

Minority Report*

on a Policy Statement on Student Projects

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On February 23, IU's University Research Policy Committee (URPC) voted 5–2 to adopt a Policy Statement on Student Projects (attached). Professors David S. Wise and Steven N. Shore voted nay, and here explain their dissent.

The attached material was cited as “policy” in the agendas before, in the vote at, and in the minutes of the February 23 meeting of Indiana University's Research Policy Committee. In fact, it is a pair of contracts prepared and approved at the request of IUPUI's School of Engineering & Technology for its capstone course on engineering design. One is entitled “Design Teaching Agreement” and the other, “Student Agreement.” These contracts were modeled after similar agreements from Purdue, but with an essential difference that Purdue's address only patent rights. The IU policy, however, claims university ownership of both students' patents and students' copyrights; this broadening underlies our dissent.

1 Developing students' work

Although this policy was drafted for a capstone courses in engineering and technology, it should be considered along with similar courses in other fields. In most cases student works are immature, often finished only after the graduation. A university claim on copyright includes the derivation rights necessary to later developments, and by claiming these rights, the university impedes that development.

All these scenarios are fictitious:

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- A nursing student develops a computer-based self-care unit instructing patients on the treatment of asthma. She gets more technological advice from her roommate and her roommate's boyfriend who are both majoring in computer science than from her School of Nursing advisor. All the development is performed on their \$1000 home computer, and they offer to license it to IU for distribution over its Internet connections. The university claims the product and tries to develop it, but it dies a quick death because—in the absence of its creators and because of advancing standards of nursing practice—it soon goes stale.
- A music student does a capstone course with the Indianapolis Symphony Orchestra. Following the precedent of these contracts, the rights to distribute refinements of her composition are granted neither to her nor to the orchestra. Her work dies because she feels a disincentive to pursue it.
- An informatics student does an ordinary internship with a private company, but these contracts discourage him and it from developing his ideas to their full potential during his internship. With the encouragement of the company, he writes a minimal report to get the grade. After graduation he intends to join the company and to develop the ideas without university interference. The goals of the advisor and the department are forgotten. Unfortunately for the university, he accepts a permanent job with another company, and the university's connection to the substance of the work is lost.

In all these hypothetical cases, the university would benefit more from the student's copyright remaining in the hands of the student.

2 Background

Under federal law [8] copyrights are created at the moment that copyrightable art is fixed in any medium, but the process by which patents are created requires formal processing after an invention is created. That is, copyrights exist as soon as a student's work is fixed, but a patent on a student's work can exist only after a lengthy legal filing. Current practice at Indiana University, therefore, creates thousands of student copyrights annually, but few, if any, student patents.

The term of copyright is the life of the creator plus 70 years, or at least 95 years for work created for hire or anonymously. The term of patent is 20 years from the date of filing.

Although "works for hire" are copyrighted to the employer under 1976 legislation, case law still supports the so-called "teacher's exemption" for materials

prepared to support a course [4]; their copyright remains the property of the faculty member. Amendments in the 1990's expanded copyright protection specifically for materials distributed electronically via the Internet, enabling publishers to create digital libraries.

Unlike other forms of property, access to intellectual property can be granted by license without exhausting the property or its utility to others. An alternative of simply licensing student-owned copyrights back to the university, rather than wholesale transfer of ownership, was rejected early in the URPC's debate.

Both contracts refer to IU's Indiana University's Intellectual Property Policy [6] which was drawn to apply to its employees. We are not aware that it has been cleared for application to unpaid students.

Although these contracts have been drawn for engineering, and for IUPUI, now that they have been approved by the URPC they become a precedent for other schools on other campuses, and off campus. Required capstone courses already exist within other schools; the School of Nursing has one operating across the state [3], and the Computer Science Department at Bloomington once had such a requirement for its B.S. degree [2]. Nationally, such capstone courses are appearing in other applied fields: for example, architecture.

