

## **Fair Use Education for the Twenty-First Century: A Comparative Study of Students' Use of an Interactive Tool to Guide Decision Making**

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Today's emerging technologies and the concomitant changes in intellectual property laws make it imperative that colleges and universities establish clear policies regarding the appropriate use of copyrighted materials on their campuses and educate their communities about the application of copyright law in teaching, research, and scholarship (Braman 2005). Effective education about copyright is especially essential as content is reused and remixed in the multimedia-rich, technology-enhanced learning environments that are becoming increasingly prevalent in higher education.

At the heart of these issues is the [fair use](#) provision of copyright law, which is intentionally vague and subject to broad interpretation. Our experience in teaching about copyright and fair use shows that many educators find fair use guidelines confusing and difficult to apply. We offer an innovative solution. The Fair Use Analysis (FUA) tool developed by the [University of Minnesota Libraries](#) can help faculty members, administrators, and students learn about copyright law and make informed decisions about fair use. In this article, we introduce a comprehensive, publicly available Web site supporting copyright education and compliance with copyright statute. The methods we describe and the issues we identify will help instructors, librarians, educational technologists, and administrators assess understanding of copyright and create systemwide copyright education policies.

### **The Fair Use Analysis Tool: Development, Purpose, and Functions**

In response to federal mandates that academic institutions develop copyright information training programs ( [Digital Millennium Copyright Act](#) and [Technology, Education, and Copyright Harmonization Act of 2002](#) ) and educators' growing dissatisfaction with traditional restrictions on the use of copyrighted works in digital formats (Fisher and McGeeveran 2006), the University of Minnesota Libraries in 2002 assembled a task force to investigate library [policies on fair use](#). Over two years, the task force inspected library and law review literature, court opinions, trade journal articles, and Web-based publications, as well as existing university policies. The task force review highlighted the confusion surrounding interpretations of fair use and punctuated the need for educational resources that would help faculty members, staff, and students make informed decisions regarding fair use. Thus, the goal of the library task force became to design and deliver resources that would foster responsible compliance with copyright law, take full advantage of fair use opportunities, and reduce institutional risk for copyright infringement liability.

In spring 2005, the University of Minnesota Libraries launched the [Copyright Information & Education](#) Web site. The site includes the [FUA](#) tool, an interactive device intended to facilitate fair use decision making by stepping users through a [four-factor analysis](#). The tool presents conditions and facts that should be considered when deciding whether a particular use of a copyrighted work falls within the fair use provision. The user provides specific facts about the proposed use and is then prompted to consider each of the four factors—purpose, nature, amount, and market effect—at work in analyzing whether the intended use qualifies as a fair use.

Three features distinguish this tool from a traditional checklist approach and highlight the technology's advantages. First, the tool is presented within a comprehensive copyright information Web site that includes explanatory links, an [FAQ](#) list, and education-based [scenarios](#) illustrating copyright issues common to the higher education teaching community. Second, pop-up windows offer further explanation of each of the four

factors, contextualizing the vocabulary of fair use and providing users with definitions and interpretations.

Third, to reinforce the concept of balancing the four factors in decision making, each factor is weighted on a five-point Likert scale. The weight of each factor for or against fair use is influenced by several sub-factors. After selecting the appropriate sub-factors, the user enters his or her own estimation of how strongly, and in which direction, each factor weighs with regard to fair use. When users click the submit button, the tool performs a simple calculation based on the scale ratings and returns a summary report indicating whether the overall balance favors fair use or not. Users are encouraged to print and save this report to document their judgments.

## **Using the FUA Tool to Teach Copyright**

Library staff sought to investigate the [FUA](#) tool's impact on fair use decision making and its potential as a teaching tool. An interdisciplinary group of library staff members, instructional designers, and educational research specialists from the university's [Digital Media Center](#) undertook a multi-semester examination of students' use of the FUA tool in the context of a Web design minicourse. We compared subjects' use of the tool with a control condition in iterative cycles with several groups of users in an effort to answer the following research questions:

- Does using the FUA tool encourage students to reach accurate conclusions about the legality of the educational use of various materials?
- Does using the FUA tool improve student thinking about the issue of fair use? Is student thinking about fair use more constructive and better informed than it was in the absence of those materials?

