

### III. EDUCATION

#### A. BACKGROUND

Public awareness of the importance of intellectual property in the information age is essential to the successful implementation and growth of the NII. The average citizen has only the most general understanding that there are patents, copyrights and trademarks, let alone an understanding of the legal, economic and trade issues involved. Indeed, many lawyers do not have an understanding of this highly specialized area of the law. However, as the convergence of computer and communications technology brings the capability of high speed computers and communications networks into our homes, we all have the possibility to become not only authors and users of copyrighted works, but printers, publishers, exhibitors and distributors as well.

Most people do not have a very clear idea about the role of intellectual property law in encouraging creativity and the importance of intellectual property to our economic well-being. Recent studies show that the core copyright industries -- those that create copyrighted works -- represent an estimated \$238.6 billion in annual contribution to the U.S. economy. Moreover, other related industries, such as those that distribute copyrighted works, account for an additional contribution of approximately \$120 billion annually. Between 1991 and 1993, while the entire U.S. economy grew at an annual rate of approximately 2.7 percent, the core copyright industries grew twice as fast, at the rate of 5.6 percent. Furthermore, the employment generated by these industries grew at four times the annual rate of the whole economy in the period between 1988 and 1993.<sup>528</sup> Users must learn enough about this topic to appreciate just what respect for intellectual property laws

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<sup>528</sup> See *Copyright Industries in the U.S. Economy*, *supra* note 426.

can do for them, and why a seemingly harmless transaction on a computer network may have a great effect on the benefits they get from the intellectual property system.

Users are likely creators, too. In that role they will benefit directly from being able to decide how and under what conditions other users will be able to use their works. It may be that a user will decide to dedicate his or her work to the community at large and not assert the rights that the law grants. Others may chose to assert their rights in a general way and make their works available on a good faith "pay if you like it" basis like much of the shareware available today. Others may insist on strict enforcement of their rights and allow only specified access on limited terms and conditions. The point is that all users should understand the law sufficiently to know that they have all of these options available to them. Copyright is the body of law that lets such a system work. It appropriates to intangible goods -- copyrighted works -- the characteristics of tangible property. This is what lets the information marketplace work.

While it is necessary to increase public awareness in these areas, it will not be easy. Intellectual property law is typically perceived by non-lawyers as being incomprehensible with its own "technical" jargon and legalistic terminology that do not provide clear cut rules in many circumstances. Many often resist learning such "legalese" and want to see clearer and more easily understandable rules. Unfortunately, a mere recitation of "do's and don'ts" is not enough to explain to NII users how the copyright system affects their interests, and why certain activities are not allowed by the law.

It is not only intellectual property law that presents complexities for the NII user. The underlying information technology is also difficult to understand, and it is constantly evolving and presenting users with new capabilities. Just learning about these capabilities and how to use them is difficult enough for users. It is also difficult

for users to understand that they may not be able to always use all of the new facilities to copy, perform and use works that the technology allows.

Overcoming these barriers is also difficult because the market for copyrighted works is complex with many participants. Individual users generally do not appreciate the impact that an unauthorized use of a protected work can have in that market. This is especially true when the unauthorized use has an immediate benefit to the user, and no immediately visible harm to others. How tempting it is to simply make yourself a copy of a piece of shareware and not pay its author, or to make just one copy of a sound recording that someone has put up on a bulletin board. What harm could there be? However, in Cyberspace, where reproduction and dissemination are so easy and quick, even one unauthorized reproduction -- onto a server for instance -- can have a substantial ripple effect that could even supplant the market for legitimate copies of the work. Just think what happens to the shareware author's expectation of a profit or the sales of a commercial sound recording if ten thousand individuals make such seemingly harmless personal copies.

## **B. COPYRIGHT AWARENESS CAMPAIGN**

To address these concerns about education, the Working Group has initiated the Copyright Awareness Campaign. The kick-off meeting of the Campaign, which was held in March 1995, brought together educator associations, media organizations, copyright owners, the Copyright Office, and the Departments of Education and Commerce to begin this important discussion on how to educate the public on the importance of copyright in the NII. All of the participants agree that this Campaign is critical to the successful development of the NII, and many suggestions were offered on how best to educate the public.