3 Dissent

We do not believe IU has a legal claim to copyrights on work by unpaid students and, furthermore, we think it counterproductive—in the absence of such a claim—for IU to demand students' copyrights routinely. On the contrary, it is generally in the best interest of Indiana University for its students to own their work.

It might be appropriate to ask that students' art be licensed to the university on the same terms it is licensed to the company but, as stated above, this tack was rejected.

Broad application of the university's 1997 policy that claims copyrights is inappropriate here because *e.g.* the student's Design Report, explicitly mentioned in the first contract, is nowhere close to a work-for-hire. It and other artifacts of a design project are copyrighted by default to their creators, specifically the unpaid student and the contributing host of an extramural project, either a corporation or its employees.

That "report," *which would be considered "a traditional work" under IU's intellectual-property policy* [6], will in near future be cast using tools like Microsoft Office or as a web page (HTML) that might include JAVA applets. That is, as technology changes from handwriting, to typewriters, to word processors, to multimedia—traditional works will also be delivered in newer media, even though

the underlying product remains traditional art. (Books are already being sold on CDROM, even though their intellectual content remains booklike.)

Does the medium: traditional vs. nontraditional, determine the classification of the message? We contend that technology, alone, should change neither law nor university policy. If the administration insists that its investment in current technology earns it ownership all work that uses that technology, then it will shortly see the creators and all their work move from campus to home, as the market for that technology expands and the price of a PC drops below \$1000. Soon all work will be created in isolation off campus, as the community that we call the university dissolves.

4 Interests of the various players

In this section we visit the negative impact of this policy on members of the university community that it affects.

4.1 The student's interest

The student enrolls in courses to learn and to satisfy requirements for a degree. Although the definition of learning is vague, the definition of the requirements is explicit, set at matriculation as a legal contract that is the university's bulletin. Since the attached documents would change that contract, they cannot be applied immediately to seniors' required courses. Just as the bulletin is a public document, these contracts need to be published and cross-referenced from future bulletins.

Even if only a few students objected to usurpation of their copyrights, the confrontation would leave the university in the awkward position defending this published policy before its students, their parents, Indiana citizens, and the press. The debate would deflate the morale of others, including prospective students of modern technology.

4.2 The teacher's view

Since this is likely the first time that a student transfers a copyright, the diligent teacher will probably teach rudiments of intellectual-property law as context for these contracts: that copyrights are property to be sold.

As the university's administration presents confiscatory contracts, however, it teaches its students a countervailing and damaging lesson on how to manage one's intellectual property. In its own interest, it corrupts the lesson on how future alumni should handle their personal property. Those who would teach a balanced view will find themselves in the awkward position of criticizing the university.

As a teacher contributes to the work of the student as editor or coach, does she earn an interest in the copyright? No, not if the contributions are only marginal. Mere editing hardly justifies ownership. When the teachers' contributions are minor, we think that most will forego that claim in favor of diligent students. The institution should not interfere in this student-teacher trust. The goal of teaching, after all, is to encourage students to create freely, and any covetous claim on student productions will interfere with the delicate trust that is the foundation of a productive teacher-student relationship.

Indeed, this policy tends to corrupt the free exchange of information and diminishes the collaborative ideals that are at the heart of academia. Having so weakened these foundations, the university will find it harder and dearer to recruit present students as future faculty.

4.3 The department's interest

The interests of the department are quality students and quality education, manifested by the highest levels of scholarly and creative activity. The expected value of copyrights that result from capstone courses is nil, even though some may offer potential for further development. From the department's perspective, this future prospect is at least as valuable as initial art itself.

The department must attract the best students by offering strong courses, talented faculty, an attractive curriculum, and a valuable degree. While a capstone course might add value to its degree, these contracts detract from its curriculum.

Future development (derived work) is one right granted by copyright ownership, and it is likely to be the one most likely to produce real value. But the most valuable development is likely to be accomplished by the original creators of the art as they mature. They are most motivated and best familiar with the work.

