the Internet as much or as creatively as they would like in schools and that, as a result, most educational use of the Internet occurs outside the school. Students surveyed in the study believe that better coordination of out-of-school and classroom activities is needed to leverage the power of the Internet as a learning tool. While there is no comparable study for this country, survey evidence suggests that in Canada, as well,

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[40] http://wcp.oclc.org
[41] Statistics Canada, *Household Internet Use Survey, 2001.*
[42] Statistics Canada, *Education Quarterly Review, 2002*, vol.8, no. 4.
[43] The U.S. study is Pew (2001).
[44] This comes from a Media Awareness Network-Environics Research Group Survey that is reported in Crowley (2002).

teachers are not major drivers of student Internet use. When asked in a recent survey where they learned about the Internet, most Canadian youth responded "from peers" (54%) or "on their own" (47%); only 22% pointed to teachers as the source of information.[45]

7.2 Allowing Free Access to Public Material on the Internet

Under this alternative, those engaged in learning activities at non-profit educational institutions would be excepted from the usual requirement to obtain a licence for production, public performance, and telecommunication to the public, for unrestricted works that are freely available on public Internet sites. Institutions would still be required to negotiate licences for access to content subject to explicit or implicit restrictions. The exception would not apply to copies of work on the Internet that are not lawfully made and acquired.

With this reform, students and educators would have timely and flexible access to the diverse materials that comprise the public Internet. The measure would respond to the concern raised above that most use of the Internet as a learning vehicle occurs outside of schools. The *Copyright Act* would support and encourage the use of Internet materials in coursepacks, distance learning, and classroom instruction and contribute to a more balanced and coordinated use of the Internet by students inside and outside the classroom.

Such a reform also responds to those who are concerned about the use of mandatory regimes to satisfy the needs of educational institutions. For example, access to Internet content could be provided through compulsory licensing, such as exists under Section 29.7 of the Act for the performance of copied programs by educational institutions and under the provisions relating to "private copying". If the Section 29.7 provisions were extended to the Internet, educational institutions would be required to maintain a record of Internet material used and make royalty payments to the collective societies on the basis set out by the Copyright Board. If an approach similar to the private copying regime were introduced, the Copyright Board would establish the levy that is to be imposed on some proxy indicator of overall Internet use. The revenues collected from educational institutions would then be passed on to collective societies for distribution to rightsholders. Both systems of compulsory licensing impact on the freedom of rightsholders; those who had initially chosen to make their material freely available to educational institutions are being denied the opportunity to do so. In addition, the imposition of a tax on users is at odds with the objective of promoting information dissemination. Moreover, these systems would apply a tax in the particular area (education) where information use is generally seen to have high social value. By contrast, the proposal to allow free access to public content on the Internet would be consistent with the view that, because information has the characteristics of a public good,[46] its distribution and widespread use should be encouraged rather than discouraged.

An open access regime would benefit primary and secondary students that use the Internet as part of their classroom studies. At the post-secondary level, instructors can be

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[45] Ibid.

[46] Information has two key "public good" attributes: (1) It is inexhaustible – i.e. use by one person does not diminish its value to others. (2) It is difficult to prevent people from enjoying the good.

expected to take advantage of the opportunity to incorporate Internet content in course Web sites and electronic course packs. The benefits of open access are likely to increase over time in line with the expected growth in the numbers of students involved in computer-mediated and online instruction.

The main question is how such a reduction in copyright protection would impact on the production of intellectual works.[47] A policy to facilitate access can have no impact on creative incentives where works have been produced without any expectation of compensation. This situation applies to most of the material on public sites. Individual and organizations want to give expression to their ideas, to publicize their activities, or to attract readers to products and services, including other information products that can be purchased online. Free access does not impact on incentives for the production of such materials. The circumstances are different where the content on the Web has been copied and circulated without permission of the author. Although any exemption introduced into the Act would not apply to such materials, it would be difficult to effectively enforce such a restriction. While such risks exist under the current system, it is conceivable that risks would increase if the Act permitted free access. A system of open access can also be criticized because it closes off opportunities for generating additional revenues through compulsory licensing or blanket licensing to promote the production of new intellectual works.

In evaluating concerns about foregone revenues and the use of prohibited materials, it is important to put the role of Canadian educational institutions as Internet users in proper perspective. Canadian schools and universities are a miniscule component of the global network of users on the World Wide Web. Changes to Canadian law, which would impact on Internet use in schools but could not influence students' use outside of the classroom, could not affect the revenue expectations of those who are marketing their works to Internet users in general. While they could affect the incentives of those producing digital content specifically for the educational sector, institutional controls along with the educators' understanding of the need to support the development of learning materials should help limit the risks of infringement in this area.