The participants in the Campaign generally agreed that education of the public about intellectual property has a number of aspects. First, public awareness needs to be

raised about the existence of copyright law and the protections that it provides. Second, model curricula need to be developed so that state and local educators (and other organizations) have available to them comprehensive material about intellectual property that could be incorporated into all levels of education. Third, the public needs quick access to up-to-date information on intellectual property rights, and guidance as to where the information is located.

The first goal -- raising public awareness of the existence of intellectual property -- is a broad goal to which anyone may contribute. The Campaign's participants felt that, at present, few people understand what intellectual property is, or the types of intellectual property protection available. Generally, owners of intellectual property should strive to get the word out about intellectual property, whether individually or collectively, so that the public becomes more familiar with the concept. As people begin to associate intellectual property with public benefits, they will be more receptive to learning about and respecting intellectual property.

The second goal is to develop educational curricula about intellectual property -- especially with regard to its role in the NII. In addition to heightening public awareness, such curricula would reinforce the important role of intellectual property as an incentive to create and innovate, provide guidance as to legal use of protected works, and dispel the notion that intellectual property is a barrier to the public availability of works. The substantive components of the curricula may be broken down further into a number of elements. Initially, respect for copyright protection needs to be highlighted -- intellectual property needs to become a "household word." This element will work in conjunction with the goal of public awareness, but should focus more on the importance of intellectual property, and not simply on its existence. Second, a comprehensive program needs to be developed to target different educational levels. Not only must a curricula be

developed and made available for all educational levels, but also a methodology must be established for the continual reinforcement of the importance of intellectual property throughout the lifelong learning of every NII user.

A number of initiatives that are presently underway in both the public and private sectors were reviewed during the kick-off meeting of the Copyright Awareness Campaign. While each of these initiatives is useful in its targeting of a specific audience, a more coordinated effort may be more successful. Ideally, copyright owners, users, and educators will seek to develop broad-based "model curricula" that incorporate all of the substantive issues that are required for useful education about copyright. Such model curricula could then be disseminated to state school boards, private schools, libraries, community centers and other educational institutions for incorporation into their programs.

In considering such model curricula, the Campaign's participants noted that a number of factors should be considered, including the age of the persons being taught, their level of experience with the NII, the specific applications for which they use the NII, and their previous exposure to intellectual property laws. Certain core concepts should be introduced at the elementary school level -- at least during initial instructions on computers or the Internet, but perhaps even before such instruction. For example, the concepts of property and ownership are easily explained to children because they can relate to the underlying notions of property -- what is "mine" versus what is "not mine," just as they do for a jacket, a ball, or a pencil. At the same time that children learn basic civics, such as asking permission to use somebody else's pencil, they should also learn that works on a computer system may also be property that belongs to someone else. Therefore, they should learn what one participant refers to as "electronic citizenship," including how to determine the owner of a work, and how to go about asking for permission to use it. Similarly, they should learn that the taking

of someone else's property, including copyrighted works, without permission is not right. Additionally, as noted previously, users will also be creators of copyrighted works, and therefore should know what their rights are and that they may expect those rights to be respected by others.

Other concepts of intellectual property should perhaps be introduced later. Soon after learning about property and ownership, students should learn more about the various forms of intellectual property, and why their protection is so important. Students should learn about the many valuable technologies that would not have been developed without protections of the patent system to recover costly research and development investments. Similarly, students should be aware of the substantial economic contributions of the industries that rely on copyright protection -- including the computer, entertainment, publishing, and broadcasting industries. In addition, people of all ages should recognize that millions of U.S. workers are employed by industries that rely heavily on intellectual property protection, and that intellectual property rights are truly a matter of national interest.

Additional concepts regarding copyright may be explored throughout a person's education. For example, the economic rationale for granting authors and inventors exclusive property rights in their creative efforts for a limited period of time in order to foster creativity and innovation might fit neatly in a high school economics course. Similarly, a number of topics might be explored during social studies or history classes including the constitutional roots of patent and copyright law, the nature of a governmental grant of a property right, or the role of the copyright and patent systems in fostering the present day information and communications revolution. Business courses could discuss the concepts of licensing intellectual property rights, the use of intellectual property as a marketing device, the concept of intellectual property as a corporate asset, and the trademark concept of good will. At the college level, concepts of intellectual property could be

included in many programs. For example, basic patent and trade secret law could be taught in all science and engineering programs, while copyright law could be included in any instruction dealing with literature, art or computer science.