If its students are successful, then their success will be shared by the department. Successful alumni, moreover, are more likely to share their wealth and expertise with the department if it contributed selflessly to the development of their talents *and* their product.

Other aspects of copyright management are performed better by enabled authors or their department than by the university's central agent. For instance, the best defense against plagiarism is a suit on copyright infringement. If the author no longer holds copyright, his only defense is an impossible tort claim. The author and the department who would object to plagiarism are powerless if the university does not pursue plagiarism.

Ownership of copyright also confers a right of censorship (reproduction right), which is best left in the author's hands; the university wants no part of that [7]¹.

¹This opinion, for instance, is copyrighted to the university trustees since it qualifies as a work

4.4 The dean's interest

The reputation of a college or school is determined as much by the success of its students as by the success of faculty. It is also advanced by a high ethical standard in dealing with students, as a model for their future professional conduct. It is in the interest of the college to encourage students to reach beyond the financial interests of the university and of themselves.

In the context of Responsibility Centered Management, it is ironic that the university's documentation implementing the 1997 Policy addresses only the central administration, the campus, and the creator. It omits the college or another responsibility unit where the work was done.

4.5 The Alumni Office's view

Sometime in the future the Alumni Office will solicit contributions from IU alumni, especially those that are financially successful. Since these capstone courses are the last memories that many professional students will carry from the university, a better investment by the university might be a warm and productive experience there, and the rights to the work that launches their careers.

4.6 ARTI

The Advanced Research and Technology Institute (ARTI) owns and manages the intellectual property of Indiana University. Outside the university, it is sheltered from the values of faculty and students, except through governance by policies of the University Research Policy Committee, under the University Faculty Council.

In the context of these contracts, its success will be measured by the rare return from a student's copyright. Unfortunately, we know of no example of such a success. But if real value were returned from a student's copyright not held by ARTI, then someone would count that as ARTI's failure. While it is just as difficult to find such an example, we observe that such a failure might yet be a success for the student, the teacher, the department, the dean, and especially the Alumni Office.

The threat of this kind of failure creates an immediate incentive for ARTI to retain everything that comes before it, regardless of its value within or without the university. Other parts of the university, and the general welfare of society, cited in the university's mission statement oppose this incentive [5].

for hire. Because it criticizes the implementation of their policy, we candidly hope that they allow its open circulation.

5 Informed consent

In the case at hand, the URPC has been told that this particular course is not a *specific* requirement for the Engineering and Technology degree; there is a rarely used, internal alternative to IUPUI's extramural capstone course. This alternative, however, is nowhere stated in these contracts that, we fear, will soon become precedent to required capstone courses in this and other programs.

In anticipation of such requirements, we ask that the second contract include wording acknowledging that the requirement must appear in a timely bulletin. The contracts must not become additional degree requirements without such an announcement.

We propose specific wording to be included as a standard clause in any agreement executed before the art is created, to transfer future copyrights to Indiana University:

Whenever this contract is to be a condition of enrollment, employment, or support of any student or faculty member, it shall be mentioned in every course description and in every call for applications.

Precedent for this condition is found routinely in calls for papers for academic conferences and journals.

6 Why Student Copyrights? Why now?

Indiana University's 1997 intellectual property policy [6] seems to have been motivated by a new regulation governing grants by the federal government [1]. That regulation governs only federally funded work, and only patents. Copyrights on federally funded work should be contrasted with patents here: work resulting from federal employment is uncopyrightable. And copyrights are not touched by that regulation.

Perhaps the prevailing majority of the URPC imagined a link between the "work for hire" provision of the 1976 act and the computer protections of the Digital Millennium Copyright Act, or products of unique equipment owned by Indiana University. But unpaid students' work is not "for hire;" the Digital Millennium applies only to the publication of the students' work—not its creation; and such work is now more likely to be created on company-owned or personally owned computers.