### ***Sample Selection***

We selected a purposeful sample of 59 graduate students aggregated across three sections of a Web design mini-course (1.5 credits) taught in fall 2005 and in spring 2006. Graduate students were appropriate participants for our study because they encounter copyright and fair use issues both as instructors and as students. As teaching assistants or instructors, our participants face fair use decisions while creating digital materials and making articles and other scholarly work available to their students in course-related online environments. As students, they encounter a wide variety of document distribution methods.

### ***Data Collection and Analysis Procedures***

We gave students a paper copy of the fair use section of the U.S. copyright statute ([Exhibit 1](#)) and asked them to read a complex problem-solving scenario, to make a decision regarding the fair use of copyrighted materials, and to explain in a written essay the reasoning that led to that decision. Participants submitted their decisions through an online asynchronous discussion tool on the mini-course Web site. This enabled us to easily record and archive each student's response.

Next, we asked subjects to read a second scenario involving a different problem and answer the same questions after using the FUA tool on the [Copyright Information & Education](#) Web site. Following the same protocol, students submitted their essay answers through the asynchronous discussion tool. After students completed this exercise, they debriefed in a face-to-face discussion with the course instructor.

### ***Development of Scenarios and Scoring Rubric***

We developed the scenarios used in the study from interviews with educators and library media practitioners about authentic situations. The scenarios were designed to be complex, multi-issue, realistic cases that challenged students to practice reasoned decision making and to make a judgment about fair use in the face of conflicting factors. Experts and novices piloted the scenarios to ensure that they represented likely scenarios in designing and delivering university courses. The expert group (a copyright administrator from the university's Copyright Permissions Center, an advanced PhD candidate studying copyright and fair use, a law school faculty member, and a copyright specialist from the Libraries) and the novice group (four students with no prior copyright training who offered instructional design support in an academic computing services unit) provided written analyses of each scenario following the protocol explained above. Analyses of these responses served as benchmarks for the next phase of the project.

The initial rubric was tested during the pilot implementation; two researchers blindly coded the same set of essays using this initial rubric. They negotiated disagreements to reach consensus on all scores and revised the scoring rubric to incorporate changes based on their reflection. During subsequent implementations, the same two researchers blindly coded all essays and negotiated disagreements to reach consensus on all scores.

The resulting scenarios ([Exhibit 2](#)) were structured so that one clearly was not an instance of fair use and the other clearly was an instance of fair use. This allowed us to consider the accuracy of student decisions as well as the quality of their reasoning. The three study groups, from three different sections of the mini-course, differed only in the order in which participants received these scenarios: one section initially received the non-fair use case, while the other two sections initially received the fair use case. This allowed us to establish a different control condition (students given only a paper copy of the statute) and treatment condition (students afforded use of the FUA tool) with each iteration.

To assess student performance on the two scenarios, we used rubric-based measures of (a) student understanding of each of the four factors involved in fair use analysis and (b) the quality of student reasoning with those factors ([Exhibit 3](#)). We also measured the accuracy of student judgments about the two scenarios, comparing them to the judgment of the experts who took part in the development of the cases. Finally, we asked students to report the degree of confidence they had in their conclusions about the scenario in question.

## Findings and Discussion

In brief, we found that the use of the [FUA](#) tool did have an effect on student comprehension of copyright and fair use compared to the control condition, but it did not significantly affect the accuracy of students' conclusions regarding fair use or their confidence about their ability to reach such conclusions ([Exhibit 4](#)).

We gathered qualitative data from an inspection of student responses to the scenarios and from an analysis of audio recordings of an October 2006 focus group. This information illuminated the patterns revealed by the quantitative data and highlighted aspects of fair use analysis that students found particularly difficult. Three themes emerged from combining the qualitative with the quantitative data. First, students understood the purpose factor of fair use most comprehensively. Purpose was also the factor that they reported in the focus group to be the least ambiguous and easiest to understand. As one student put it, "Educational [purpose] is the only one [fair use factor] that is absolutely clear cut." This may explain why students showed a strong tendency to view the purpose factor as dominant, trumping the other factors in decisions about whether a proposed use of copyrighted materials is a fair use.