Along with the initial consideration of the substantive component of *what* should be taught, a procedural component must also be determined. This component actually considers a number of related questions -- *when* should a specific topic be taught, and in what order as related to other topics; *how* should the specific topic be presented, including general tone; and *what form* of communication is most effective given the nature of the topic and the audience involved. The participants at the kick-off meeting discussed a number of factors that should be considered in making these determinations.

Determining when a topic should be presented depends on its degree of complexity. As noted earlier, basic concepts of intellectual property -- such as ownership -- are easily taught at a young age. More complicated topics, such as the exclusive rights of intellectual property owners and fair use, would likely be reserved for later study. However, complexity of the subject matter alone is not the only consideration. A complex topic can be simplified for earlier ages, leaving more detailed instruction for future study. For example, the basic notion of ownership may be introduced at an early age, but should also be reinforced when discussing exclusive rights, licensing, and in other related topics throughout a person's education. Thus, the answer to the question of when a given topic should be taught may be "always," with increasing degrees of complexity so that students are not overwhelmed by a subject that they are too young to understand.

A slightly different factor to consider is how a particular topic should be presented. A point raised in the first meeting of the Copyright Awareness Campaign was that copyright education should not be a series of "thou

shall nots." Instead, education should carry a "just say yes" message -- that works may be accessed and used, and that seeking permission is not an insurmountable barrier. The prohibitions against unauthorized use of intellectual property should be cast in terms of a right to control one's property. The public should also understand that copyright protection is specifically prescribed for a limited period of time, after which the underlying work becomes dedicated to the public. In addition, users should recognize that as on-line licensing becomes more readily available for accessing protected works on the NII, the delays in seeking authorization from the property owner will be minimized.

Another problem with the determination of how a topic should be presented is ensuring accurate and consistent information. In order for the public to respect and participate in educational programs, they must be able to rely on the information they receive. As many private organizations have already developed their own educational materials -- often directed at specific audiences and applications -- confusion may result on the part of the layperson based on perceived "mixed signals" of what is and is not permitted. Therefore, as curricula and other educational programs are developed, clear and consistent information must be ensured in order to avoid confusion and contempt. A system for "peer review" of educational material by impartial editors may aid in presenting accurate and consistent information.

The third factor, and perhaps most important, is the form of communication used to deliver an education program. Clearly, audiences respond differently to varied methods of communication. Numerous methods have been suggested through the Copyright Awareness Campaign for getting the message across including: classroom learning; video instruction; distance learning; broadcast television and radio; satellite teleconferencing; cable television; on-line services; billboards; books, magazines, and other publications; music; and art. Combinations of these methods in copyright workshops will reinforce key concepts



and help tie information together. Many of these forms of communication are already being used to educate the public about copyright law -- and the producers of these materials should work together to determine which methods are most effective for a given audience. The sharing of such information will go a long way toward reducing duplication of efforts -- especially those that are less effective.

Educators and media organizations can have tremendous impact on the procedural component because they possess the expertise required to determine whether a particular educational message is being effectively communicated. Through testing procedures, educators may determine whether certain concepts are comprehended by students. Similarly, through marketing surveys, media organizations can determine the forms of communication that are most effective for particular audiences. These methods of evaluation are already available for other educational and communication materials, thus requiring only minor adaptation for the evaluation of an intellectual property curricula.

The final goal of the Campaign is the establishment of a system that provides the public with easy access to accurate and up-to-date information on copyright, including guidance on when and how to get authorization to use copyrighted works. While educational programs and curricula may raise public awareness, they cannot teach the public every facet of the law as it applies to new and previously unencountered situations. People soon will become frustrated with such programs if they cannot get quick answers to their questions regarding compliance with copyright law. In order for NII users to comply with the law, they need to know where and how to receive additional information on copyright as they encounter new situations on the NII.

A number of methods could be used to provide this service. A directory of attorneys having expertise in a particular field, such as copyright issues dealing with

educational or library applications, could be developed and maintained. Additionally, as was suggested in the Copyright Awareness Campaign, a package of copyright basics could be established on a World Wide Web home page for access by interested users. Similarly, a copyright information news group could be established on Usenet to keep users informed of where to go to get important copyright information. The U.S. Copyright Office provides on-line access to its circulars, announcements, and regulations (proposed and final), as well as information regarding registration information (original and renewal), and other recorded documents. Other private organizations also provide such information and counseling, often for nominal charges.