It is a mistake to assert that technology, alone, creates a new basis for sponsors' claims on copyrights. New technology has distorted university values before. In 1958 educational television was supposed to replace live lecturers and whole buildings were equipped for televisions that were never installed (Lindley Hall). In 1978

some thought computer-aided instruction would replace labs and exercises, but it did not because authors were not motivated to produce enough lessons. (Illinois's PLATO system was imported to IU and withered.) Now the web—a wonderful reference tool—is supposed to change distance learning; it may, but not unless teachers see reward in the production of quality courseware. So has it always been with textbooks.

Still this technology has one new attribute that makes success less likely. Unlike ink-on-paper books, the cost of distributing material and recovering responses on the Internet is nearly nothing. This fact makes it even more likely that a single product can dominate a world-wide market. That is, the chance that IU would assemble a profitable on-line course ranks somewhere below the chance that an IU author will assemble a profitable textbook. Although the investment in a book is far less than that in a web course, IU yet allows personal profit as motivation for the book and its revisions. If IU removes that motivation from a web course, why would IU faculty and students strive to produce and to maintain an even more costly product?

7 Conclusion

- Should Indiana University adopt an unenforceable policy?
- Can Indiana University claim ownership of copyright on art created by its unpaid students?
- Should Indiana University coerce students into yielding copyrights on their own work?

We think not. IU might well ask for a limited license, in order to complement its patent interests, but this reach for ownership of students' copyrights is excessive.

It is wrong to appropriate students' nascent creations. On the contrary, we think that a university should seek a high standard in dealing with its students, so to teach them by example to seek high ethical standards in their blooming professional careers.

We think that when the university adopts overreaching policies it poisons its future sense of community and, here especially, the student-teacher relationship. Regardless of whether or not faculty members have rights over the design courses they create, students in those courses certainly deserve the rights to their own work.

References

- [1] Code of Federal Regulations, Chapter 37, Section 401.14(f).
<http://www.indiana.edu/~rugs/respol/37cfr401.html>
- [2] Indiana University, Bloomington Campus. *Bulletin, College of Arts and Sciences, 94/96*, B.S. in Computer Science: C390 or C391 (1994), p. 89.
- [3] Indiana University, School of Nursing. S483 Clinical Nursing Practice Capstone (3 credits, 112.5 actual hours), *School of Nursing Course Descriptions* (2001).
<http://www.indiana.edu/~iubnurse/home/course/description.html#S483>
- [4] Marshall Leaffer. *Understanding Copyright Law*, New York: Matthew Bender (1999), pp. 199–200.
- [5] Trustees of Indiana University. *Objectives and Ideals*, (June 29, 1974).
<http://www.indiana.edu/~deanfac/acadhbkgovernance/ideals.html>
- [6] Trustees of Indiana University. *Intellectual Property Policy*, 1997.
<http://www.indiana.edu/~rugs/respol/intprop.html>
- [7] University of Wisconsin System. Computer Software Ownership. *Financial and Administrative Policies* (October 21, 1985).
<http://www.uwsa.edu/fadmin/gapp/gapp10.htm>
- [8] United States Code, Chapter 17, Sections 101–803.

DESIGN TEACHING AGREEMENT

Among

INDIANA UNIVERSITY

ADVANCED RESEARCH & TECHNOLOGY INSTITUTE

and

COMPANY

THIS AGREEMENT, made as of _____ by and among _____ (hereinafter called "Company"), Indiana University (hereinafter called "IU"), and Advanced Research & Technology Institute (hereinafter called "ARTI").