Second, and most surprising to us, students seemed confused about the balancing component of fair use reasoning. It was not clear that students grasped what it meant to weigh or balance competing factors against each other in arriving at a decision about a complex situation. Almost no responses to the scenarios involved anything resembling a balancing of factors, even though the cases were designed so that some factors

avored fair use and some weighed against it. Moreover, in the focus group, none of the students described a balancing or weighing process when explicitly asked how they went about making a decision about fair use when some of the factors pulled in different directions.

Finally, many students seemed to become lost in the details of the particular scenario and failed to simply step back and apply the four-factor analysis to determine fair use. When asked to discuss broad principles of copyright and fair use, such as the four factors themselves, students often retreated into discussing the particulars of how copyrighted materials are distributed and used by instructors or peers in their disciplines.

## Recommendations and Next Steps

We offer the following four recommendations for educators and administrators seeking to design or use similar tools and methods to promote informed instructional practices.

First, this study reinforced for us how difficult it is to teach copyright and fair use rules. Even after completing these exercises, many participants still seemed profoundly confused. In retrospect, the participants' reactions make sense; they are practicing educators who have no desire to become experts in copyright law, but simply want to teach their classes efficiently. In fact, a number of our participants showed a tendency to focus on the purpose factor and conclude (incorrectly) that use of parts of a work for an educational purpose is sufficient to justify fair use. In order to promote increased compliance and nurture more knowledgeable practitioners, copyright educators should provide greater context for exercises such as these and help [FUA](#) tool users see why understanding copyright permissions is essential to ethical and responsible conduct in teaching.

Second, this study suggests that the reasoning process involved in coming to a responsible fair use decision is not easily grasped by most graduate teaching assistants and instructional support staff. Although we believed that the rating system built into the FUA tool would scaffold high quality, well-reasoned decisions, we found that this functionality was not enough. We recommend, therefore, that copyright educators provide explicit modeling of appropriate reasoning with the four factors to guide learners' efforts in thinking through similar problem situations. Modeling this process, both with and without the FUA tool, might also help learners better discern the significant aspects of a situation. In addition, we believe that reasoning will be improved by presenting and using the FUA tool as part of the larger suite of copyright information and education tools presented on the [University Libraries'](#) Web site. These additional tools, particularly the explanatory links and example scenarios, add depth and context, which can be expected to deepen users' thinking about copyright and fair use.

Our study did not measure learning in an authentic context, nor were we able to adequately measure how well participants' understanding, reasoning, accuracy, and confidence in performing a fair use analysis with the tool transferred to such contexts. In an early iteration of these procedures, we asked participants to think of actual fair use decisions they faced while designing courses for instructors, teaching their own courses, or in other situations, and to use the FUA tool to make informed decisions. However, we were not able to evaluate responses because participants often did not provide enough written background information about the problem for us to assess the strength of the analysis. This absence of necessary context again confirmed for us that participants struggled to determine which features of a given scenario are relevant.

In a future study, we plan to study the effects of the FUA tool on learning using authentic cases. By providing learners with opportunities to consult with experts and peers about key information that is needed to make an informed decision and the chance to practice using the tool in authentic situations related to the courses they teach, we hope to obtain sufficiently detailed descriptions of their situations to allow for learning assessment. In this study, we will use qualitative methods to investigate the reasons for the null effects of the FUA tool on learner confidence, and the study will focus more on the quality of learner understanding and reasoning than

on accuracy of learner judgments in authentic cases. We will explicitly model use of the suite of copyright education tools and resources in which the FUA tool is embedded. We also plan to work with faculty members in the next study to determine whether the results obtained with graduate students can be replicated.

## Conclusion

Every institution of higher education faces difficult questions about how best to educate its community regarding copyright law and the fair use of copyrighted materials. Overall, our evaluation shows that an interactive, online approach to teaching about copyright and fair use can be effective in promoting understanding of these complex issues. Finally, deeper discussion based on thoughtful investigation is needed to move educators, staff, and students beyond the notion that any use of copyrighted material for educational purposes is in compliance with copyright law and fair use policies. Our study has shown how institutions might move forward in developing or using online tools and methods, but clearly more work is needed both in creating innovative tools and in investigating their effects.

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