In assessing concerns about the possible revenue impact of open access provisions, consideration also needs be given to the data cited above indicating that Canadians are responsible for only 3% of the content only public Web sites. Even if Internet use in schools and universities was heavily tilted towards Canadian content, a large portion of the licence payments made under a system of compulsory or blanket licensing would rightfully belong to foreign, primarily U.S., rightsholders. If such payments were made to foreign collectives for distribution, they would add slightly to the revenues of some foreign content providers who had intended to charge for their content but were unable to limit distribution and provide some additional pocket change to others who had planned to make their material freely available; in neither case are they likely to influence incentives for content production.

Taking account of all these considerations, a system in which schools and universities are allowed to take advantage of content that is freely available on the public Internet would

[47] The extent to which this constitutes a reduction in protection depends on whether and under what circumstances the use of Internet material in schools might be defensible under the "fair dealing" doctrine.

be preferable to the status quo. Under a system of open access, educational institutions would continue to enter into licensing agreements for access to content that is not freely available on public sites. Indeed, licensing agreements are likely to become more important as technological developments facilitate the clearance of digital materials and make it easier for rightsholders to control the use of their materials.[48] Open access provisions are likely to further increase the incentive for those developing content of particular interest to the educational sector to implement copyright management systems or to associate with collectives or private firms that can market digital materials for them.

7.3 A Conditional Exception for Use of Public Material on the Internet

In the other policy to be examined, a conditional exception would allow educational institutions to use material that is freely available on the public Internet until a suitable blanket licence is available. Blanket licences can co-exist with free access; they can be used to provide educational institutions with access to the Internet content they require that is not freely available on public sites. Under the conditional exception option, however, what is envisaged is a broad licensing agreement that would offer educational institutions access to the wide range of Internet content they may require, including material from both public sites and potentially interesting private sites.

Blanket licensing has advantages over the current system of transactional licensing in which schools and universities must negotiate a licence with rightsholders or their representatives for each and every use of Internet content. There are many situations where the negotiation of a transactional licence is clearly not feasible or practical. However, there are difficulties designing and implementing a policy regime to promote blanket licensing. In addition, the costs of a blanket licence affording rights to the use of Internet content may pose a significant financial burden for some educational institutions.

The first issue was addressed in previous sections discussing the use of conditional exceptions. In defining the terms of a conditional exception, policymakers would need to establish some basis for determining what constitutes an adequate blanket licence. Guidelines would be needed that could be applied in deciding whether the relevant collectives have built their repertoires to the point where they can offer reasonable access to Internet content of potential interest to schools and universities. Policymakers must determine whether the removal of the exception would be justified by a blanket licence that is offered at a price that is unacceptable to a significant portion of schools and universities. These are difficult issues that are likely to be made more complex by the likelihood of strategic responses by the parties involved. For example, educational institutions would have no incentive to negotiate in good faith for a blanket licence that would result in the elimination of the exception they enjoy. Collectives may find it in their interests to introduce a very attractive blanket licence and then to substantially hike licence fees in later negotiations that occur after the exception has been removed.

The second issue relating to the potential cost burden for schools and universities arises because a blanket licence offering "just in case" access to a substantial range of material

[48] In the U.S., some academics are concerned that technology is providing authors and publishers with too much control over the use of digital materials. Laurence Lessig, for example, has observed that content management systems are being used to prevent educational institutions from gaining access to materials that are covered by the fair use exemption in U.S. copyright law.

on the public Internet would be a large and complex product. Under a pricing scheme that involved a flat fee based on FTE enrolment, schools and universities would be paying for access to a vast package of content that is far beyond what any single institution would use. Under a use-based pricing scheme, institutions would only pay for the content they required, but they would face the additional expense of tracking and recording Internet activities by their own staff and students. Under both pricing regimes, licensing fees would need to be set high enough to cover the substantial administrative costs collectives would incur in building their repertoires, monitoring the use of materials and making appropriate distributions to members and foreign collectives.

Some institutions may find that a blanket agreement for Internet access is too costly a purchase, given their needs and priorities. If charges are use-based, institutions may sign on to the agreement, but limit use to control costs. Under both these circumstances, a blanket licence would not provide the needed support and encouragement for Internet use by school and universities. Alternatively, at post-secondary institutions, the costs may be incorporated in tuition fees, thereby adding to the financing burdens that students incur.