WITNESSES THAT

WHEREAS, to better prepare their students in the design process, the IUPUI School of Engineering & Technology (hereinafter called "IUPUI ") has developed a course which allows students to work on design problems of interest to industry,

WHEREAS, the design project contemplated by this Agreement is of mutual benefit to the parties hereto, will further the instructional objectives of IUPUI in a manner consistent with its status as an educational institution,

NOW, THEREFORE, in consideration of the premises and the mutual covenants herein contained, the parties hereto agree:

Article 1 - Definitions

As used herein, the following terms shall have the following meaning:

1.1 "Design Project" means the design problem described in Appendix A attached hereto and made a part hereof, as developed by IUPUI and Company in accordance with Article 2 Responsibilities of Parties.

1.2 "Project Period" shall mean from the beginning of the _____ semester of Indiana University Purdue University Indianapolis and terminating after the _____ Semester.

1.3 "Course" shall mean the design course developed by IUPUI.

1.4 "Supervisor" means the professor assigned by IUPUI to be in charge of the Course.

1.5 "Instructors" means Supervisor and any clinical professors and all other IUPUI personnel assigned by IUPUI to assist in the teaching of the Course.

1.6 "Company Assistants" means all employees of the Company assigned by the Company to assist IUPUI in carrying out the Design Project.

Article 2 - Responsibilities of Parties

2.1 IUPUI:

- i. The Supervisor will work with the Company Assistants to develop a suitable Design Project,
- ii. Have each student sign the attached Student Agreement Form,
- iii. Assign the Design Project to one (1) or more students, and
- iv. Assist student(s) in the course in developing one (1) or more Design Projects

2.2 Company:

- i. Assign the Company Assistants to work with the Supervisor to develop the Design Project,
- ii. Provide financial support, as deemed appropriate by IUPUI and the Company. The Company shall reimburse the student and instructors for all expenses, including materials and travel mileage, which are pre-approved by the Company. All travel expenses shall be paid directly to student(s) and Instructor(s),
- iii. Provide technical liaison and assistance as needed,
- iv. Read and evaluate the final report, and
- v. Provide input to faculty and students that will improve the design process and help in the design education of the students,

Article 3 - Project Personnel and Facilities

3.1 IUPUI will make available personnel and facilities required, if any, for this Design Teaching Agreement.

Article 4 - Reports and Deliverables

4.1 Where not prohibited by the agreement with the Student assigned to a Design Project, the Supervisor shall furnish the Company the final design project report relating to such Design Project (the "Design Report"). The Design Report shall be the non-exclusive property of the Company to duplicate and/or use the same in the Company's normal business operations, which includes using the material in reports, to design and build equipment for use by the Company, or any subsidiary of the Company, provided however, that any design information protected under patent or copyright laws shall be subject to Article 9 (Intellectual Properties). The Company shall not sell, license or allow anyone else to use the results of these reports.

4.2 The author(s) of the Design Report and IU shall have the same rights to use the Report as given to the Company in 4.1 above.

4.3 The format and content of the Design Report shall be at the sole discretion of IU, and neither IU nor ARTI shall not be obligated to provide any report in addition to or different than that used by IUPUI for its own purpose. **Neither IU nor ARTI makes any warranty as to completeness, accuracy, efficacy, or safety of any material or information given in the Design Report.**

Article 5 - Information Supplies by Company

5.1 Because it is not possible to retain responsibility for students once they leave IUPUI, IUPUI does not desire to receive any information which is confidential to the Company's Business. The Company agrees that no confidential information will be given to IUPUI.

5.2 Any information, data, parts and knowledge disclosed to IUPUI by the Company shall be at the sole discretion of the Company, and shall be in the form and detail deemed appropriate by the Company. The Company shall not be obligated to create any special part, drawing, specification or other document. **The Company does not warrant and makes no representation as to completeness, accuracy or efficacy of any part, information, data, knowledge or other assistance provided hereunder to IUPUI.**

Article 6 - Use of University Name

Neither party will use the name of the other party, or the name of any employee of the other party, nor any student working on the design, in any publicity, advertising, or news release without the prior written approval of an authorized representative of the other party. The Company will not under any circumstances advertise or otherwise state or imply that Indiana University has tested and approved any product or process.

