On Ensuring That Intellectual Property Public Policy Promotes Progress

"To promote the Progress of Science and useful Arts..."
—U.S. Constitution, Article I, Section 8

The core mission of colleges and universities is to create and distribute knowledge in order to enrich and improve the lives of individuals and to strengthen society. Intellectual property law has become a major factor in how we are able to conduct that mission. Therefore, intellectual property and related issues must be a matter that those of us in higher education understand and focus upon.

The ability of public universities and others to carry out their mission depends on the ability of our faculty and students to gain access to the knowledge, equipment, and techniques necessary to teach and research at the cutting edge of their disciplines and to engage in the practice of those “arts.” Increasingly, our faculty and researchers have seen limits placed on their access to these critical resources. These restrictions thus limit the ability of public universities to perform their missions and to fully implement the public good.

Copyright, patent, trade secrets, licensing, and other forms of intellectual property protection are part of the legal framework of the United States. The economic and cultural progress of societies is damaged if the incentive to invent, create, and improve the types of things protected by intellectual property is too weak. The legal basis for these protections is Article I, Section 8, Clause 8, of the U.S. Constitution: “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Rights to their respective Writings and Inventions.”

From the beginning, intellectual property law has required a balancing of needs. On the one hand, there was and is a wish to encourage the creation of intellectual property by giving to the creator a property right. I view this as a form of “temporary monopoly” (a view meant not to be judgmental but to offer clarity). On the other hand, society is benefited by the early and wide availability of knowledge. The question today is whether we have the right balance and, if not, what should be done about it.

Many argue that the balance in recent years has tilted in favor of this temporary monopoly. The strengthening and lengthening of copyright provisions, the modification of patent law, and various court decisions have affected our understanding of the laws. Further, the increased digitization of content generated by our higher education institutions and others—and the use of that content by students, faculty, and researchers—have increased the challenges we face in teaching, learning, and discovery.

Several of the most important factors in shifting this balance are themselves the result of discovery: the genome, the Internet, zero marginal worldwide distribution costs. These, of course, did not exist when the Constitution was framed and the first defining intellectual property laws were written. Together, relatively recent law revisions, court decisions, and discoveries have combined to create access barriers that teachers and researchers of an earlier era did not face and that certainly were not anticipated by the framers of the Constitution.

A few examples suggest the scope of the problem:

- “Ownership” of surgical techniques hinders teaching them or discovering ways to improve them.
- With the transition of scholarly journals to electronic form, driven in part by continual subscription price increases and market concentration, licensing now governs distribution, and concepts such as “first sale” have disappeared. This has reduced the ability of scholars at poorly funded institutions worldwide to teach existing knowledge and to build on it in their research.
- Challenges to the legitimate “fair use” of digitized content threaten to hinder the strategic utilization of Web-enabled teaching, whether it be through the use of e-reserves, hybrid teaching tools, or the provision of online courses and programs.
- A lengthened period of copyright ensures that many copyrights outlive their authors, their authors’ families, and sometimes even the commercial existence of the original publisher. These materials become “orphan” works, and when scholars desire continued access to them, rights for reproduction are unavailable.

Some of the problems illustrated by these examples were foreseen, but perhaps not fully dealt with, by drafters of some of our intellectual property laws. Fortunately for all of us, these statutes have been viewed as “living” documents, with alterations and additions made to reflect the evolution of intellectual
property concepts. For example, the Bayh-Dole Act provides for the seldom used “march-in” rights that permit federal research funders to bring the benefits of inventions to the public under certain conditions. Title 17, U.S. Code Section 103, similarly forbids authors whose work arose from their employment by federal laboratories or other federal agencies from granting exclusive copyright to their written works to scholarly journals, and it preserves the right of the federal government to make these works publicly available. That Code provision also provides for “fair use” of portions of copyrighted material so that scholars and students can make use of the material even if they do not own it. Further, the last National Institutes of Health (NIH) appropriations bill included the requirement that scholarly journal articles arising from NIH-funded work be made available publicly, for free, no later than one year after initial publication. This ensures that scholars and the general public have full access to this important work within a reasonable period of time.

Experience has also demonstrated that we do not need to rely exclusively on federal laws to deal with these important issues; individuals and organizations have found ways to make their intellectual property available for the common good. For example, some creators have used nonexclusive public licenses to ensure that scholars and the entire public may benefit from their creations. Others, faced with restrictions imposed by intellectual property protection, have lifted those restrictions to those in impoverished sections of the world. Still others have decided that a market allocation of their creations is desirable only for those who can pay. All of these historical elements and more recent developments point out that a “solution” to fully address some of the contemporary challenges we face in the intellectual property arena may be a combination of further legislation, public licenses, market-modification allocations, and market-based allocation.

It is not my goal to articulate exactly what might be done to right the balance—to specify how to change the access restrictions that unwisely limit researchers and teachers. I do not have sufficient expertise to do so, and in any case, it would probably be unwise to suggest a general solution when we as a community do not yet fully understand the scope and nuance of the problem.

I would ask, though: Why do we find ourselves in the position of feeling that an imbalance has developed? Why are we, as a community, not sure what to do about it?

I suggest the following: The issues are so complex and interrelated that the subject has remained the domain of experts, mostly lawyers and some line executives who manage intellectual property. College/university leadership rarely has real expertise in this area. Moreover, these issues tend not to be the most pressing problems before academic leadership. Perhaps for those reasons, our leaders have not made the effort to pull together a comprehensive and broadly supported view on how intellectual property law affects our core mission and, of course, have not developed a broadly supported plan to deal with intellectual property law. In contrast, various private-sector interests do have a primary mission to protect or advance certain aspects of intellectual property. The measurable amount of money at stake for those parties produces a focus of effort in Washington.

To address these issues, I recommend that the academy develop a comprehensive set of positions on intellectual property. The positions should be supportive of our core mission of creating and distributing knowledge. The process of developing a set of positions needs to involve the academic library community and college/university-based technology commercialization officers and intellectual property experts. These groups have thought the most about the issues. But these professionals cannot do the work alone: their (legitimate) differing perspectives will prohibit them from coming up with broadly agreed-upon positions. Presidents and provosts—and perhaps associations of these academic leaders—must play a major role in pushing matters along to agreement. Of equal importance, senior academic leadership is critical to getting something done once there is agreement on a comprehensive set of positions. NASULGC is certainly willing to help, but other groups need to be deeply involved. Further, any effort in this area must take into account the excellent work done by others. Over the past half dozen or more years, a number of thoughtful people and organizations have examined many of these issues in great detail, including the President’s Council of Advisors on Science and Technology (PCAST), the National Academies, and the Council on Competitiveness.

The academic effort should be informed by this earlier work, not recreate it. Building on this work, the academic community needs to find a way to agree on a comprehensive set of positions. As the process moves forward, concrete plans need to be made for an adequately funded structure to support and advance this agenda in Washington and across the country. Clearly, the imbalance in the application of intellectual property rules is affecting the core mission of colleges and universities: creating and distributing knowledge in order to enrich and improve the lives of individuals and to strengthen society.


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