Aside from these issues, there is the question of whether blanket licensing is a feasible approach from Canadian collectives' perspective, given the increased risks they could face under the indemnity they offer licensees. Some collectives believe that if they were to offer a blanket licence covering Internet content, the costs of indemnifying licensees for copying materials outside the collective's repertoire would rise significantly. One proposal for addressing this problem is to establish a system of extended collective licensing modeled on the regimes in place in Norway, Sweden, Denmark and Iceland.[49] Under this approach, the law would provide that once a collective represented a large number of rightsholders in a particular sector, it has the authority to negotiate on behalf of all rightsholders in that sector (including those outside of Canada), except those who have expressly requested that they be excluded. There are a number of difficult issues that arise in applying such a proposal, including the determination of the appropriate collective to represent owners of copyrights for the diverse forms of Internet content. Moreover, the concerns highlighted above with respect to blanket licensing - notably, the high costs to educational institutions and the insignificant impact on incentives for production of creative works – apply as well to extended collective licensing.[50] There are other, potentially more attractive, ways to address the liability concerns of collectives, but discussion of possible reforms in this area is beyond the scope of this paper.

Notwithstanding the problems discussed above, the adoption of a provision conditionally permitting educational institutions to use free material available on the public Internet may well represent an improvement over the current situation in which transactional licences must be negotiated for every use of Internet content. Educational institutions would be substantially better off at least over the period in which they enjoy free access and these benefits are likely to more than offset the increased public sector costs

[49] These are discussed in Gervais (2001).

[50] Indeed, these concerns increase because licensing costs are likely to be higher under a system of extended collective licensing. The licensing fees paid by educational institutions would need to cover payments to a potentially vast number of rightsholders and the considerable administrative costs incurred in monitoring the use of materials and making appropriate distributions to members, foreign collectives and the large number of non-members within Canada that would be entitled to compensation under extended collective licensing.

associated with developing and administering a more complex policy framework. However, as in the situations discussed in previous sections of the report, a conditional exception is not the preferred solution. The prospective economic gains are less than those that would result from the alternative of simply opening access for educational institutions to content that is freely available on the public Internet.

8. CONCLUSIONS

While, using available information, it is not possible to estimate the costs and benefits of changes in the provisions of the *Copyright Act* pertaining to education, it is possible to assess the relative size and significance of various positive and negative economic impacts. The proposals examined in this report would extend a number of the exceptions in the current Act to distance education and increase the list of educational exceptions to include the showing of films and videos and the use of lawfully circulated material that is freely available on public Internet sites. The report also considered the merits of a conditional exception that would be terminated when and if the requirements of educational institutions could be met through blanket licences. A conditional exception creates the incentive for strategic responses by stakeholders and would be very difficult to successfully implement. All the proposed reforms for extending exceptions to distance education and expanding the list of educational exceptions, however, are likely to produce significant benefits and have negligible economic costs.

The largest gains are likely to result from allowing educational institutions to freely access content that is lawfully available on public Websites. This would allow the Internet to become a more important learning resource and it would help to address the apparent "digital disconnect" between students' use of the Internet at school and at home. A reform facilitating Internet use by instructors would support the development and growth of online learning, which, in the view of many, is a key to Canadians' successful adaptation to the requirements of a knowledge-based economy. The reform of copyright law would complement technological changes that are making it easier for those who want to charge for the use of their materials to limit access and to negotiate licences on terms they find agreeable.

The main benefit from the other reforms would similarly come from encouraging schools to make greater use of certain materials that can confer gains well in excess of their costs of production. Under the existing law, various factors have limited use of these materials. In the case of the items and activities addressed in Sections 29.4, 29.59(c) and 29.6(1) of the Act, distance education instructors have been deterred from seeking licences because of the preparation and advance planning this would require. The relevant items are supplementary materials that are only likely to be considered by instructors as a late addition to their classes. In the case of musical recordings, the complicated pattern of ownership rights and the difficult and lengthy processes involved in obtaining clearances have discouraged their use in distance education classes. For films and videos, the limiting factor has been budgetary constraints, which have been more significant for some schools and some departments than others.

Although other benefits would result from extending and expanding the educational exceptions in the Act, most of these gains are likely to be small. This is because existing licensing activity in the relevant areas is generally quite low and, hence, there are not major gains to be realized from lowering transactions costs and reducing payments to foreign copyright owners. A reform that provided an exception for the showing of films and videos by educational institutions, however, would yield some notable savings in the payments by Canadians to foreigners.

The proposed reforms would be unlikely to have any appreciable effect on incentives for the creation of intellectual works. A change in copyright law is only likely to affect incentives, if financial returns are an important consideration for creators and the reduction in protection would reduce the returns below the level necessary to attract individuals to the creative pursuit and/ or to induce them to engage in further activity. Some of the content being examined was not produced to generate financial gains. In the case of all the content under consideration, the potential decline in revenues from "excepting" Canadian educational institutions would be very small and have an insignificant impact on expected returns to producers and creators. In the context of the overall North American or global markets for which much of this content is produced, Canadian educational institutions constitute a minute market segment. The situation is, of course, different for materials produced expressly for the educational market, which presumably would continue to be excluded from any exception in the Act.

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