Article 7 - Product Liability Indemnity

7.1 Subject to the provisions of Article 9 below, the Company at its sole discretion, and without payment to IU, may use any or all of the material contained in Design Report to develop and/or improve any product and/or process. If the Company uses any material contained in any Design Report to develop and/or improve any product and/or process, the Company shall indemnify, hold harmless and defend Indiana University, and its officers, directors, trustees, employees, agents, and students (the "indemnified parties") against any and all claims, demands, actions, liability and expenses ("claims"), including claims allegedly resulting in whole or in part from the negligence of the indemnified parties or from acts or omissions for which the indemnified parties otherwise would be strictly liable, related to or arising out of the Company use of any material from any Design Report.

Article 8 - Publications

8.1 Publication of the Design Report is of fundamental importance to IUPUI, faculty members and their teaching programs. IU must, therefore, permit publication of the Design Report in recognized journals. A copy of all such publications will be sent to the Company thirty (30) days in advance of submission for publication. Recommendation for change to the proposal publication will be considered, but the decision to make such changes is at the sole discretion of the authors of the proposed publication.

Article 9 - Intellectual Properties

9.1 It is understood that the principal product anticipated from this design experience will be the Design Report discussed in Article 4. Under Indiana University’s Intellectual Property Policy, any patentable material contained in the Design Report is to be assigned to IU. At the discretion of the Company, IU will give the Company a non-exclusive, paid up license to any patented material developed under this agreement. The fee for such a license will be the cost of preparing, filing, prosecuting and maintaining of U.S. and foreign counterparts (in countries selected by the Company). The Company shall be given the first opportunity to obtain an exclusive license to use said patents upon reasonable terms mutually agreeable to the parties.

Article 10 - Completion

10.1 It is understood that IUPUI will use its best effort to complete the Design Project within the time period, but because this course involves undergraduate and/or graduate students, IUPUI and IU do not make any warranty nor do they guarantee completion the Design Projects.

IUPUI will not be obliged to spend any University funds except those already allocated to this course in the performance of this Design Project.

IN WITNESS WHEREOF, this agreement is effective as of the initial date of the project set forth hereinabove.

INDIANA UNIVERSITY

COMPANY

By:_____

By:_____

Name:

Name:

Title:

Title:

Date:

Date:

ARTI

By:_____

Name:

Title:

Date:

STUDENT AGREEMENT

for

(Course number and Title)

Among

Indiana University

Advanced Research and Technology Institute

And

Student's Name

THIS AGREEMENT, made as of _____, 20__ by and among _____ (hereinafter called "Student"), Indiana University (hereinafter called "IU") and Advanced Research & Technology Institute (hereinafter called "ARTI").

As part of the design educational process being taught in this course (Course Number and title). IU and _____ (hereinafter called "Company") have entered into an agreement to conduct a joint Design Project. During this Design Project, you may receive information from the Company and may meet and have classes from personnel of the Company. Your instructor, (Name) at IUPUI, and IU feel that this arrangement will greatly enhance your design education at IUPUI. Therefore, as part of this design team you agree to the following:

1. All material you put into your final Design Report will be given to the Company, and Indiana University has agreed to give a non-exclusive license to use that report to the Company.
2. According to Indiana University Intellectual Property Policy, any and all copyrightable and patentable material developed as a result of this Design Project, is assigned to Indiana University by Student, signing this agreement confirms such ownership. All revenue, other than direct expenses, generated from the commercialization of intellectual property developed as a part of the design educational process will be shared with the Student according to the policy. A copy of Intellectual Property Policy is available from your instructor.
3. Student shall have a non-exclusive license to all copyrightable material developed as a result to the Design Project.

Date:

Student

Indiana University

ARTI

By:

By:

By:

Name:

Name:
Title:

Name:
Title: