This study analyzed the knowledge levels of Ohio's postsecondary educators regarding copyright and copyright related issues. A stratified random sample of 62 postsecondary educators from public and private colleges who taught Web-based courses participated in the study. The study used two instruments: a copyright questionnaire about knowledge of issues and a followup to gather educators' responses to issues related to copyright knowledge, ownership, and management in their own institutions. Results show that postsecondary educators have some knowledge of the Copyright Act and copyright related issues, but were for the most part unstudied in this area. Educators who taught graduate courses scored significantly lower than those who taught undergraduate and professional courses. Educators who were aware of their own institution's copyright policy scores higher than those who were not. Results from the followup show that most educators feel limited in their knowledge regarding copyright, are concerned about legal issues, and request ongoing inservice training and workshops to remain informed. The study suggests that institutions of higher education must respond to copyright issues and provide ongoing education and access to materials about copyright for faculty members. Eighteen appendixes contain supporting materials, including cover letters and tracking forms used in the study. (Contains 15 tables and 58 references.) (SLD)
AN ANALYSIS OF THE KNOWLEDGE LEVELS OF OHIO'S POST-SECONDARY EDUCATORS IN PUBLIC / STATE, PRIVATE AND TWO-YEAR COLLEGES AND UNIVERSITIES REGARDING COPYRIGHT OWNERSHIP OF WEB-BASED / ONLINE COURSES AND MATERIALS

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A Dissertation

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DOCTOR OF EDUCATION

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ABSTRACT

Patrick D. Pauken, Advisor

Knowledge of copyright is essential for educators in today's rapidly changing educational and technological environment. The study analyzed the knowledge levels of Ohio's post-secondary educators regarding copyright and copyright related issues. A stratified random sample of 62 post-secondary educators who taught web-based courses from public/state, private, religious and two-year colleges participated in the study. The study utilized two instruments: the copyright questionnaire to assess the knowledge levels of educators regarding the Copyright Act and copyright ownership issues, and a copyright follow-up survey to gather and evaluate educators' responses to issues related to copyright knowledge, ownership and management in their current institutions.

Data collected from the questionnaire were subjected to several ANOVA tests, t-tests and Tukey's post hoc test. Data from the survey were analyzed utilizing a modified version of Spradley's (1976) thematic content analysis. The study also utilized a legal research methodology to collect, review, and analyze state and federal case law relevant to a discussion on copyright ownership of educational materials.

The results of the study reveal that post-secondary educators have some knowledge of the Copyright Act and copyright-related issues but were for the most part unstudied in this area. Two demographic variables had a significant effect on post-secondary knowledge of copyright law. Educators who taught graduate courses scored significantly lower than those who taught undergraduate and professional courses.
Additionally, educators who were aware of their institution’s copyright policy scored higher than those who were not. Results from the follow-up survey revealed that most educators feel limited in their knowledge regarding copyright, are concerned about legal issues and request ongoing in-services and workshops to remain informed. The study concluded that institutions of higher education must respond to copyright issues and provide on-going education and access to copyright materials for faculty members.
This dissertation is dedicated to my loving husband, Sylvester Renner, whose unfailing support and encouragement made a world of difference in completing this enormous project.
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CHAPTER ONE: INTRODUCTION

The United States Constitution grants the power to Congress “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries” (U.S. Const. Art I, § 8, cl.8). The first Copyright Law was passed on May 31, 1790, during the second session of Congress (Miller, 1979), and granted authors the exclusive rights to any book, map or chart they created for a renewable fourteen-year term. Based on the Statute of Anne with some parts drawn from state laws, the act was appropriately entitled “AN ACT for the encouragement of learning by securing copies of maps, charts, and books, to the authors and proprietors of such copies, during the time mentioned” (Miller, p.5). While intellectual property laws date back to the Middle Ages in Europe, there is a growing concern amongst educators regarding intellectual property rights from the utilization of advanced technology on campuses (Young, 1998).

Consider the following scenarios:

It is a cool spring morning in Mansfield, Ohio. Professor Jones is in charge of creating a distance education course in International Business for the University of Miami. Professor Jones creates a web site, records video of lectures, creates a chat room, an electronic mail discussion list, and develops an examination administrable online. The course is developed over several years and becomes popular resulting in increased student enrollment in the university’s distance education program. Professor Jones is offered the opportunity to manage a similar program at Cleveland State University. Professor Jones wishes to take his product with him, but encounters immense pressure from officials at Miami who claim ownership of the materials based on contract and the utilization of campus resources.

In the summer of 1999, Professor Ridge, a law Professor at Case Western Reserve University, entered a contract and supplied videotaped lectures to Kent State University School of Law. Under this contract Professor Ridge gave eleven lectures for a civil procedure course, which were videotaped for later use by Kent State law students. Officials of Case Western Reserve University learned about this arrangement and objected stating that Professor Ridge violated university policies by
providing course materials to another law school without permission. Professor Ridge argues that she does not teach at the virtual law school or even interact with its students, in person or online, and therefore is not in breach of Case Western's intellectual property policies.

The above scenarios are hypothetical examples of how disputes may arise regarding ownership and transfer of intellectual property from individual faculty members to other organizations other than the home institution. In the former, the faculty member is the decision-maker and meets resistance from his university. In the latter, the university plays the role of the decision-maker and encounters resistance from the faculty member. Over the past decade, there has been no reported legal case directly addressing the issue of copyright ownership of web-based courses and materials in institutions of higher education, yet such occurrences as those mentioned in the above scenarios are likely to increase in the future. For example in late 1999 and early 2000, the Wall Street Journal and New York Times each reported a similar dispute between Harvard Law School and one of its well-known faculty members, Professor Arthur Miller (Steinberg & Wyatt, 2000; Marcus, 1999). Similarly, the Chronicle of Higher Education (1999) reported the case of a new company Unext.com. Unext.com offered a select group of universities, namely Columbia University, Stanford University, the University of Chicago and the London School of Economics and Political Science a chance at Wall Street riches in return for the right to use their names and faculty expertise for developing business oriented courses. Unext.com then sold the course materials to multinational corporations overseas. In turn, the corporations delivered the courses to their employees worldwide via the Internet. However, a unique feature of the Unext.com contract is that it makes clear that the content going to the company is coming from the institution and not from particular faculty members. The Unext.com case is a typical example of how institutions
of learning engage in business arrangements with external organizations utilizing faculty's expertise. Although this relationship with third parties is more typical of those that colleges or universities have had in the past, it does raise interesting questions about intellectual property rights.

Institutions of higher education exist to advance and disseminate knowledge, and they accomplish these objectives through teaching, research, publication, and community service. However, today's rapidly changing educational and technological environments bring new challenges to old practices. For example, traditionally, the university professor has been the sole author or copyright owner of most copyrighted works in higher education (Lape, 1998). Today, some universities produce works that use an entire team of experts to bring a project to fruition (Guernsey & Young, 1998). Hill (1999) for example suggests that technological advancement in institutions of higher education is growing at a rapid and unprecedented rate. Amidst these developments, there have been misunderstandings that arise amongst faculty and the institutions they serve regarding intellectual property rights (Guernsey & Young, 1998).

As the twenty-first century emerges, technological advances are rapidly changing the ways in which everyday occurrences transpire in most colleges and universities. Perhaps the most prevalent effect information technology has on higher education is the rapid growth of distance education (Hill, 1999). The United States Copyright Office Report on Copyright and Distance Education reports that by 2002, it is estimated that 2.2 million college students or (15%) of all students will take distance education courses (U.S. Copyright Office Report on Copyright and Distance Education, 1999). This represents an increase from 710,000 or (5%) in 1998 (International Data Corp Press
In 1998, 62% of all four-year colleges offered distance-learning courses. However, the report suggests that by 2002, there will be an increase to about 85% (U.S. Copyright Office Report on Copyright and Distance Education, 1999).

Faculty and instructors in a wide variety of disciplines are responding to technological advances by setting up web pages to enhance their courses (Young, 1998). Institutions of higher education have responded too. For example, it is reported that Florida Gulf Coast University has mandated that professors prepare at least some form of online materials for all courses taught (Florida Gulf Coast University Web Design Standards, 2001). Furthermore, several educational institutions have taken steps to encourage faculty to incorporate website and other digital technologies into their courses (Young, 1998). Unfortunately, as colleges and universities scramble to develop and implement distance education programs, there is a growing concern as to whether current widespread use of technologies are keeping up with the existing intellectual property laws (Young, 1998; Laughlin, 2000; Seely, 2001).

Seely (2001) for example notes that one of the appeals of the widespread use of distance education is that it represents a kind of cyber frontier, that the civilizing influence of the law has not reached. Much of the educational use of the Internet in the form of distance education courses he maintains, proceeds without any serious consideration of the legal issues created by such use (Seely, 2001). Consequently, there may be a significant gap in the knowledge base of educators regarding intellectual property rights as it relates to web-based creations. Historically, the ownership of the materials prepared by educators for their courses has not been an issue (Guernsey & Young, 1998). Today, with the growth of distance education the status quo has changed.
The process of committing to writing and digitizing the course content and material makes it possible, if not potentially lucrative, to package courses in such a way that they become mobile and can be delivered by the author at a new university (Seely, 2001). Traditional copyright issues were limited to whether a professor’s use of copyrighted materials in class violated another’s copyright (Crews, 1999, Leibowitz, 1998). Laughlin (2000) suggests that this issue has turned “full circle.” Now, professors are raising claims of copyright ownership of their classroom lectures (Hill, 1999). In response to the widespread use of this form of technology, many institutions are in the process of rewriting their intellectual property policies to govern the use of these course materials (Marcus, 1999).

Meanwhile, studies reveal that the knowledge levels of educators and administrators about the current Copyright Act of 1976 are ambivalent and, at best, low (Chase, 1994; James, 1981; Baker, 1999). Scholars who have studied the phenomenon on copyright ownership of web-based courses suggest that there are conflicting views with regards to ownership claims made by the university and faculty (Daniel & Pauken, 1999; Seely 2001; Laughlin, 2000). The Copyright Act of 1976 stipulates that such ownership vests in the author of the work (Copyright Act of 1976, 17 U.S.C § 107). However, because colleges have their greatest power in the curricular sphere, they may claim authorship inasmuch as they remunerate faculty for their academic endeavors and invest in the curricular and research materials (Daniel & Pauken, 1999).

As the information revolution grows, faculty and administrators may become literally overwhelmed by keeping abreast with the current developments. At the same time, there may be a copyright issue that is of far greater concern to educators and
administrators, namely the lack of information and knowledge about copyright law and more specifically copyright ownership of web-based courses and materials that professors create on a daily basis. Most institutions of higher education have intellectual property policies incorporated into the employment contracts either by implication or by reference in their faculty handbooks. However researchers have suggested that despite the presence of policies, educators' knowledge levels of copyright is low (Chase, 1994; Baker 1999). In addition, while intellectual property conflicts in private industry are often clear-cut, conflicts between faculty members and the universities that employ them regarding ownership of copyright of electronic courses and other curricular materials are more difficult to decide (Gorman, 1998). It is crucial that faculty be made aware of certain provisions that govern their intellectual property rights. Given the widespread use and proliferation of distance education courses, educators need to be enlightened about their intellectual property rights. Lang (1998) predicts that universities that continue to expand their distance learning programs without first addressing issues of copyright ownership of electronic courses and materials may find themselves mired in legal battles that will be costly, both in terms of legal expenses and faculty morale.
Purpose of the Study

Previous studies testing the knowledge levels of educators regarding copyright law have focused on the K-12 setting (Shane, 1999), on media directors (Chase, 1994), or on librarians (Tilson, 1990). Although such studies have assessed educators' practices, exposure and understanding on certain portions of the Copyright Act, currently no study has tested the knowledge base of post-secondary educators regarding copyright and copyright ownership of web-based courses and materials. There has been a distinct lack of research assessing the knowledge levels of copyright ownership with this group.

The purpose of this study was three-fold. Firstly, the study assessed the knowledge levels of Ohio's post-secondary educators regarding copyright ownership, by testing their knowledge base of standard copyright questions, drawn from the Copyright Act of 1976. In addition, several demographic factors were examined to determine a significant relationship to educators' knowledge base of the Copyright Act. The demographic factors are number of years teaching, number of years using web-based technology in an institutional setting for instructional purposes, faculty rank, full-time or part-time employment status, highest level of education, level of course taught, institution type, participation in copyright law related conferences and awareness of institutional copyright policy. Most of the variables utilized in this study are those utilized by Shane (1999) in his doctoral dissertation, which analyzed the knowledge levels of K-12 educators regarding copyright ownership of their multimedia classroom projects. Secondly, the purpose of this study was to gather and report additional data on case law regarding copyright and copyright ownership. Through legal research and analysis a knowledge base of copyright law was established. Thirdly, the study analyzed and
reported data on educators’ responses about knowledge of copyright law, the management of copyright related information by university officials, and responses by participants as to the best way of getting out copyright information to faculty.

Research Questions

The following research questions are addressed in this study:

(1) What is the level of legal knowledge of Ohio’s educators in public/state, private, and two-year institutions of higher education regarding the Copyright Act of 1976?

(2) Do the following variables significantly affect the level of legal knowledge of post-secondary educators regarding copyright ownership of web-based /online courses and materials?
   
   (a) Number of years teaching in higher education
   
   (b) Number of years using web-based technology in an institutional setting for instructional purposes
   
   (c) Faculty rank
   
   (d) Employment status
   
   (e) Highest level of education completed
   
   (f) Education level taught
   
   (g) Institution type
   
   (h) Participation in law related workshop on copyright law
   
   (i) Awareness of institutional copyright policy

(3) What is the knowledge base of educators regarding copyright ownership as is stipulated in section 201 of the Copyright Act of 1976?
(4) What sources of law-related information are educators familiar with regarding copyright law and copyright ownership?

(5) Do educational institutions have copyright guidelines that address the issue of web-based/online courses and materials created by its own faculty?

Significance of the Study

This study is the first comprehensive study that tests the level of legal knowledge of Ohio's post-secondary educators regarding the Copyright Act of 1976. The study is also significant because it is the first comprehensive and clear view of faculty members' attitudes regarding intellectual property rights especially as it relates to copyright law. The study can promote interest in organizing, formulating, and disseminating clear and revised copyright policies that address current intellectual property concerns in higher education. This study bridges the gap in literature regarding the knowledge level of a distinct campus group, namely educators of web-based instruction. Other studies have focused on media directors, teacher and librarians. Given the rapid growth of technology as an educational delivery system, it is important to conduct research on educators' knowledge of intellectual property issues that affect them. The study may provide educators and higher education administrators with much-needed data that can be useful in analyzing the knowledge level of educators regarding intellectual property laws and rights. The findings of this study will add to the body of research for future study of copyright ownership of web-based/online courses not only in Ohio but also in other states. Conclusions from this study may provide perspectives on improvements that can be made in providing for in-service legal training...
for educators who utilize information technologies to enhance and enrich their classroom presentations.

If the results of this study show that the legal knowledge level of faculty is truly low, then there is an obvious need to do something about this lack of knowledge. This lack of knowledge could lead to faculty being sued or terminated for copyright infringements or for violating university polices regarding copyright law. It may be necessary to establish ongoing in-service legal training for educators who are creators of these products. However, before any sensible training can be planned, it is useful to establish baseline data to know where knowledge is lacking and consequently where training is most needed. This study will establish a knowledge level baseline for in-service legal training.

This study is timely because failure to test the knowledge of educators regarding their intellectual property rights for web-based courses and materials may well have a negative impact on both the institution and faculty members. Faculty members out of concern and because of uncertainty as to the legal position on copyright ownership may, and in some cases, have refused to make digital or electronically created materials available for their courses (Young, 1998). Even more troubling to institutions is the possibility that an educator could sell the product to other institutions. In turn, the institution that purchased the materials may use them to compete against the original institution that incurred the cost to create the materials (Steinberg & Wyatt, 2000). The Pew Symposium in Learning and Technology categorizes this issue of knowledge of copyright ownership as one of conflict of commitment (Leibowitz, 1998).
The principal concern most institutions have is a lack of knowledge base on the part of both administrators and faculty as to intellectual property rights that govern their creations. In a world where convenience of location and time are increasingly crucial, an objective assessment of the legal knowledge levels of faculty is crucial. With this knowledge base, policymakers will be in an informed position to proceed in promoting law-related education of college teachers.

Variables

Dependent Variable: The dependent variable in the study was the level of legal knowledge of Ohio’s educators regarding the Copyright Act and copyright ownership of web-based / online courses and materials. Knowledge of the Copyright Act and copyright ownership of web-based / online courses and materials was defined as the scope and extent of the understanding and awareness of the aggregate of legal and judicial precedent and accepted legal principles as they relate to the body of law regarding copyright. The knowledge level was determined by the percentage of correct answers on a multiple-choice and true and false questionnaire that participants voluntarily completed. The knowledge score ranged from 0-21.

Independent Variables: The independent variables in this study were the demographic information asked on part three of the copyright questionnaire. The independent variables were:

(a) Number of years teaching in higher education: This variable was coded utilizing the following ranges 0-2, 3-5, 6-10, 11-15, and greater than 15.

(b) Number of years of experience using web-based technology for instruction in an instructional setting: This variable was utilized by Shane (1999) in his
study of the knowledge levels of K-12 teachers regarding copyright law and multimedia classroom materials. This variable was coded utilizing the following ranges 0-1, 2, 3, 4, 5, and greater than 5.

(c) Faculty rank: This variable reflected the Ohio Board of Regents Higher Education Information classification of faculty rank, which include: Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer.

(d) Employment status: This variable was classified into the following categories: part-time position and full-time position.

(e) Highest level of education completed: This variable was classified into the following categories: Bachelor's degree, actively working on a master's degree, Master's degree, actively working on a doctoral degree, Doctoral Degree (J.D. Ed.D. M.D. Ph.D.).

(f) Level of course taught: This variable was based on the Ohio Board of Regents Higher Education Information classification of academic course level which consisted of the following: undergraduate (UG), graduate (G) and professional (P).

(g) Type of Institution: This variable was based on Ohio Board of Regents Higher Education Information classification of universities and colleges. This includes:

(i) Four-year public college and universities

(ii) Four-year private/religious colleges and universities

(iii) Two-year public college or university
(iv) Two-year community or technical college

(g) Participation in law-related workshop on copyright: This variable was classified utilizing a "yes" and "no" answer format and assessed attendance and participation in copyright law related conferences.

(h) Awareness of institutional copyright policy: This included a "yes", "no" and "I don’t know" answer format and elicited information from educators regarding awareness of the availability or non-availability of their institution’s copyright policy.

Definition of Terms

The terms used in this study are defined as follows:

Community College: A two-year institution of higher education that operates within tuition, state funds, and funds derived from local levies. This type of college offers certificates, two-year degrees, and is often a partner with university main campuses in the awarding of four-year baccalaureate degrees.

Copyright: The protection given to authors of creative works which gives them the exclusive rights to reproduce, prepare derivative works, distribute, publicly perform or display their works or authorize someone else to do these acts. Copyright Act of 1976, 17 U.S.C. § 101-810 (2000).

Copyright Act of 1909: A piece of legislation that governs intellectual property rights relating to copyright. This Act was codified and took effect in March 4, 1909. It is found in Pub L. No. 60-349, Ch. 320, 35 Stat. 1075.

Copyright Act of 1976: A piece of legislation that governs intellectual property rights relating to copyright. This Act was passed in 1976 and took effect in January 1,
Derivative Work: A derivative work is a work based upon one or more pre-existing works, such as a translation, a musical arrangement, a dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted. A work consisting of editorial revisions, annotations, elaboration, or other modifications, which, as a whole represent an original work of authorship, is also a derivative work. 17 U.S.C. § 101 (1976).

Educators: A term used to describe full professors, associate professors, assistant professors, full and part-time instructors and lecturers who are instructors of web-based /online courses and materials. This classification is based on Ohio Board of Regents academic rank of educators.

Fair Use: A principle expressed in copyright law that is designed to balance the rights of the creators of a copyrighted work with the need of society to allow others to build upon the information presented in that work. 17 U.S.C. § 101 (1976).

Four-year public / state colleges and universities: A term used to describe four-year college campuses, which may also have two-year branches. These colleges operate with tuition and state funds and offer certificates (some universities offer two-year degrees) baccalaureate degrees, and graduate degrees.

Infringement: The violation any of the exclusive rights reserved for the copyright holder is an infringer of the Copyright. 17 U.S.C. § 501 (1976).
**Intellectual Property Policy:** A document or policy statement created by an institution of higher education to formally recognize the issues of intellectual property with regards to patent law, trademarks, and copyright law and to provide a policy statement on behalf of organization.

**Intellectual Property:** A term used to describe the whole body of regulations relating to patents, trademarks and copyright

**Knowledge:** A term used to describe the scope and extent of one's understanding and awareness and a condition of being cognizant, and conscious of something.

**Law:** A body of authoritative grounds of judicial and administrative action rules of action or conduct prescribed by controlling authority and having a binding legal force. The aggregate of legal judicial precedent and accepted legal principles.

**Two-Year Public Colleges:** These are two-year college campuses serving as branches to university main campuses. These colleges operate with tuition and state funds. These colleges offer certificates, two-year degrees and with their four-year university partners participate in the awarding of baccalaureate degrees. Many also offer graduate education course work.

**Technical Colleges:** A term used to describe two-year institutions that operate with tuition and state funds These colleges offer certificates, two-year degrees, and the bulk of their course offerings are technical.

**Web-Enhanced Instruction:** A term used to describe instruction augmented by use of the web and technology in a static fashion. Typically, web-enhanced instruction relies on the web to post things that may be useful to students upon occasion, such as syllabus, an assignment, or a schedule. The advantage of this instructional format is that it allows
students to access important course information at any time from an internet equipped location.

Web-Assisted Instruction: A term used to describe instruction that utilizes the web to post information that is to be used during or outside of class. This includes outlines for class lectures, links to relevant websites and audio-visual demonstrations. In addition, web-assisted courses often use discussion boards or listprocs to allow student and instructors to engage in ongoing conversations about specified topics, readings or assignments.

Web-Based / Online Courses and Materials: A term used to describe the most advanced, web-instructed course because, it utilizes technology of the web to offer a course completely online. There are two ways to format such a course. The first is "synchronous," which involves students doing most of their work on their own, but who meet regularly with the instructor at a given time using internet "chat" or distance education technology that allows for real time interaction. The second format is "asynchronous." Under the second format students and professors do not need to meet as a group in real time. Instead students may turn in work at assigned times and communicate regularly through discussion boards, emails, or telephone.

Limitations of the Study

For the present study, the population sample was limited to Ohio's post-secondary educators who were instructors of web-based /online courses and materials for the 2002 academic year. Post-secondary educators who are instructors of other forms of online courses, namely web-enhanced and web-assisted courses were excluded. Therefore,
generalizations of the results of the study will be limited to instructors of web-based courses.

In addition, the collecting of data for the study via the traditional mailing data collection method imposed some limitations on the study. Firstly, because the study utilized two instruments, a timely return and high return rate of the completed instrument was not guaranteed. Secondly, the researcher had to rely on the respondents' willingness to complete the second instrument. Therefore data acquisition for the survey was limited to respondents who had indicated their willingness and the surveys returned in a two-week time frame.

Organization of the Study

The study was organized into six chapters. Chapter 1 contains the introduction to the study, the purpose of the study, the significance of the study, research questions, definition of variables and terms, and a summary of the organization of the study. Chapter 2 presents the review of the related literature. Chapter 3 presents a legal research and case analysis of copyright law and ownership. Chapter 4 describes the methods and procedures for acquiring and analyzing data. Chapter 5 contains the results of the study. Chapter 6 contains discussions, conclusions and recommendations of the study. The Appendices contain copies of the study's instruments, answer keys, letters, raw scores and other materials relevant to the study.
CHAPTER TWO: REVIEW OF RELATED LITERATURE

This chapter contains a review of the literature related to the study. The review contains literature on the historical foundation of copyright law, the concept of copyright authorship and ownership, the importance of educators’ knowledge regarding copyright related issues and the implications such knowledge has on educators’ preparedness. The chapter is divided into the following sub-sections:

(a) The historical foundation of intellectual property law
(b) Early attempts at legislation: Copyright in the United States
(c) Intellectual property and electronic courses in higher education.
(d) Fundamentals of copyright authorship and ownership
(e) The significance of being an author
(f) Work made for hire
(g) The exception to the work made for hire
(h) Importance of knowledge base in law for educational leaders
(i) Implications of the legal knowledge base and educators’ preparedness and readiness.
Historical Foundation of Intellectual Property Law

When the printing press was introduced in England in 1476, the need for the protection of printed works was inevitable (Hulme, 1896). The probable genesis of copyright law was the crown’s grant of letters patent, which gave printers a monopoly on the printing of certain works. According to Hulme (1896), the printers paid a fee for that monopoly to the crown, thus making the letters patents a source of revenue for the crown. A guild of booksellers called the Stationer’s Company found that they could agree among themselves to allow a monopoly on works (Macleod, 1988), when the crown granted these patents. Members of the Stationer’s Company were mostly the printers in England (Macleod, 1988). Consequently, they agreed to respect one another’s claims to particular works and established a de facto monopoly over their printed works. Thus the idea of “copyright” started when a member of the guild registered the title of the manuscript or “copy” with the guild (Macleod, 1988).

Macleod (1988) suggests that registering a copy with the guild gave the printer the exclusive right in the copy. The bookseller’s registration of the copy with the guild gave him the exclusive right to print and vend the work as a matter of private law, agreed to by the members of the guild (Hulme, 1896). As a matter of law, private law can only be enforced among those who have agreed to it. The bookseller’s private law was no exception. It was enforceable only among the members of the Stationer’s Company. Because of this limitation, the booksellers often sought public affirmation or codification of their private law (Macleod, 1988).

In 1557, the desires of the booksellers and the desires of the crown coincided. The crown perceived the need to gain greater control over the dangerous possibilities of the
printed word and so granted a royal charter to the Stationer’s Company that limited most printing only to the members of the company (Bugbee, 1967). This charter also empowered the company to search out and destroy unlawful books, which gave the guild the public enforcement mechanism for its private law (Hulme, 1896). If a nonmember was printing a work that had been registered with the company by a member, the nonmember could now be stopped. It also meant that if a work that was disagreeable to the crown was being published, it also could be stopped. This arrangement provided the crown with added policemen to enforce its goal to control printed works. Censorship was born. Walterschied (1994) suggests that the power of censorship and press control through the Stationer’s Company Copyright lasted for 150 years. Finally, in the early 1700’s parliament refused to continue to support the monopoly that the Stationer’s had enjoyed for centuries and the power of censorship that the crown had enjoyed along with it.

Early Attempts at Legislation - Copyright in the United States

The framers of the United States Constitution, suspicious of all monopolies, knew the history of copyright as a tool of censorship and press control (Walterschied, 1994). In turn, they wanted to assure that copyright was not used as a means of oppression or censorship in the United States. They therefore, expressly stipulated the purpose of copyright which is to promote the progress of knowledge and learning (Walterschied, 1994).

Donner (1992) noted that with the stated goal firmly fixed in the Constitution, the task of accomplishing that goal was given to Congress. He further maintains that the means for achieving that goal was also stated in the Constitution (Donner, 1992).
In fulfilling the constitutionally mandated goal of copyright law, Congress had to ask two questions. The first was, how much will the legislation stimulate the producer and so benefit the public? The second was, how much will the monopoly granted be detrimental to the public? (Nimmer, 1954). As Judge Walker of the Second Circuit Court summarized:

The copyright law seeks to establish a delicate equilibrium. On one hand, it affords protection to authors as an incentive to create, and on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation (Nimmer, 1954).

The founding fathers wanted copyright to be a mechanism by which our democracy would grow and flourish, a way in which our storehouse of knowledge is stocked. The origins of the United States copyright laws are found in the Constitution, which provides that Congress shall have the power “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries” (U.S. CONST. art I, §8, cl.8). This clause permits Congress to grant authors certain rights with regard to the works they create.

Luzum and Pupel (1989) maintain that the reasoning behind the founding fathers offering copyright protection was “to reward individuals artists for their creative genius by granting them a limited monopoly over the duplication and distribution of their works” (p. 372).

When the founding fathers drafted the intellectual property clause their main concern was the protection of literature and maps, as those materials were subject to piracy in England and the colonies at the time. The first United States Copyright Act was enacted
in 1790. Since then, there have been four subsequent major revisions, the most recent being the Copyright Act of 1976 (Blurr, 1990).

Middletown and Chamberlain (1994) assert that the first copyright law passed on May 31, 1790, granted authors the exclusive right to “any book, map or chart” they created for a renewable 14-year term. The laws have been updated over the years to include prints (1802), musical compositions (1831), photographs (1865), paintings (1870) and computer software (1964). In addition to the various forms of expression, the copyright laws have also been expanded to include all of the various recording methods that have been developed, such as phonograph records, motion picture film, audio and video tape, computer disks, computer software, video laser disks, compact disks and video game cartridges (Middleton & Chamberlin, 1994).

The 1976 Act, which was a general revision of federal copyright law, provides copyright protection for original works of authorship fixed in any tangible medium of expression (Copyright Act 1976, 17 U.S.C § 101). This includes literary works like a professor’s scholarly article. Versteeg (1990) noted that a work becomes protected “at the very instant that… a word is written on a page or encoded onto a computer disk”. Additionally, “an author is not required to register a copyright, nor even affix a copyright notice, to the work to obtain copyright safeguards” (p.389).
Intellectual Property and Electronic Courses in Higher Education

For hundreds of years, university professors have created courses, written lectures, and developed exams without concern over who owned them (Bobbit, 1999). But with the growth of distance education programs and the commercial potential for licensing successful courses, universities are seizing control of courses, mass producing them in either World Wide Web or CD-ROM format, and selling the rights to other institutions (Guernsey & Young, 1998). Alger (1998) maintains that although distance education programs expanded educational opportunities for students and created new pedagogical opportunities for professors, it also tested the limits of intellectual property rights in institutions of higher education.

Macbrayne (1995) reports that the first electronic courses in the United States, were delivered by radio in 1940. However this was replaced by the first television courses that appeared in the 1950s. Among the early pioneers of instructional television, was an extension of City College of Chicago which began in 1956 (Macbrayne, 1995). The programming was developed by a university faculty with broadcasting services provided by WTTW, the local public broadcasting station. Hundreds of universities followed by developing their own programming, initially to use on their campuses and later to be licensed to other institutions (Lang, 1998).

Today the term “electronic courses” also applies to those offered over the internet. Both the television courses and internet courses can be used to deliver instructional materials to students on campus or hundreds of miles away. In the latter circumstance, the popular terms used are “distance education” and “open university” (Macbrayne, 1995). According to Verduin and Clark (1991), the latest estimates are that there are more than
10 million people enrolled worldwide in electronic courses each year with more than half being in the United States. Many states are forming consortiums in order to pool their resources and establish virtual universities. One such venture is the Western Governors University currently being developed by 11 western states. Colorado's Governor Roy Romer and Utah's Governor Michael Leavitt are the leading advocates of this project, which offers degree programs entirely through the internet (Guernsey & Young, 1998). However, the role of faculty members in developing content for such courses raises crucial legal questions because the materials created fall somewhere in between the two areas of intellectual property, namely patents and copyrights. By tradition and common law, universities, like other employers, own the rights to patentable inventions created by faculty members (Lape, 1998). However, Guernsey and Young, (1998) point out that tradition and the common law have granted faculty members the rights to materials that are copyrightable, such as lectures and writings. The problem is that at many universities, electronic courses do not fit into existing institutional policies for intellectual property. Observers say that in some ways, electronic courses are like inventions, in which case the universities usually own the patent rights to their professor's inventions and share with them the income from licenses on those patents (Leibowitz, 1999; Blumenstyk, 1999). In other ways, online materials are like textbooks. Universities rarely claim any rights to such works, leaving professors to deal independently with publishers. When trying to determine in which category to place electronic courses, observers say they can be classified as one, the other, or both (Guernsey & Young, 1998).

On one side of the argument, faculty members fear that if they do not stand up for their rights, they may become producers of "Hollywood-style" courses that are created to
draw larger and larger audiences and more and more money with little regard for substance and quality (Guernsey & Young, 1998). Thus distance learning programs present special challenges especially as they relate to faculty workload and reward systems (Guernsey & Young, 1998). While technology makes learning easier for students, courses that rely heavily on technology may actually require increased time and effort of faculty members who develop and teach the courses, even if the courses appear to cut costs for the universities that offer them.

On the opposite side of the debate, universities are concerned not only with the financial rewards, but the fate of courses when the faculty members who created them move to other institutions. Could the faculty members take their courses with them? Could the universities at which the courses were developed continue to offer them after the faculty members leave (Lang, 1998)?

Although the debate is somewhat hypothetical, and electronic courses have not yet become highly profitable, the issue has gained popularity at educational and technology conferences. The potential for conflict as Lang (1998) suggests may be far reaching. Researchers such as Lang (1998) predict that universities that continue to expand their distance learning programs without first addressing the policy issues will find themselves mired in legal battles that will be costly, both in terms of legal expenses, and faculty morale.
Fundamentals of Copyright Authorship and Ownership

The first federal copyright statute was passed on May 31, 1790, during the second session of Congress and was based on the Statute of Anne with some parts drawn from state laws (Act of May 31, 1790, ch.15, 1 Stat.124 1790). The law, as amended in 1802, extended protection to prints. Subsequently four general revisions of the copyright laws were enacted in 1831, 1870, 1909, and 1976 (Miller, 1976). Under the 1909 revision, an author’s ownership rights were expanded from 14 to 28 years, with the option of renewing for another 28 years (Lape, 1998). The 1976 revision eliminated the renewal opportunity, but expanded the ownership option. For individuals, ownership lasted for 50 years beyond the life of the author. For copyrights owned by organizations, ownership rights lasted for 100 years past the creation of the work or 75 years after first usage, whichever comes first. The Sonny Bono Copyright Term Extension Act (1998) extended the duration of copyright in a work created on or after January 1, 1978, to the life of the author and 70 years after the author’s death and makes the same extension with regard to joint works of authors created on or after such date (Sonny Bono Copyright Term Extension Act, 1998). The 1909 revision also established the “work for hire” concept, which was later clarified by the 1976 revision, also known as Chapter 17 of the United States Code.

According to Versteeg (1990) it is important to resolve the question of copyright ownership for several reasons. The 1976 Act grants a number of substantive rights the “bundle” of copyrights to a copyright proprietor. Section 106 of the Act affords a copyright owner the exclusive right to reproduce, distribute, perform, display, or prepare derivations of copyrighted work (Copyright Act of 1976 § 106). Consequently, any
economic or other gain consequent to these activities rightfully belongs to the copyright owner. The scope of these exclusive rights depends largely on whether the work is classified as a work for hire.

The Significance of Being an “Author”

By law, copyright automatically arises when original works are fixed in a tangible medium of expression (Copyright Act of 1976, § 102 (a)). However, upon satisfaction of these conditions, the law of copyright recognizes only a fixed number of rights (Copyright Act 1976, §106 (a)). This includes the right to reproduce the work, to disseminate it, to make derivative works from it, to publicly perform and publicly display it, and in the case of sound recordings to perform the work publicly by means of digital and audio transmissions (Copyright Act of 1976 §106 (a)). These rights are considered to belong exclusively to the “author” of the work, unless they are otherwise properly transferred to another (Copyright Act of 1976 § 106 (a), 201 (a)). The concept of “authorship” is therefore a fundamental cornerstone of copyright doctrine since it establishes that upon the creation of a copyrightable work, the copyright therein is deemed automatically vested in the “author” of the work (Copyright Act of 1976, § 201 (a)). Thus, it can be concluded that the author alone is exclusively entitled to exercise the specific copyrights rights recognized by the law. Notwithstanding, it is very important to have the legal status as the “author” of a copyrightable work since both the ownership of the copyright and the exclusive rights to exercise copyright rights are thereby initially and automatically determined. Although the term “author” is not defined in the copyright statute of 1976, it is assumed throughout the statute that the “author” is the one who created the work. That is, the “author” is the individual or individuals in the case of
jointly created works, from whose mind the original work actually emanated.

"Authorship" for purposes of the copyright law does not exist where the work is nothing more than a copy of something that already exists. Thus, as a general rule, the ownership of the copyright and the privilege of exercising the exclusive rights belongs to the individual or individuals who caused the work to come into existence and who provided the creative energy and direction to give it a physical embodiment.

Despite the normal sense that the creative author should own the copyright in original works, the 1976 Act makes the concept of "authorship" subject to the work for hire doctrine (Copyright Act of 1976, § 201(b)). This doctrine generally vests the copyright in the employer or person for whom the work was prepared rather than in the actual creator of the work (Copyright Act of 1976, § 201(b)). Rather than replacing the author with that of the employer, the act expands the concept of authorship to include employers under appropriate circumstances. As such, the work for hire doctrine is a vicarious means of acquiring the status of authorship for the employer and thereby entitles the employer to enjoy the exclusive copyrights that otherwise would belong to the actual creator. Thus, in work-for-hire situation, it may be the employer rather than the actual creator of the work who owns the copyright in the particular work. The employer stands for the author of the work as a matter of law and is entitled to enjoy and exercise the exclusive rights that pertain to copyrights (Copyright Act of 1976 § 201(b)).
Work Made for Hire

Wadley and Brown (1999) have noted that since its beginnings in England the law of copyright existed primarily for the purpose of encouraging the creation and dissemination of work which benefits the public. First introduced in the 1903 case of Bleistein v. Donaldson Lithographing and later codified in the 1909 and 1976 revisions of the U.S. copyright law, the work for hire doctrine provides that creations and inventions of an employee generally belong to the employer, unless a written agreement provides otherwise (Bleistein v. Donaldson Lithographing, 1903). If applied to the problem of electronic courses, it would place them in the same category as tangible inventions, which generally belong to the university (Bobbitt, 1999). Courts prior to this time had occasionally alluded to the principle, but were clearly slow in articulating a basis for its application (Hanson v. Jaccard Jewelry, 1887).

A definition of “work made for hire” can be found at (Copyright Act of 1976, § 101). This section breaks down the definition into two distinct categories. It defines work for hire as a work prepared by an employee within the scope of his or her employment. Alternatively, subsection two defines “work for hire” as a work ordered or commissioned for use as a collective work, as a translation, as part of a motion picture, as an atlas, as a compilation (Luzum, 1989).

Section 201(b) of the 1976 Act also deals with the work for hire doctrine. This section states that in the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author unless the parties have expressly agreed otherwise in a written instrument signed by them. The application of the work for hire doctrine in higher education would be uncertain because of the unique employment
relationship between faculty members and the universities. Traditionally, universities have generally retained the rights to tangible inventions, such as those in technical fields such as chemistry and engineering, allowed faculty members to retain the rights to creative works. Ownership rights to electronic courses are more difficult to determine because most of the materials in question are based on computer programs, which often fall somewhere between the realms of tangible inventions and intangible scholarly creations. Under the general principles applied to the work for hire, college and university educators appear to meet the criteria for regular employees. They generally have long-term relationships with the institutions, which has the right to assign them particular projects and tasks (Bobbitt, 1999). Most college and university educators are subject to income tax withholding and receive benefit packages from or through the institution. Additionally, most of the course materials and scholarship produced in higher education are generated with resources provided by the institution (Lape, 1998).

The Exception to Work for Hire for Academic Writings

Versteeg (1990) noted that according to the legislative history of the 1976 Act, Congress did not intend to change the law prior to the 1976 Act regarding work for hire when a regular employment relationship exists. Therefore, as Versteeg (1990) suggests “in order to evaluate what works created by a teacher should be considered work for hire under the 1976 Act, it is critical to understand the interpretation of works for hire under the prior law” (p.388). The prior law in this regard is the Copyright Act of 1909, which was in effect from 1909 through December 31, 1978. Commentators such as (Dreyfuss 1987; Nimmer, 1984) have noted that under the older Copyright Act, the work for hire doctrine is regarded as largely inapplicable to teachers.
However, the best known of these commentators according to Simon (1982) is the leading authority in the copyright field, Melville B. Nimmer. Nimmer’s view was that professors own the copyright to scholarly work, because courts fashioned a “teacher’s exception” to the work for hire rule (Nimmer, 1984). Nimmer refers to these two common law cases, Sherrill v. Grieves (1929), and Williams v. Weisser (1969), for creating the academic exception to the work for hire doctrine. In both cases, the courts considered the work made for hire principle with respect to professors but did not find work made for hire in large part due to policy and custom (Lape, 1992). In the United States, these two cases alone comprise the judicial authority prior to the 1976 Act for the existence of an exception from the work made for hire doctrine for professors. Most importantly, as Versteeg (1990) noted, these cases stand in stark contrast to the general rule that the copyright to works created pursuant to an employment relationship vests with the employer. Gorman and Ginsburg (1993) point out that Sherrill v. Grieves (1929), and Williams v. Weisser (1969) follow an English tradition that allowed professors to own copyright in their works. The tradition they maintain, stems from the 1825 English case of Abernethy v. Hutchinson (1825) where Lord Elton held that the precedent warranted a recognition of a litigant’s claim to ownership of his lectures in medicine since Sir William Blackstone had been found to own the copyright to his lectures on law (Gorman & Ginsburg, 1993).

In Sherrill v. Grieves (1929), the Supreme Court of the District of Columbia held that a professor’s work is excepted from the work made for hire doctrine (Lape, 1992). In this case the issue was whether a military instructor’s book for his class fell under the work for hire provisions of the 1909 Act (Smith & Zirkel, 1991). The instructor, Mr.
Sherrill, taught military sketching, map reading, and surveying to United States army officers and prepared and wrote a textbook on these subjects. Prior to the publication, Sherrill allowed United States military authorities to print a pamphlet incorporating a section from his textbook on military sketching. The defendants published an infringing work, but when sued they argued that Sherrill did not own the copyright to his academic writing since his work was a work for hire. The court held that the U.S. Army could not claim copyright to a training manual written by an instructor at its postgraduate officers' school at Forth Leavenworth Kansas. The case is important because it is the first judicial ruling in the United States that recognized an exception to the work for hire doctrine for an academic work. Similarly, in Williams v. Weisser (1969), a California court of appeals more explicitly excepted the works of professors from the work made for hire doctrine. In that case, a California court of appeals enjoined a student from publishing a professor's lecture notes. Williams, an anthropology professor at UCLA, sued Weisser, the owner of a company that sold lecture notes from UCLA classes. In order to obtain the notes from Professor Williams most recent class, Weisser hired a student in the class to take detailed notes and then turn over the notes to Weisser's company, called Class Notes. Weisser reproduced the notes and sold them to other students in the class. Professor Williams sued Weisser for infringing on the copyright of his lectures. Weisser's defense was that Professor Williams lacked standing to sue him, since the university, not Professor Williams owned the copyright in his lectures under the work for hire doctrine. The court disagreed with this argument and found that the student's professor, not the university the student attended, owned the common law copyright to the professor's lectures. The court's reasoning for not applying the work for hire doctrine was primarily (a) the
university's lack of supervision and control, (b) the absence of a motive for the university
to own the copyright, and (c) the undesirable consequences that would flow from
granting ownership to the university, for example, the restraint of the professor's mobility
(Versteeg, 1990).

Commentators such as Lape, (1992) and Dreyfuss, (1987) have relied on these
two cases to assert that prior to the adoption of the 1976 Act, the work made for hire
provision did not apply to the works of professors. The decision in Williams v. Weisser
(1969) is important because the Williams court appears to have recognized that the
academic tradition which assumes that professors own the copyright to their works was
incongruous with copyright law and the work for hire doctrine (Versteeg, 1990). The
court conceded that its decision carved out an exception to the general rule and noted that
a rule of law developed in one context should not be blindly applied in another where it
violates the intention of the parties and creates undesirable consequences (Williams v.
Weisser, 1969). Thus, Williams stands for the proposition that works created by teachers
summon forth a "teacher exception" to the work for hire doctrine.

The next relevant case to the academic exception work for hire was Weinstein v.
University of Illinois (1987), a case from the Seventh Circuit of the United States Court
of Appeals. This case dealt with the work for hire doctrine in relation to faculty
publishing and was decided by Judge Easterbrook. In this case, Judge Easterbrook held
that a professor owned the copyright to his published work because the University of
Illinois had adopted a policy defining work for hire for professors (Weinstein v.
University of Illinois, 1987). This policy, which was incorporated into each professor's
contract with the university, stated that a professor retains the copyright unless the work
falls into one of the three specified categories, (i) the terms of a University agreement with external party require the University to hold or transfer ownership in the copyrighted work or (ii) works expressly commissioned in writing by the University or (iii) works created as a specific requirement of employment or as an assigned University duty. (pg 1094). Such requirements or duties may be contained in a job description or an employment agreement, which designates the content of the employee’s work. If such requirements or duties are not so specified, such works will be those for which the topic or content is determined by the author’s employment duties which are prepared at the University’s instance and expense. The application of the third category of the policy was at issue in Weinstein.

The district court had held that Weinstein’s work was covered by this paragraph because the university funded the clerkship program. However, Judge Easterbrook ruled that the district court failed to recognize the fact that the three categories from the university policy were exceptions to the rule that faculty members own the copyrights in their academic work (Weinstein v. University of Illinois, 1987). This is an important statement because it is an explicit judicial recognition of the academic tradition. The appellate court went on to say that when Weinstein was told that he needed to write more scholarly articles to obtain tenure, he was not being told that it was a “requirement or duty” of his job within the meaning of paragraph three of the university copyright policy. Thus, the court held that Weinstein’s scholarly writing was not work for hire because his work did not fall under the university copyright policy, but rather fell under the academic exception for the work for hire doctrine (Weinstein v. University of Illinois, 1987).
It is important to note that the court looked beyond the employment contract to incorporate the academic tradition into its terms. The court did this because it found that granting teachers an exception to the work for hire doctrine has been the academic tradition since copyright law began. The tradition covers scholarly articles and other intellectual property (Nimmer, 1978). The court added that the professor who produced a new theorem in the course of his employment would own the copyright to his article containing that proof (Weinstein v. University of Illinois, 1987). Thus, the court felt that the common law academic exception to the work for hire doctrine needed to be applied.

Importance of Knowledge Base in Law for Educational Leaders

In the past, university officials and faculty have always regarded legal knowledge as simply a boundary in which administrators are free to exercise their professional prerogatives (Bull & McCarthy, 1995). Such a view, while true, misrepresents the nature of the real purpose, importance, and the responsibilities of university leaders to acquire a base of legal knowledge in their daily activities. Although there is a commonly held perception that understanding the law is entirely a technical skill educators must be aware of rules, regulations, and judicial mandates or at least know where to locate them (Bull & McCarthy, 1995). Bennett (1988) suggests that viewing the law through this lens ignores the importance of the law as one of the cornerstones of an ordered society and overlooks the value of a legal perspective in addressing university problems and opportunities. The concepts and logic of law in policy-making has permeated university decisions in various areas. Thus, the need for a sound base of knowledge for educational leaders cannot be overemphasized. Until recently, many educators had not considered the issue of intellectual property in the arena of copyright ownership. Yet, as more faculty
members utilize the internet, and more institutions develop distance education courses, it is more important than ever that faculty and the institutions at which they work have clear legal understanding of intellectual property rights.

Because universities are fluid institutions (Birnbaum, 1998) most policy-making decision takes place within a legal framework (Carter, 1978). More crucial is the fact that educational leaders cannot afford to be misguided as to the proper actions to be pursued in the governance of institutions of higher education. For educational leaders to gain a robust legal perspective, there is a need to move beyond mere directives and understand the various statutes that govern and regulate their daily instructional, administrative and educational workloads.

Legal logic is based on the premise that the law emanates from experience and is designed to enhance individual and collective activities (Levi, 1948). In his seminal article on legal reasoning, Levi (1948) observed that “legal reasoning has a logic of its own, and its structure is to give meaning to ambiguity and to test constantly whether the society has come to see new differences or similarities” (p. 573-574). Knowledge of legal mandates no doubt is important for all educational leaders. The full benefit of a legal perspective, however, goes far beyond complying with directives and practicing preventive law. By becoming fully aware of legal regulations educators would begin to ask more critical questions in approaching campus situations and the competing interests involved (Bull & McCarthy, 1995). An understanding of legal regulations can also enhance the process of identifying problematic situations, anticipating alternative conclusions and their consequences and seeking principles and data to support a conclusion or to allow for intelligent choices among alternatives (McCarthy, Bull,
Quantz, & Sorenson, 1994). Thus instead of viewing the law as simply setting boundaries for actions, a legal perspective and knowledge base provides a valuable vantage point that can lead to more informed and better decisions and can enable educators to perform their jobs more effectively.

McCarthy et al (1994) maintain that educators are not merely passive conduits of the law, but do play an important role in interpreting and applying the law within their own jurisdictions (the classroom, school, or school district). They maintain that educators retain considerable discretion to make decisions and establish policies (McCarthy et al, 1994). Knowledge of how the law works leads to the realization that educators, not the courts or legislatures, must determine what actions are reasonable and just in campus situations. Moreover, by understanding the evolution and current status of the law, educators can gain a context for contemplation of what the law should be in the future. However, many educators and university leaders do not feel ownership in directing the outcomes of the law. They view legal mandates either as affording more protections than they do, or as imposing unreasonable barriers.

Implications of the Legal Knowledge Base and Educators’ Preparation/Readiness

The relationship between the practice and the knowledge base of university officials has obvious implications for the programs in which university officials and educators are prepared. Prospective educators must be encouraged and enabled to accept the intellectual responsibilities that come with the roles for which they are preparing themselves. This requires an acquisition of a broad understanding of the disciplines relevant to those roles.
Currently, studies reveal that many educators lack knowledge about legal knowledge and how to employ legal knowledge in practical situations (Chapman, Sorenson, & Lobosco, 1988; Goodlad, 1990). Preparation programs need to guide educators so that they become more aware of legal concerns and give more critical thought to legal responsibilities in their professional roles. Also, specific courses focusing on law and ethics may be useful in helping future academic leaders acquire skills in legal discourse. If university administrators and faculty are active participants in shaping their campus’ laws, they have a relationship to what is known on matters that relate to legal knowledge. Through their deliberations and actions, university officials can contribute to this knowledge. Consequently, any purported knowledge base for university leaders should represent itself as a resource for administrative and faculty action, rather than a detriment to such action. It would seem that the purpose of having this knowledge base is to make available to educators, the wide range of cultural, social, and intellectual materials that can help them understand the circumstances and opportunities that their work presents to them.

Furthermore, the knowledge base for faculty and administrators should be structured and represented as a dynamic product of human effort to which anyone with sufficient imagination and intelligence can contribute. It is significant to note that there will never be a definitive body of knowledge that captures every situation university officials need to know, as one cannot gain legal perspectives by memorizing laws or a set of principles. Instead, the focus must be on insightful discussions pertaining to the various tensions involved in balancing majority and minority interests on campus.
Because knowledge is process oriented, it is essential to learn to think critically about the current state of knowledge.

It is important that university officials and faculty be knowledgeable and updated about the law that affects their daily activities on campus. One of the primary objectives of legal education is preparation for responses to lawsuits. However, perhaps the most important objectives is to view the law as a positive, necessary tool instead of a roadblock.
CHAPTER THREE: LEGAL RESEARCH

Legal research is the process of finding the laws that govern most of our life activities and the materials that explain or analyze these laws (Cohen & Olsen, 1996). Legal research is essential to determine the impact of past legal decisions and enactments and the implication of contemplated actions (Cohen & Olsen, 1996). This chapter utilizes the case summarization and analysis method of legal research to analyze several cases that relate to copyright ownership and authorship on college campuses. For this chapter, reported case law on selected areas of the Copyright Act is analyzed to determine the significance that a decision may have on current issues pertaining to copyright ownership on college campuses. The main components of case summarization and analysis that form the analysis are:

(a) The legally relevant facts of the case which describe the events between the parties that led to the litigation

(b) The issue(s) which are the legal questions that the court must decide to resolve the dispute between the parties

(c) The holdings which is the court's decision on the question that is before it and

(d) The court's rationale that explains and supports the court's decision (Shappo et al. 1991).

Shappo et al. (1991) further maintains that legal research involves the use of a variety of printed and electronic sources and materials. The researcher utilized both electronic and printed sources in analyzing the case law and statutes.
Legal Research Methodology

In preparation for this part of this study, the researcher attended three seminars on Legal Research and Drafting offered by the College of Business and Administration’s Legal Studies at Bowling Green State University. These seminars covered issues relating to electronic and paper-based legal research techniques. Aspects of legal research covered in the seminars included: (a) locating paper-based legal materials, (b) locating legal materials electronically utilizing the Lexis Nexis academic and congressional universe, and (c) a tour of the legal section of the Jerome Library at Bowling Green State University and the Wood County Law library. For this chapter, the researcher utilized both paper-based and electronic sources of legal materials in providing case summarization and analysis.

The researcher accessed the Lexis Nexis Academic and Congressional Universe website on the 25th of February 2002 and the 4th of March 2002. The electronic search yielded a total of ninety-eight hits, which included cases at all three federal levels. The researcher went through each case to determine which cases were appropriate to the subject matter of the study. After a thorough review of legal decisions, the researcher categorized cases that dealt with the issue of copyright ownership and the university into the following themes:

(a) Copyright ownership and joint authorship

(b) Copyright ownership and the work for hire doctrine

(c) Copyright ownership and the teacher’s exception rule

(d) Commentary on copyright ownership of electronic/web-based courses
As colleges and universities advance into a business-model approach of content delivery via distance learning, the complicated question of ownership become equally significant to the issue of copyright. However, the case law relating to challenges of copyright ownership in a college or university setting is sparse. Presently there is no reported case that addresses the issue of copyright ownership as it relates to web-based /online courses and materials. However the issue of whether an institution or its faculty members own course materials has been the subject of litigation. This chapter provides copyright law court decisions as they relate to ownership within the context of joint authorship, the work for hire doctrine and teacher’s exception rule. The review concludes with a commentary on some of the complicating factors that make the determination of copyright ownership in higher education difficult.

Case Law and Analysis

The constitutional provision that authorizes Congress to legislate copyright law provides that Congress has the power “To promote the Progress of Science and Useful Arts, by securing for limited Times to Authors and Inventors the exclusive right to their respective Writings and Discoveries” (United States Const. Art. I § 8, cl. 8). Especially important is the stated purpose of the copyright clause: “to promote the progress of science and useful arts” (United States Const. Art. I § 8, cl. 8). The reasoning behind the founding fathers’ offering of copyright protection was to reward individual artists for their creative genius by granting them a limited monopoly over the duplication and incentive to produce new scholarly works.

When faculty members create web-based courses, they do so for innumerable reasons. For example, faculty often create web-based courses materials in the course of
carrying out their professional duties. In addition, faculty may engage in this type of activity for the satisfaction of a creative endeavor and the pride of seeing an original idea come to fruition. In other instances, universities and colleges strongly urge their faculty members to incorporate this mode of instruction as part of their teaching portfolio (Florida Gulf Coast University Web Design Standards, 2001). However, few court cases have clarified whether certain types of new works produced by faculty will belong to the professor or to the university. The following court decisions provide important insight on the applicability of copyright ownership in the context of joint authorship of faculty work, the teacher's exception rule, and the work for hire doctrine. They also underscore the importance of well-planned agreements and clear university policy to help resolve uncertainty.

Authorship of Online Courses

As a general rule, the "author" of a work for purposes of copyright law is the person who actually creates the work by translating the idea into a fixed tangible expression (The Copyright Act of 1976). Thus, when a faculty member creates course materials, copyright attaches when the materials are recorded on paper, tape, or otherwise fixed in a tangible medium of expression. While the question of who owns the copyright has been defined by different institutions in different ways, the Copyright Act outlines different parties that can be considered "authors" for purposes of the act. For example, under Section 26 of the 1909 Copyright Act (The Copyright Act of 1909), the word "author" included the actual author or, in the case of works made for hire, an employer. Similarly, Section 201 (a) of the 1976 Act states that copyright protection initially vests in the author of the work, and Section 201 (b) states that in case of a work for hire, the
employer or other person for whom the work was prepared is considered the author. Since neither statute defines the term “author,” the courts have suggested a judicial definition.

In Borrow-Giles Lithographic Co v. Sarony (1884), the issue before the Supreme Court was to determine the authorship of a picture of Oscar Wilde for purposes of establishing copyright ownership. In this instance, the court had to determine whether the “author” was the photographer who also set up the scene of the picture or whether it was the person who made the lithograph from that picture. The court held the photographer was the author. The court defined “author” as the person to whom anything owes its origin, originator, maker, one who completes a work. In other words, the person who is the originator and director of the creation of the work is considered the “author.”

To qualify for copyright protection, the Copyright Act of 1976 (“The 1976 Act”) provides that a work of authorship must be “original” and “fixed in a tangible medium of expression.” It is reasonable to suggest that authorship of web-based/online course materials clearly satisfies this statutory criterion as interpreted by the courts. The constitutional grant of power is sufficiently broad to extend to any “writing” as long as the writing is the product of the author.

In general, the more expressive the work, the more likely it is to be considered original. Therefore, any original expressions authored by a professors such as commentary or lectures qualify as copyrightable subject matter. More doubtful would be copyright protection for a compilation of names for an electronic mail discussion list. In general the more expressive the work, the more likely it is to be considered original. This qualification extends to components of online course materials such as alphabetized
listings, which may lack sufficient originality for copyright protection but taken as a whole, clearly would qualify for copyright protection.

Regarding the fixation requirement, the Copyright Act of 1976 provides that any tangible medium of expression will suffice, including media "now known or later developed," and from which works of authorship "can be perceived, reproduced, or otherwise communicated either directly or with the aid of a machine or device (The Copyright Act of 1976, § 101). In the digital age, typing material into a computer and saving it to a file on disk fixes the work just as writing with a pen did in earlier years.

In MAI Systems Corp v. Peak Computer Inc (1993), the Ninth Circuit concluded that a copy of copyrighted software created in a computer's random access memory (RAM) meets the statute's fixation requirement. The court's rationale was that the software was sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. All of the components of an online course, to the extent that they embody material entered into a computer, should meet the fixation requirement as defined in MAI Systems. Clearly online course materials satisfy copyright law's general subject matter requirement. However since the implementation of the current 1976 Act, there have been only two cases that have examined copyright ownership of a professor's work. Both cases occurred in the Seventh Circuit.

In the case of Williams v. Weisser (1969), a California appeals court ruled that faculty members, not the universities that employed them, hold a common law copyright to their lectures. The defendant was J. Edwin Weisser owner of a company called Class Notes Inc. that published and sold lecture notes of a professor of Anthropology at the
University of California at Los Angeles (UCLA). The defendant paid UCLA students to
attend the plaintiff’s course, take notes, organize and type them up. The defendant then
placed copyright notice in these notes, subsequently reproducing and selling them.
The university was aware of the company’s practice, but in a 1964 policy memo
announced it was up to the individual professors to determine whether or not to allow it.
None objected until 1965, when anthropology professor B.J. Williams sued the company
for violating his copyright interests and for invasion of privacy. Williams based the claim
on the fact that his name was used to promote the sale of the notes without permission.
The defendant claimed that the university, as Williams’s employer, should be the only
party to have standing to file the suit.

The court rejected the defendant’s argument and concluded that the common law
copyright in these materials was owned by the professor, rather than by the university for
which he worked, as there was no evidence that the professor had assigned such materials
to the university. The court also noted “several undesirable consequences” which would
follow from a contrary holding. The court ruled that the professor held a common law
copyright to his lectures because he was not hired to give lectures, but added that if he
were, it would have ruled that the copyright to the lectures rested with the school. This
case was decided under the 1909 Copyright Act, under which unpublished works were
protected by state common law copyright. The decision in Williams v. Weisser (1969)
emphasized academic custom and the anomaly that would flow from a contrary rule for
the professor who would be barred from delivering at one school lectures that were
developed at another. The court’s rationale in the Weisser ruling was that university
professors are transient in their employment history, and the courses they teach may
begin to take shape at one institution but are later taught at another. The court emphasized
the undesirable consequences of constraining a professor’s ability to build on his or her
work and to move freely to other institutions.

Several years later, the Seventh Circuit appears to have upheld the “teacher
copyright infringement action against Sony after it modified and distributed a word
processor manual that teachers created for their students. The trial court dismissed the
case for failure to state a claim. The court of appeals affirmed the dismissal, but
nevertheless discussed the plaintiff’s merit in dictum. The court observed that until 1976,
the universal assumption and practice was that (in the absence of an explicit agreement as
to who had the right to copyright) the right to copyright such writing belonged to the
teacher rather than to the college or university.

The *Hays* court further stated that academic writings were an exception to the
“work for hire” doctrine and such presumptions are as forceful today as they ever were.
The court noted that it was “widely believed” that the 1976 Copyright Act abolished the
“teacher exception rule.” The line of reasoning was that Section 201 (b) of the current
Copyright Act recorded only one exception to “work for hire” doctrine, namely a signed
agreement, and the fact that the “teacher exception” was not mentioned indicates that
such a custom or tradition does not apply. However, the court suggested that if the 1976
Copyright Act did abolish the teacher exception, it was probably done inadvertently since
there was no mention in the legislative history of abolishing the exception codified in the
previous Copyright Act.
The "teacher exception" continues to be applied despite the implementation of the 1976 Copyright Act (Lape, 1992). Although it was confirmed only in dicta, no court has overruled the longstanding tradition. Neither has the 1976 Copyright Act explicitly abolished it in its legislative history.

Joint Ownership of Works Created by Faculty

When educators collaborate with each other or even with students, performing substantial research and writing duties, problems can arise. Cases have arisen involving authorship disputes. In Weissman v. Freeman (1989), Leonard Freeman, a medical school professor, was sued by Dr. Heidi Weissman, his former research assistant (who was also a physician). Freeman and Weisman were prolific authors who, in addition to their individual articles, had co-authored numerous previous works in the field of nuclear medicine. One of the papers they co-authored in 1980 was a review of techniques in an area of "radionuclide imaging." They cooperated in a series of revisions to that article over the next five years, but then Weisman published under her own name an article derived from the previous works they had written jointly. Two years later Freeman gave a lecture and, in developing materials for the lecture, prepared to disseminate Weissman's article by removing her name, substituting his own, and modifying the title by three words. Weisman complained and, although Freeman never distributed the revised version, Weisman brought a copyright infringement action.

Freeman contended that he was entitled to recognition as a co-author of the work in question because the material was based on other materials they had co-authored. The Second Circuit held that under the Copyright Act, collaborative work product results in joint copyright ownership, even if the authors did not contribute equally. As joint owners,
each contributor shares equally in the ownership and control of the work unless otherwise agreed. Lacking an express agreement allocating rights to control the work product, both physicians share equally the ownership of the entire work. As such, each author is permitted to modify or update the material as needed for his or her use.

The Second Circuit reversed the district court's determination that, as a matter of law, Freeman's joint authorship of the prior works made him a joint author of the derivative work. The court of appeals articulated a standard for joint authorship of derivative works. First each putative author must have "contributed" to the work. Second, each must intend to contribute to a joint work at the time his or her alleged contribution is made. In this case, the evidence established that Freeman had not made any contributions to the derivative work at issue, apart from his contributions to the underlying work. Applying the standard that joint authorship does not result unless all parties intend to merge their contributions, the court determined that no joint authorship resulted in the light of Weissman's lack of intent.

Significantly, in University of Colorado Foundation v. American Cyanamid (1995), two professors agreed to perform a study for Cyanamid, a private company. The study resulted in new findings and a published article in a scientific publication. The university's policy established that inventions made by the university employees using university facilities were to be assigned to the university. Although the policy did not extend to copyright, the court readily accepted the university foundation's assertion that journal articles also belonged to the institutions. The court held that the university owns the copyright to the article written by its professor, because it was work done within the scope of its employment. Both professors and the university cooperated during this
litigation therefore there was no contest of the issues. This case tacitly reveals that faculty, individually, may not have the resources to defend or assert their legal claims to ownership.

The creation of on-line course materials clearly can involve the use of works derived from previously existing copyrighted works. When the professor creating the on-line course was not an author of the preexisting works used, the extent to which use of the underlying work is allowed will be determined by application of the fair use doctrine absent the involvement of a license. On the other hand, when the professor creating the on-line course alleges that he co-authored the underlying work used in a derivative manner in the on-line course, the joint ownership principles invoked in Weisman and other courts will apply to determine whether the underlying work was the product of joint authorship. The same joint authorship principles will apply to the issue of whether a particular on-line course is a jointly authored product, regardless of whether the course itself is a derivative effort. Under copyright law, joint authors have equal undivided interests in the whole work meaning that they can unilaterally use and license the work, subject to the duty to account for profits to other joint authors (Copyright Act of 1976, § 201 (b)). In sum, the manner in which the joint authorship doctrine has been applied has the potential for creating significant difficulties for those who collaborate on ventures resulting in online course materials.

Work For Hire Doctrine

The copyright act provides that the author of a work is considered the copyright owner in the first instance, absent the application of the work for hire doctrine. Section 201 (a) of the 1976 Act provides that the copyright in a protected work "vests initially in
the author or authors of the work.” The statute also provides that in the case of a work for hire, the employer or other person for whom the work was prepared is considered the author unless the parties have expressly agreed otherwise in a written instrument signed by them (Copyright Act of 1976). Thus the work for hire doctrine is an exception to the rule that copyright ownership vests initially in the work’s creator. The statute provides that a work is made for hire under two alternate circumstances. Firstly, a work can be a work for hire if an employee within the scope of his or her employment prepares it. Secondly, a work that is specially ordered or commissioned for certain types of uses can be a work for hire, but only if the parties expressly agree in a written instrument signed by them that the work shall be a work for hire.

In Weinstein v. University of Illinois (1987), the plaintiff M. M. Weinstein, professor of pharmacy administration at the university, collaborated with two other faculty members on an article proposing new approaches to pharmacy education. A preliminary draft listed Weinstein first among three authors, but after Weinstein disagreed with his co-authors over the content of the finished paper, they submitted their version for publication in the American Journal of Pharmaceutical Education listing Weinstein as the third author, instead of the first. Weinstein sued the institution, claiming it infringed on his copyright and that being listed as the third author diminished his contribution to the article in the eyes of his colleagues. An Illinois district court ruled that the article belonged to the university, determining that it was a “work for hire” because his contract specifically mentioned that his scope of employment included research and writing articles about pharmaceutical education. The court based its conclusion on the university’s work for hire policy, which clearly provided that work created as a specific
requirement of employment or as assigned university duty will be regarded as works for hire. Therefore, because the university funded the clerkship program and because the plaintiff was required to conduct and write about clinical programs as part of his clinical professor duties, the article qualified as a work for hire.

The following year, the Seventh Circuit had another occasion to comment on the work for hire doctrine in the context of academics.

In Hays v. Sony Corporation of America (1988), Judge Posner, a former university professor, endorsed the continued existence of the teacher exception to the work for hire doctrine for three primary reasons: (i) that the [teacher's exception rule] was an ancient tradition to be upheld and applied in special circumstances, (ii) that there was evidence of the absence in the legislative history of any congressional motive to eliminate the teacher's exception rule and (iii) the results of great havoc that eliminating the [teacher exception] would wreak in settled practices of academic institutions (p. 416). Although the court did not expressly decide whether the teacher's exception rule had survived the enactment of the 1976 Act, it indicated that it would be inclined to retain the exception based on policy considerations coupled with the absence of an express indication that Congress had intended to alter the law as previously applied. Because little case law from other circuits exists on this issue, Posner's explanation, although dicta, is essentially the law.

The Supreme Court attempted to give some definitive context to the scope of employment component of the work for hire definition in Community for Creative Non-Violence v. Reid (1989). The community for creative non-violence was a non-profit organization dedicated to drawing attention to and reducing the problem of homelessness.
In the fall of 1985, the organization hired sculptor James Earl Reid to design a display that would combine a biblical manger scene with a modern day portrayal of a homeless family. Neither party signed a written agreement defining its rights and neither party mentioned copyright. After the sculpture was completed, it was returned to Reid for repairs. Upon Reid's refusal to return the sculpture, the organization brought suit, seeking a return of the sculpture and a determination of copyright ownership.

In this context the work in Reid did not fit within the categories outlined under part two of the work for hire definition, as no written agreement existed. The Supreme Court was left solely with the application of "the scope of employment" provision of the statute. Noting the absence of a statutory definition for the terms "employee" and "scope of employment", the Court stated that Congress intended these terms to be interpreted in the light of the general common law of agency. In so doing the court adopted a long list of factors that are relevant to determine whether a hired party is an employee under the common-law of agency. According to the court, the factors relevant to this determination include: the skills required, the source of instrumentalities and tools, the location of the work, the duration of relations between the parties, whether the hiring party has the right to assign additional projects to the hired party, the extent of the hired party's discretion over when and how long to work, the method of payment, the hired party's role in hiring and paying assistants, whether the work is part of a regular business of the hiring party, whether the hiring party is in business, the provision of employee benefits, and the tax treatment of the hired party (Community for Creative Non-Violence v. Reid, 1989).

The Supreme Court suggested that the sculptor and the non-profit organization might be considered co-owners of copyright if, on remand, the district court determined
that they met the statutory requirements for joint authorship. Courts holding that a particular work is not made for hire must examine whether the facts at issue nonetheless justify a conclusion of joint authorship (Versteeg, 1990). On remand following the Supreme Court’s opinion, the district court determined that Ried should be recognized as the sole author of the sculpture and that he has sole ownership rights under 17 U.S.C. §106 (1994) regarding all three dimensional reproductions of the sculpture (U.S. Dist. Lexis 21020, 1991). The court ordered that CCNV is the sole owner of the original copy of the sculpture, and that both parties are co-owners of all rights respecting two-dimensional reproductions of the sculpture. Tradition dictates that scholarly articles are owned by the scholar or professor and not by the university, even under the “work-for-hire” provisions of the Copyright Act. As co-owners of the copyrighted material, one author may modify the work product, create a derivative work, and publish the new version without infringing on the other co-author’s property rights. A university policy sets forth parameters for when a faculty member retains copyright. Interpreting a university policy, the Reid court could differentiate scholarly work from administrative or otherwise commissioned work which would fall under the work-for-hire provision of the Copyright Act. If, for example, the professor is commissioned to participate in a study for the use of computers at the university, the resulting report is most likely the property of the university.

Universities tend to allow faculty members to retain copyright because they seek publication for peer recognition rather than for profit. Also the financial market for most scholarly articles is too small to warrant a fight over ownership or royalty fees (Copula, 1997). Even if a textbook is written during a professor’s office hours, using a university
computer and tested in his or her classes prior to publication, the university has no legal claim to the copyright, unless the professor was engaged specifically for the purpose of writing or producing the book in question (Blackwell, 1961). Because research and academic writing are only a part of faculty member's job and because a university seldom assigns specific projects to faculty members, it is rare for a university to make a copyright claim to traditional research products. State cases suggest that the relationship between professors and their institutional employers is different from that of employees and their employers in the non-academic workplace.

In Sherill v. Grieves (1929), the Supreme Court of the district of Columbia held that the U.S. Army could not claim copyright to a training manual written by an instructor at its postgraduate officers' school at Forth Leavenworth Kansas. The instructor had written the manual at home on his own personal time, but allowed the Army to print portions of it in shorter publications. When the army claimed the instructor's work to be a government publication, he filed suit and won, successfully claiming that his writings, while helpful in his teaching, were developed on his own initiative and therefore not within the scope of his employment.

However, in Manasa v. University of Miami (1975), a Florida District Court of Appeals ruled that university employee Norman P. Manasa, Jr. did not hold a common law copyright to a written proposal for federal funding for one of the university's academic programs. Manasa sued the university after it refused to compensate him for what he claimed to be the overtime required to prepare the grant proposal. A Dade County Circuit Court dismissed the case, and on appeal, the District Court of Appeals affirmed the
dismissal, ruling that because the proposal was not widely reproduced nor sold, no such common-law copyright applied.

In applying the work made for hire doctrine to the creation and ownership of online course materials, the determination turns on whether the professor is considered an employee of the university and whether preparing the course materials comes within his scope of employment. Little doubt exists that a professor is an employee of the university where he or she teaches. For purposes of applying this provision of the statute, the real question is whether the faculty member is an "employee" for purposes of creating the online course materials. It would seem reasonable to suggest that much of the work performed in creating an online course would have to be done by the university itself.

Constructing and designing an online course would require creating a web page for every component of the course utilizing software such as Microsoft FrontPage. Professors may need to rely on their universities' services and hours of availability to create certain course components. Also web-based courses may require additional external services provided by the university such as computer programmers, computer specialists and video producers. Another complicating scenario in which it may be difficult to apply the two limbs of work for hire is where, for example, a faculty member creates an online course over an extended period of time and has worked in several institutions during this time. The age-old convention of academia supports the position that even with regard to on-line course material, copyright presumptively belongs to the faculty creator. It would seem that all educational institutions should have the dissemination of information and advancement of knowledge as their primary goal. Vesting copyright ownership of both conventional and online course lectures and other
academic work products in faculty does not entail a significant degree of monetary loss or administrative disruption to the university. In contrast, an educator's claim of copyright ownership can result in depriving the university of the benefits of its monetary and time expenditures in creating the courses. Distance learning materials also generate tremendous profits for the university, and such profits will be diminished to the extent universities must negotiate subsequent uses of the materials with the faculty members who create the courses (Lauglin, 2000).

One commentator has suggested that the issue of ownership of on-line courses should be resolved by affording universities a perpetual, nonexclusive license to use of the videotapes, computer files or other media comprising the distance learning programs (Lauglin, 2001). Such license also should permit the institutions to revise and update course materials for its distance learning programs (Lape, 1992). This recommendation appears to strike a positive balance, at least initially. It is a balance between the university's interest and the creator's interest.
CHAPTER FOUR: METHODOLOGY

The Population Frame

The population for this study consisted of post-secondary educators in Ohio’s public/state, private and two-year community and technical colleges and universities. Post-secondary educators included full professors, associate professors, assistant professors and instructors and lecturers of web-based/online courses. The population frame was obtained from the 2000-2001 Ohio Board of Regents Directory. The Directory contains information and data generated by the Higher Education Information Systems (HEI), which contains a list of the names of all colleges and universities in the state of Ohio. The directory also contains a list of post-secondary educators, which includes tenured and non-tenured professors and instructors/lecturers (Ohio Board of Regents, 2001 Higher Education Information Systems, Ohio’s colleges and campuses) Available online: http://www.regents.state.oh.us/visit_campuses.htm.

In the directory of Higher Education Information Systems, Ohio’s colleges and universities are classified into groupings called sectors. The sectors are generic and identify and describe the various categories of colleges into four types:

(i) Four-year public colleges and universities
(ii) Two-year public universities
(iii) Four-year private/religious colleges and universities and
(iv) Two-year public community and technical colleges.

The population sample for the present study consisted of post-secondary educators randomly selected from the four types of institutions listed above.
Sample Selection

The directory was accessed twice through its online worldwide website. To verify the accuracy of the 2000-2001 list of post-secondary educators, the researcher contacted the participating institutions directly to update, verify and confirm their listings. All participating institutions confirmed their listings. In the Higher Education Information Systems Directory, each institution has a unique institutional and campus code that can be matched with the institution’s name. To select the sample, the names of the institutions and institutions’ campus codes were downloaded into a computer file. Universities and colleges were selected randomly using the code numbers. For sample selection, three institutions of higher education from each sector of Ohio’s list of four-year and two-year colleges and universities were selected randomly. Next, data on educators, their academic rank (i.e. full professors, assistant professors, associate professors, and instructors/lecturers) and the courses they taught were downloaded into a file. In the case where there were insufficient web-based instructors available in an institution, a new university or college was randomly selected from the same institution type. For statistical purposes, faculty members were selected based on stratification of institution type. A representative sample of 120 faculty members was selected at random, to participate. This comprised of an even number of ten educators per institution.

Data on the randomly selected participants who were downloaded into the computer file as instructing web-based courses for the Spring 2002 academic year were confirmed by accessing information directly through each institution’s online website. For a second confirmation on the availability of educators to participate in the study, the
researcher visited the web page of each institution where participants were selected and put in any or all of the following search words in the search link: "Web based courses," "distance education courses," "online courses" and the name of the instructor. Ninety-five percent of searches conducted yielded positive results confirming the identity of the educator and the name of the web-base course taught. The researcher conducted a follow-up and verification of the list generated through the web, via telephone calls and or emails. This method of confirming and verifying the names of faculty who taught web-based courses was cumbersome but proved very successful.

In addition, requirements for sample selection included the following:
(a) The institution from which the participant was instructing a web-based/online course must fit into one of the four classifications of institutions provided by the Ohio Board of Regents higher education classification system.
(b) Distance education in the form of web-based /online courses was offered.
(c) The participant was an instructor of the web-based/ online course for at least one of the semesters or quarters in the 2002 academic year.

Instrumentation

This study utilized two research instruments namely, the Copyright Questionnaire and the Follow-up Copyright Survey. The first instrument, the Copyright Questionnaire was slightly adapted from the Copyright and Multimedia Questionnaire (CMQ) utilized by Shane in his doctoral dissertation in 1999 (Appendix C). Permission was requested and received from the instrument's author to use certain parts of the instruments for the study (Appendix J). Shane's (1999) Copyright and Multimedia Questionnaire comprises of three parts. The first part consists of demographic questions. The second part
examined K-12 educators' knowledge of copyright law a based on the Copyright Act of 1976. The third part of the questionnaire asks factual questions about the fair use guidelines for educational multimedia. For the present study, the researcher utilized slightly adapted portions of Part 1 and 2 of Shane's (1999) Copyright and Multimedia Questionnaire. The researcher developed part 3 of the study's copyright questionnaire comprising of 14 question items. Because the study sought to test the knowledge levels of Ohio's post-secondary educators regarding copyright ownership of web-based courses, statements in Part 3 were developed to include copyright ownership questions as they related to the Copyright Act of 1976. Each question item in this section was generated from Section 201 of the Copyright Act of 1976 that dealt with ownership and was presented in a statement that is either "true" or "false." Participants were asked to respond to each statement by checking an "X" on one of the options.

**Copyright Questionnaire**

The Copyright Questionnaire Cover Letter (Appendix A) accompanied the Copyright Questionnaire and was designed to introduce the nature, purpose and importance of the study and to request participation from the study's participants. The cover letter also assured participants that great lengths had been taken to assure their anonymity and confidentiality. The cover letter stated the approximate time the questionnaire would take to complete (10-15 minutes) and provided instructions on how to return the completed questionnaire to the researcher.

Additionally, an instruction page accompanied the Copyright Questionnaire (Appendix B). The instructions described the contents of the copyright questionnaire, provided direction to participants in completing and mailing the completed questionnaire,
and reminded participants that participation in the study was voluntary. The Copyright Questionnaire (Appendix C) was divided into three parts. Part I of the questionnaire comprise of seven questions that ask factual questions about the U.S. Copyright Law of 1976. These questions were based on general provisions of copyright law of 1976 and are multiple-choice in nature. Part II of the questionnaire was designed by the researcher and asks specific questions about copyright ownership. The copyright ownership questions were drawn directly from the Copyright Act of 1976. This 14 true and false questions items. Part III of the questionnaire contained nine demographic questions directed to participants of the study.

Copyright Follow-up Survey

The Copyright Follow-up Cover Letter (Appendix D) accompanied the follow-up survey. The follow-up cover letter was designed to introduce the nature, purpose and importance of the follow-up survey and to thank participants for their continued willingness to participate in the survey. The cover letter also assured participants that great lengths had been taken to assure their anonymity and confidentiality. The cover letter stated the approximate time the survey would take to complete (10 minutes) and provided instructions on how to return the completed survey to the researcher. Additionally, an instruction page accompanied the follow-up survey (Appendix E). The instructions described the contents of the follow-up survey, provided direction to participants in completing and mailing the completed survey, and reminded participants that participation in the study was voluntary. It also provided an approximate time of completion. The second instrument, the follow-up copyright survey, was slightly adapted from a follow-up copyright survey utilized by Shane in his doctoral dissertation.
in 1999. Permission was requested and received by the researcher to utilize certain portions of the survey (Appendix J). The follow-up copyright survey contained 10 open-ended questions and was sent to the 25 participants who indicated their willingness to further participate in the study. The first question asked for comments about the original questionnaire and how well participants felt the questionnaire achieved the study’s goals. The next four questions asked about copyright information resources, and training that was available to participants. The remaining questions asked educators about their concern regarding knowledge of copyright information and elicited ideas on how to effectively disseminate this information to educators.

Validity and Reliability

Validity

Huck and Cormier define content validity as “the degree to which the various items collectively cover the material that the instrument is supposed to cover” (1996, p.89). Content validity verifies that the items in an instrument make up a representative sample of the applicable universe of content (Kerlinger, 1986). The universe measured in this study covers federal law as it relates to intellectual property especially the Copyright Act of 1976.

To define the universe of the content the researcher consulted several sources, including case and statutory law, relating to copyright ownership, the work for hire doctrine, academic exception to the work for hire doctrine and the fair use doctrine. The researcher consulted several legal research articles, texts and cases on the subject area. The researcher also conducted a comprehensive electronic legal research utilizing the Lexis Nexis academic and congressional universes. To insure content validity, a panel of
three experts in the field of copyright assessed the instrument during and after development. The panel consisted, in part, of members of the researcher’s dissertation committee. The committees of experts had knowledge of measurement and content and are members of the target population. The panel represented a mix of law professors and quantitative researchers. The panel members were:

(1) Patrick Pauken, J.D., Ph.D., Assistant Professor, School of Leadership and Policy Studies, Chair of the Doctoral Program in Leadership Studies, Bowling Green State University.

(2) Sue Mota, J.D., Assistant Professor Department of International Business and Legal Studies, Bowling Green State University and

(3) Mark Gooden, Ph.D., Assistant Professor, Department of Education Administration, University of Cincinnati.

To validate the knowledge measure, the panel of experts assessed the study’s instrument during and after its development. Each expert was given a copy of the Copyright Questionnaire, the Copyright Follow-up Survey and a content evaluation form. The experts returned the form and provided feedback on improving and revising the instrument. Revisions and improvement to the study’s instrument were made accordingly. The following revisions were made to the original instrument.

1. Question 1 (Copyright Questionnaire) was reworded. The phrase “it is” was changed to “the work is” for clarity purposes.

2. Question 6  (Copyright Questionnaire) was reworded and the term “on or after January 1, 1978” was changed to the “Copyright Term Extension Act of 1998. This is the current amendment that deals with copyright duration.
3. Question 10 (Copyright Questionnaire) was reworded and the phrase
"Generally" was inserted at the beginning of the sentence.

4. An example of a collective work resulting from web-based instruction was
inserted into Question 15 for clarity purposes. The following phrase was inserted:
"e.g., a set of websites joined by hyperlinks."

5. An example of a material object was inserted into Question 18 for clarity
purposes. The following phrase was inserted: "e.g., a compact disc."

6. Question 19 (Copyright Questionnaire) was reworded to the following for
purposes of clarity. "Transfer of copyright ownership may be completed by either
verbal or written contract."

7. Question 20 (Copyright Questionnaire) was reworded to the following for
purposes of clarity. "The ownership of copyright may be bequeathed by will."

Reliability

Vogt (1993) defines reliability as, "the consistency or stability of a measure or
test from one use to the next" (p.195). The reliability of the questionnaire was
determined by conducting a pilot test of the instrument.

A pilot study was conducted to establish the relevance of the content of the
copyright questionnaire and survey to post-secondary educators' knowledge levels. In
addition, pilot study participants examined the items in both the Copyright Questionnaire
and Copyright Follow-up Survey for clarity. A convenience sample of ten post-
secondary educators from the researcher's home institution, Bowling Green State
University, were identified and selected to participate. The ten pilot participants, who
were selected for the final study sample, were given the Copyright Questionnaire, the
follow-up Copyright Survey and the pilot study response form to complete. Envelopes containing the proposed data instruments, a pilot cover letter, and a structured response sheet were mailed to the pilot participants.

Pilot testers were asked to complete all items in both the questionnaire and the follow-up survey. In addition pilot testers were asked to complete the pilot response forms and to indicate any questions, wording or instructions that were unclear, incomplete, or needed revision or improvement. Nine completed pilot test and pilot response forms were returned to the researcher resulting in a 90% return rate. Overall 90% of the pilot testers indicated that the instructions were clear, the format, wording and contents of the copyright questionnaire and follow-up copyright survey were good, and the font size was acceptable. Slight adjustments were made to the copyright instrument based on the recommendations of the pilot testers.

The results of the pilot test were useful in establishing content validity and in refining the instrument for future studies. In addition, the researcher contacted the Statistical Consulting Center at Bowling Green State University and a frequency on all forty test items completed by pilot participants was done. Each question response of pilot participants was compared item by item and a frequency on similar responses from the actual study was tabulated. The frequency results showed that the question contents were overall answered consistently by participants across the board. The content validation procedures discussed above indicated that the set of forty items adapted and developed for the questionnaire and survey adequately represented the content necessary to judge Ohio’s post-secondary educators regarding copyright.
Validity and Reliability - Qualitative Portion of the Study

For qualitative research, research validity refers to qualitative research that is plausible, credible, trustworthy and therefore defensible (LeCompte & Preissele, 1993). According to Kincheloe (1991), surveys are common instruments of qualitative research because they can be regarded as interviews by proxy, are easy to administer, and provide direct responses to factual and attitudinal questions. Furthermore, Kincheloe (1991) maintains that this methodology in qualitative research make tabulation and analysis of response nearly effortless. The study utilized the follow-up copyright survey as the primary data collection method for the qualitative part of the study. Data for analysis in this study were derived from the returned responses of twenty-one participants who completed the follow-up survey.

In qualitative research, descriptive validity refers to the factual accuracy of the account as reported by the qualitative researcher (Johnson, 1994). A key question addressed in the process of establishing descriptive validity is: “Did the researcher accurately report what he / she saw or was written?” Or “did what was reported as taking place in the group studied actually happen?” In other words descriptive validity refers to accuracy in reporting descriptive information (Johnson, 1994). One effective strategy used to obtain and verify descriptive validity is called investigator triangulation. In the case of descriptive validity, investigator triangulation involves the use of multiple observers to record and describe the research participant’s behavior and or written statements. The use of multiple observers allows crosschecking of observations to make sure that what is reported is accurate. For this study the researcher independently coded and read all of the returned surveys to maintain accuracy. However, the researcher
utilized multiple observers namely an employee from the data entry and processing office at Bowling Green State University, and a graduate student to cross reference the coded surveys and ensure their accuracy. The final results from the data processing and entry center and graduate student showed a high rate of consistency with the coding employed by the researcher. This strategy in addition to the pilot test and expert review was used to improve the descriptive (internal) validity and reliability of the qualitative instrument.

The term "triangulation" or "cross checking" is referred to information and conclusions through the use of multiple procedures or sources (Johnson, 1994). When the different procedures or sources are in agreement, "corroboration" is said to be achieved (Johnson, 1994). The researcher relied on a methods triangulation to verify the reliability of the qualitative instrument. According to Johnson (1994) when utilizing methods triangulation the researcher utilizes more than one methodology for collection and analysis of data in a single study. For this study, the researcher utilized more than one methodology in addition to qualitative method of data collection and analysis. The logic was to combine different methods that had non-overlapping weaknesses and strengths (Brewer & Hunter, 1989). Thus when the two or more methods are combined, the result is better evidence. In other words, the "whole" is better than its "parts." For this study a combination of a legal, quantitative and qualitative methods produced better and consistent evidence on the research questions assessing the knowledge levels of educators and providing feedback responses on important issues regarding copyright. Corroboration was achieved as the different methods procedures serve to provide credibility and consistency in the evidence or responses generated by participants.
Data Collection

Legal Data Collection Methods

The primary objective of the legal research conducted for this study was to collect, review, and analyze state and federal law relevant to a discussion on copyright ownership as it relates to joint authorship, the work made for hire doctrine, and the teacher's exception rule. The cases analyzed and reviewed were collected through the traditional and on-line legal research method. The researcher accessed the Lexis Nexis Academic and Congressional Universe website on the 25th of February 2002 and the 4th of March 2002. The electronic search yielded a total of ninety-eight hits of cases at the federal and state and district level. The researcher went through each case to determine which cases were appropriate to the subject matter of the study as discussed in chapter three. After a thorough review of legal decisions the researcher categorized cases that dealt with the issue of copyright ownership and itemized them under sub-themes.

The review presented in Chapter Three covers a description of analysis and case summarization of the cases that were analyzed.

Quantitative Data Collection Methods

Permission to conduct the study was requested and approval to conduct this study was given by the Human Subjects Review Board of Bowling Green State University on March 5, 2002. Data for this study were collected by utilizing the conventional mailing system. Questionnaire packets were sent to 120 selected participants on the April 8th, 2002. The approximate time for completion was 10-15 minutes and participants were advised to return the completed questionnaire within 10 business days. Two weeks after the first mailing, twenty-five participants returned their completed questionnaires.
Follow-up reminder postcards were subsequently sent to all participants, thanking them for their participation and reminding the non-respondents to complete the questionnaire as soon as possible. Data collection for the questionnaire ended four and a half weeks after the initial mailing with a total of sixty-two completed questionnaires.

**Qualitative Data Collection Method**

Twenty-five respondents from the initial study participants indicated their willingness to continue in the study. Three weeks after the initial mailing of the questionnaire, the Copyright Follow-up survey (the second instrument in this study) was sent to the respondents who had indicated their willingness to continue. Data for the qualitative part of the study were collected through mailing of the copyright follow-up survey to participants. After 10 days a follow-up reminder was sent to all twenty-five respondents via email reminding the non-respondents to complete the survey as soon as possible. Data collection for the follow-up survey ended two weeks later with a return of 21 completed surveys.

To maintain anonymity and confidentiality, the researcher employed a double blind administration of both the questionnaire and the survey. That is, each participant returned, separately a questionnaire or survey and an enclosed postage paid postcard separately. The post card had the code for follow-up purposes and the questionnaire and survey had no identifiable marks on it. Copies of the return, postage-paid postcards can be found in Appendix O. A summary of the results was provided to the respondents who indicated they wanted it.
Research Design and Data Analysis

This study combined quantitative, qualitative and legal research methods to examine the knowledge levels of post-secondary educators regarding copyright and copyright ownership of web-based courses and materials.

Legal Research Methodology

Chapter Three discusses the legal research methodology utilized in this study. A legal electronic search was conducted by the researcher, which yielded a total of ninety-eight cases. Cases were selected based on their relevance to the subject matter of copyright ownership as discussed in the study. The researcher utilized the case summarization and analysis methodology to analyze the selected cases. Reported case law and decisions were analyzed to determine the significance that a case may have as a legal precedent for the current issues pertaining to copyright ownership discussed in the study. Ultimately, the legal research was used in part to construct a fourteen-item instrument testing Ohio’s post-secondary educators’ knowledge on laws relating to copyright ownership.

Quantitative Research Methodology

The quantitative research design for this study was both descriptive and inferential. The study utilized a non-experimental research design, as the researcher deliberately manipulated no variables. The quantitative portion of this study was designed in two parts. First, several one-way analyses of variance were conducted on the independent/demographic variables defined in Chapter One of the study. The One-Way ANOVA procedure displayed multiple comparison statistics to evaluate the differences of knowledge levels between educators groups based on each of the independent
(demographic) variables: number of years teaching, number of years of experience using web-based technology for instruction in an institutional setting, faculty rank, employment status, highest level of education completed, level of courses taught, type of institution, participation in copyright law-related conferences and awareness of institutional copyright policy.

This statistical technique examined the variability of sample values and examined observations within each group as well as how much the group means vary (Norusis, 1997). Based on these two estimates of variability, conclusions were drawn about the population means. The second portion of the quantitative design was descriptive in nature. Utilizing the (SAS) statistical analysis software, a frequency was run on all items and presented the mean scores and standard deviation of educators' knowledge levels of copyright law and copyright ownership. The data were analyzed using frequency and percentage tables and the following parametric tests: t-tests for the difference between means and the one-way analysis of variance tests. The basic level of significance for the study was set at .05. This level of significance adequately guarded against Type I errors without being conservative to the point that meaningful differences were not found significant.

**Qualitative Research Methodology**

The qualitative methodology used in this study is the thematic content analysis, a modified version of Spradley's domain analysis procedure (Spradley, 1979). This research method is used to identify key themes related to the subject matter and to count the frequency of each theme across open-ended responses for the ten questions in the survey. For this portion of the study, the researcher administered the follow-up copyright
survey, which was the primary data collection instrument. The primary intent of the
descriptive survey was for respondents to write open-ended answers to key questions on
copyright ownership, management and the awareness of copyright resources in their
institutions.

The data were analyzed utilizing three steps. The first step in content thematic
analysis is arriving at a thematic code for each question item. The researcher conducted
open coding in relation to questions 1-10 in the copyright follow-up survey. The
researcher read through each of the 21 returned surveys looking for themes,
commonalties and distinctions. This process was repeated for internal consistency on the
emerging themes. As the themes emerged, the researcher developed a set of initial
conceptual categories that were very specific based on open coding of the surveys. The
initial set of categories expanded as additional surveys were returned and analyzed and
new information emerged. The initial categories were then modified to create a schema
(set of higher level categories, which encompassed the more specific categories). The
researcher then used this schema to re-analyze each survey to assure that data had not
been lost in the process of expanding the original categories. The researcher finalized the
coding of the ten question items.

After the final coding of the surveys, the researcher recorded all codes on the
master copy and ran a frequency test utilizing a computer software program (SAS) to
tally all coded responses. The second step in the process involved computing frequencies
on the numerical data and checklists. The researcher counted the frequency of each
theme across open-ended responses for the 10 items. Finally, a comparison of themes
with the highest frequencies across the ten questions for respondent group was calculated.

Employees of the Statistical Consulting Center then compared the answers for reliability.
CHAPTER FIVE: RESULTS

The methodology used for gathering data has been discussed in chapters three and four. From the population of Ohio’s post secondary educators instructing web-based/online courses, 120 participants were selected in a random sample to participate in the study. From the 120 selected participants, three participants returned uncompleted questionnaires signifying their unwillingness to participate in the study. In addition two participants returned their questionnaire indicating that they did not qualify as part of the target population, as they were not instructors of web-based/online courses for the 2002 academic year. Thus, the final total number of selected participants in this study was 115.

Of the 115, 62 participants (54%) responded to the questionnaire during the four weeks of data collection. A total of sixty-two copyright questionnaire responses were complete and usable and were included in the results. 25 participants responded within the two weeks of the initial mailing. Additionally, thirty-seven responded over the next two weeks after participation reminder postcards were mailed.

Out of the sixty-two responses, twenty-five participants (40%) indicated their willingness to continue participation and to complete the copyright follow-up survey. Twenty-one of those twenty-five participants (84%) returned their completed follow-up survey within two weeks of the initial mailing. Overall 21 follow-up copyright surveys were complete and usable, and were included in the results.
Copyright Questionnaire Results

Descriptive Statistics

The Copyright Questionnaire consisted of a total of twenty-one multiple choice and true and false question items. The legal knowledge score of each participant was the raw score of items answered correctly, out of twenty-one question items. Out of the total of 115 respondents 12% achieved competency, as defined by an overall score of 75%. Thirty-five individuals scored at least 50% on either part (Part I or II) of the questionnaire (see p.107 & 108 ). Nineteen individuals scored below 50% on their overall scores. The number of correct responses from individual scores of participants ranged from 2 out of 21 (10%) to 18 out of 21 (86%). Overall, the grand mean score for the group was .569 with a standard deviation of 0.144.

The first research question in the present study was the following: What is the level of legal knowledge of Ohio’s educators in public/state, private and two-year institutions of higher education regarding the Copyright Act of 1976?

The overall mean score for the sample revealed that there is some level of legal knowledge among Ohio’s post-secondary educators regarding copyright law and copyright ownership. The results reveal that although post-secondary educators have some knowledge they are to a large extent unstudied in this area. They may therefore need some attention in the subject matter. A summary of the mean scores of each group of participants is presented in Table 1.
<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Total Sample (n = 62)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Number of years teaching</td>
<td></td>
</tr>
<tr>
<td>0-2</td>
<td>10</td>
</tr>
<tr>
<td>3-5</td>
<td>9</td>
</tr>
<tr>
<td>6-10</td>
<td>22</td>
</tr>
<tr>
<td>11-15</td>
<td>10</td>
</tr>
<tr>
<td>Over 15 years</td>
<td>11</td>
</tr>
<tr>
<td>Number of years using web-based technology</td>
<td></td>
</tr>
<tr>
<td>0-1</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>5 years or more</td>
<td>6</td>
</tr>
<tr>
<td>Faculty rank</td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>8</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>20</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>15</td>
</tr>
<tr>
<td>Instructor/Lecturer</td>
<td>19</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
</tr>
<tr>
<td>Part-time position</td>
<td>14</td>
</tr>
<tr>
<td>Full-time position</td>
<td>48</td>
</tr>
</tbody>
</table>
Table 1 (continued)

Educators’ Knowledge of Copyright Law - Group Mean Scores

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample (n = 62)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Highest level of education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelors</td>
<td>7</td>
<td>0.525</td>
<td>0.163</td>
</tr>
<tr>
<td>Actively working on master’s degree</td>
<td>1</td>
<td>0.620</td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>16</td>
<td>0.624</td>
<td>0.101</td>
</tr>
<tr>
<td>Actively working on a doctoral degree</td>
<td>4</td>
<td>0.452</td>
<td>0.045</td>
</tr>
<tr>
<td>Doctoral Degree (JD, Ed.D. M.D. Ph.D.)</td>
<td>34</td>
<td>0.555</td>
<td>0.155</td>
</tr>
<tr>
<td><strong>Level of education courses taught</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>45</td>
<td>0.591</td>
<td>0.129</td>
</tr>
<tr>
<td>Graduate</td>
<td>11</td>
<td>0.450</td>
<td>0.165</td>
</tr>
<tr>
<td>Professional</td>
<td>6</td>
<td>0.620</td>
<td>0.120</td>
</tr>
<tr>
<td><strong>Institution type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four-year public college or university</td>
<td>21</td>
<td>0.605</td>
<td>0.131</td>
</tr>
<tr>
<td>Two-year public college or university</td>
<td>9</td>
<td>0.576</td>
<td>0.099</td>
</tr>
<tr>
<td>Private/religious college or university</td>
<td>14</td>
<td>0.497</td>
<td>0.185</td>
</tr>
<tr>
<td>Two-year technical or community college</td>
<td>18</td>
<td>0.578</td>
<td>0.133</td>
</tr>
<tr>
<td><strong>Participation in law-related copyright workshops</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>0.571</td>
<td>0.138</td>
</tr>
<tr>
<td>No</td>
<td>55</td>
<td>0.568</td>
<td>0.146</td>
</tr>
<tr>
<td><strong>Awareness of institutional copyright policy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>0.620</td>
<td>0.127</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>0.512</td>
<td>0.150</td>
</tr>
<tr>
<td>I don’t know</td>
<td>32</td>
<td>0.534</td>
<td>0.148</td>
</tr>
</tbody>
</table>
Summary of Results from Collapsed Cells

After running an initial statistical test on the demographics (independent variables), it was necessary to collapse certain cells because of insufficient data in certain categories. The researcher, with the advice of a consultant at the university’s statistical center, collapsed the cells for two demographic questions. First, the highest level of education completed was collapsed from five levels to four combining participants with a bachelor’s degree and those actively working on a master’s degree.

Second, the existence of an institutional copyright policy was collapsed from three levels to two levels combining participants who indicated that they were not aware of any institutional copyright policy in existent at the universities and those who indicated that they did not know whether such policy existed. The collapsed results of the mean score for participants in both categories are reported in Table 2.
### Table 2

**Educators Knowledge of Copyright Law - Group Mean Scores Results from Collapsed Cells (Highest level of education)**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.537</td>
<td>0.155</td>
</tr>
<tr>
<td>Highest level of education</td>
<td></td>
<td>0.624</td>
<td>0.101</td>
</tr>
<tr>
<td>Bachelors / Actively working on master’s degree</td>
<td>8</td>
<td>0.537</td>
<td>0.155</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>16</td>
<td>0.624</td>
<td>0.101</td>
</tr>
<tr>
<td>Actively working on a doctoral degree</td>
<td>4</td>
<td>0.452</td>
<td>0.045</td>
</tr>
<tr>
<td>Doctoral Degree (JD, Ed.D. M.D. Ph.D.)</td>
<td>34</td>
<td>0.555</td>
<td>0.155</td>
</tr>
</tbody>
</table>

### Table 3

**Educators Knowledge of Copyright Law - Group Mean Scores Results from Collapsed Cells (Awareness of the existence of an institutional copyright policy)**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0.620</td>
<td>0.127</td>
</tr>
<tr>
<td>Awareness of the institution’s copyright policy</td>
<td></td>
<td>0.531</td>
<td>0.146</td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>0.620</td>
<td>0.127</td>
</tr>
<tr>
<td>No / I don’t know</td>
<td>36</td>
<td>0.531</td>
<td>0.146</td>
</tr>
</tbody>
</table>
Analysis of Variance

The study's second research question asked the following: Do the following variables significantly affect the level of legal knowledge of post-secondary educators regarding copyright ownership of web-based /online courses and materials (a) number of years teaching in higher education, (b) number of years using web-based /internet technology for instruction, (c) faculty rank (d) employment status (e) highest level of education completed (f) education level taught (g) institution type (h) participation in law-related workshops and (i) existence of institutional copyright policy?

To examine the impact of these demographic variables on the legal knowledge of Ohio's post-secondary educators regarding copyright law and copyright ownership, several one-way analyses of variance were conducted. A summary of the results is presented in Table 4. The results of the one-way ANOVA tests revealed that there was a significant main effect of the level of course taught on the level of knowledge of post-secondary educators regarding the Copyright Act. (F (2,59)=5.26, p=0.0079). To determine where among the level of courses taught the significant differences lie, a post hoc test was conducted. Under Tukey's test for comparisons between pairs of means, post-secondary educators who taught graduate courses scored significantly lower than post-secondary educators who taught undergraduate or professional courses. Post-secondary educators who taught professional courses scored the highest. However there was no significant difference between the total score of post-secondary educators who taught professional courses and those who taught undergraduate courses. The results of the post-hoc tests are presented in Table 5.
Furthermore, the ANOVAs revealed that there was also a significant main effect of the awareness of an institutional copyright policy on the level of knowledge of post-secondary educators regarding copyright ownership. (T (1,60)=6.09, p=.0164). Those who were aware of the existence of their institution’s copyright policy scored significantly higher than those who either were unaware of a policy at their institutions or reported that their institution had no such policy. The possible justifications for this main effect and significant difference among post-secondary educators are discussed in Chapter 6.

The ANOVAs reported no significant effects at the alpha level of .05 for the remaining independent variables (number of years teaching, number of years of experience using web-based technology in an institutional setting, faculty rank, employment status, highest level of education completed, type of institution, and participation in copyright law-related conferences).
<table>
<thead>
<tr>
<th>Variables</th>
<th>SS</th>
<th>df</th>
<th>Test Statistic</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years teaching</td>
<td>0.046</td>
<td>4</td>
<td>0.54</td>
<td>0.7105</td>
</tr>
<tr>
<td>Number of years using web-based Technology</td>
<td>0.099</td>
<td>4</td>
<td>1.20</td>
<td>0.3204</td>
</tr>
<tr>
<td>Faculty rank</td>
<td>0.008</td>
<td>3</td>
<td>0.12</td>
<td>0.9454</td>
</tr>
<tr>
<td>Employment status</td>
<td>0.002</td>
<td>1</td>
<td>0.11</td>
<td>0.7459</td>
</tr>
<tr>
<td>Highest level of education completed</td>
<td>0.154</td>
<td>4</td>
<td>2.07</td>
<td>0.0965</td>
</tr>
<tr>
<td>Educational level taught the most</td>
<td>0.193</td>
<td>2</td>
<td>5.26</td>
<td>0.0079*</td>
</tr>
<tr>
<td>Institution type</td>
<td>0.102</td>
<td>3</td>
<td>1.68</td>
<td>0.1822</td>
</tr>
<tr>
<td>Participation in law–related workshop</td>
<td>0.000</td>
<td>1</td>
<td>0.00</td>
<td>0.9634</td>
</tr>
<tr>
<td>Institution copyright policy</td>
<td>0.119</td>
<td>1</td>
<td>6.09</td>
<td>0.0164*</td>
</tr>
</tbody>
</table>

* Significant at the alpha level of 0.05
Table 5

Tukey’s Post-Hoc Test Results for Level of Course Taught by Ohio’s Post-Secondary Educators

<table>
<thead>
<tr>
<th>Level Taught Comparisons</th>
<th>Difference Between Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 1</td>
<td>0.02867</td>
</tr>
<tr>
<td>3 - 2</td>
<td>0.17000***</td>
</tr>
<tr>
<td>1 - 2</td>
<td>0.14133***</td>
</tr>
</tbody>
</table>

***Comparisons significant at the 0.05 level

Level of Course Taught Group description
1= Undergraduate
2= Graduate
3= Professional
Copyright Follow-up Survey Results

Twenty-five participants indicated that they would be willing to complete the copyright follow-up survey by checking the postage-paid participation reminder postcard. Twenty-five surveys were mailed to the participants by the researcher. Twenty-one follow-up surveys were completed and returned to the researcher for a 84% return rate two weeks after the initial mailing.

The qualitative methodology used in the present study is referred to as thematic content analysis, which is a modified version of Spradley's domain analysis procedure (Spradley, 1979). This qualitative method is used to identify key themes related to the subject matter found in a survey, questionnaire or interview and to count the frequency of each theme across open-ended responses.

The first question of the survey asked if the original questionnaire was a fair test of the respondent's knowledge of copyright law and copyright ownership. Twelve respondents (57%) said it was a good evaluation of their knowledge. Five respondents (23%) made the additional comments that it showed the limits of their knowledge on the topic. One respondent said “Yes it was thorough, but I know little about copyright laws, so the questions were difficult. Another said, “Yes, and therefore my knowledge is spotty at best.” Yet another said, “I feel very limited in knowledge (lack of) copyright law and [this instrument] proves it.” However, three respondents (14%) said “No” to this question. A respondent who said “no” remarked, “The questions were legal and technical and it is difficult to judge whether [the questionnaire] truly tested their knowledge.” See details as shown in Table 6.
Table 6

Frequency Table Coded Responses from Copyright Follow-up Survey - Question 1

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that the original questionnaire you completed truly tested</td>
<td>1</td>
<td>Yes</td>
<td>6</td>
<td>28.5%</td>
</tr>
<tr>
<td>your knowledge level of copyright law and copyright ownership? If so,</td>
<td>2</td>
<td>No</td>
<td>3</td>
<td>14.2%</td>
</tr>
<tr>
<td>how? If not, why not?</td>
<td>3</td>
<td>Yes, it seemed thorough</td>
<td>4</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Yes, showed limited of my knowledge</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Maybe, I felt inadequate in my knowledge</td>
<td>1</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Yes very comprehensive</td>
<td>2</td>
<td>9.2%</td>
</tr>
</tbody>
</table>
The second question on the survey asked if respondents thought they would have done better if they had utilized resources such as books and texts available to them at their institution. Twenty-one respondents (100%) said they thought they would have done better using other resources. The resource most frequently mentioned by respondents was the web or internet resources. Six respondents (28%) selected this choice. The second most mentioned resource was the university’s copyright policy; five respondents (23%) selected this choice. Other resources mentioned that may be useful are access to library materials (three respondents (14%) indicated this choice), university and intellectual property office (three respondents (14%) indicated this choice), and faculty handbook (two respondents (9%) indicated this choice). The least mentioned resource was a text on copyright law; only 1 respondent offered this option. Another respondent mentioned consulting notes from a course taken at another university. See details as shown in Table 7.
<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you could have used any resources (for example a book, text etc)</td>
<td>1</td>
<td>Yes, internet/web</td>
<td>6</td>
<td>28.5%</td>
</tr>
<tr>
<td>available to you at your institution, do you think you would have</td>
<td>2</td>
<td>Yes, access to library materials</td>
<td>3</td>
<td>14.2%</td>
</tr>
<tr>
<td>done appreciably</td>
<td>3</td>
<td>Yes, book on copyright</td>
<td>1</td>
<td>4.7%</td>
</tr>
<tr>
<td>better on the test? If so what sources would you have used?</td>
<td>4</td>
<td>Yes, through university &amp; intellectual property office</td>
<td>3</td>
<td>14.2%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Yes, through university copyright policy</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Yes, faculty handbook</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Yes, from a course taken at another university</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
Where, or how, did participants learn what they knew about copyright law was the content of the third question on the survey. The most frequent response was that knowledge was gained from in-services and workshops; nine respondents (42%) indicated that response. Five other sources were each mentioned by the respondents. These sources are reading (28%), university bulletins (9%), formal training (9%), word of mouth from colleagues (4%) course from another university (4%). See details as shown in Table 8.
Table 8

Frequency Table coded Responses From Copyright Follow-up Survey – Question 3

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where, or how, did you learn what you know about copyright law?</td>
<td>1</td>
<td>Word of mouth from colleagues</td>
<td>1</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>University bulletins</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Reading</td>
<td>6</td>
<td>28.5%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Formal Training</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>In-service/workshops</td>
<td>9</td>
<td>42.8%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Took a course from another university</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
The fourth question on the survey asked respondents if an institutional official had discussed copyright ownership issues for web-based courses with them in a meeting or in-house session, and, (if so, what professional role did the official play.) A majority of the respondents (86%) indicated that no one had discussed copyright law with them. Two respondents (9%) simply indicated “yes” to this question. One respondent (4%) said that it had been discussed, during an in-house session, by the vice president for academic affairs, a librarian, and a web administrator. See details as shown in Table 9.
Table 9

Frequency Table coded Responses From Copyright Follow-up Survey - Question 4

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has an institution official discussed copyright ownership issues for web-based/online courses with you in a meeting or in-house session? If so, what professional role did the official play at your institution?</td>
<td>1</td>
<td>Yes</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>No</td>
<td>18</td>
<td>85.7%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Yes, a vice president for academic affairs, a librarian, and a web administrator</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
The fifth question on the survey is a follow up to question 4. It asked respondents who had indicated that their institution had discussed copyright law, what issues their institutions addressed. Each of the three participants who responded "yes" to item 4 indicated that their universities had discussed issues pertaining to ownership of web-based materials. See details as shown in Table 10.
Table 10

Frequency Table coded Responses From Copyright Follow-up Survey- Question 5

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>If answered, “Yes” to item # 4 what issues did your institution discuss?</td>
<td>1</td>
<td>Not Applicable (NA)</td>
<td>18</td>
<td>85.7%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Ownership of web-based materials</td>
<td>3</td>
<td>14.2%</td>
</tr>
</tbody>
</table>
The sixth question on the survey asked if respondents thought educators should be knowledgeable about copyright when dealing with their students and their classroom. Ten respondents (47%) indicated that they needed to know their rights. Nineteen percent indicated that they felt it was important because it was their intellectual property, 14% indicated it was important to follow laws, and 9% said it was good to set an example for students. Overall, 95% indicated that they needed to be knowledgeable although for a variety of reasons. Only one respondent (4%) said “no.” That respondent said “we pretty much figured that we had lost our copyright by doing “work for hire.”” See details as shown in Table 11.
Table 11

Frequency Table coded Responses From Copyright Follow-up Survey – Question 6

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that educators should be knowledgeable about copyright when dealing with their students and in their classrooms?</td>
<td>1</td>
<td>Yes, it is important to follow laws</td>
<td>3</td>
<td>14.2%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Yes, to set an example for students</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>No</td>
<td>1</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Yes, it is their intellectual property</td>
<td>4</td>
<td>19.0%</td>
</tr>
<tr>
<td>Why or Why not?</td>
<td>5</td>
<td>Yes, they need to know what their rights are</td>
<td>10</td>
<td>47.6%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Yes, to be able to answer questions and serve as an acceptable role model</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
The seventh question on the survey asked if respondents thought their colleagues were concerned about copyright when dealing with web-based courses. Seven respondents (33%) said they thought they were concerned especially as it relates copyright ownership issues. Another seven felt that it was a very important subject matter and four felt it that it depended on how valuable the content developed was. Two felt that it varied as some educators were concerned and some were not. See details as shown in Table 12.
Table 12

Frequency Table coded Responses From Copyright Follow-up Survey—Question 7

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that your colleagues are concerned about copyright when dealing with web-based/online courses? Why or why not?</td>
<td>1</td>
<td>Yes, especially regarding ownership issues</td>
<td>7</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Varies, some are some are not</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Depends on how they value the content developed</td>
<td>4</td>
<td>19%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Yes, very important subject matter</td>
<td>7</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Yes, they are very worried about institutional monopoly</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Total Sample (n = 21)
The best way to get information out to educators about copyright issues was the subject of the eighth question on the survey. The two methods that were the most popular with respondents were (a) web-based/internet access (38% of respondents indicated this option), (b) focused seminars/workshops and in-services (28% of the respondents felt this was the most effective way). However, 19% felt that some written information by the university would also be very useful. See details as shown in Table 13.
Table 13

Frequency Table coded Responses From Copyright Follow-up Survey – Question 8

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you think is the best way to get</td>
<td>1</td>
<td>Web-based access</td>
<td>8</td>
<td>38.1%</td>
</tr>
<tr>
<td>copyright information to educators in</td>
<td>2</td>
<td>Written information by the university</td>
<td>4</td>
<td>19%</td>
</tr>
<tr>
<td>post-secondary institutions of learning?</td>
<td>3</td>
<td>Focused seminars/workshops/in-services</td>
<td>6</td>
<td>28.5%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Faculty developed session during orientation</td>
<td>3</td>
<td>14.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>week</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Sample
(n = 21)
The ninth survey question asked whether their institutions had copyright guidelines specifically for web-based/online courses and material produced by their faculty. Six of the respondents said "I don’t know," five said "no," five said "yes" they had specific guidelines, and four of the respondents reported an uncertainty by saying "I don’t think so, but not certain." Only one respondent remarked. "Maybe." See details as shown in Table 14.
Table 14

Frequency Table Coded Responses From Copyright Follow-up Survey – Question 9

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your institution have copyright guidelines specifically for web-based online courses and materials produced by its own faculty?</td>
<td>1</td>
<td>Yes</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>No</td>
<td>5</td>
<td>23.8%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I do not know</td>
<td>6</td>
<td>28.5%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Don't think so</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>I think so, but not certain</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Maybe</td>
<td>1</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
The tenth and final question on the survey asked respondents whether their institutions had specific guidelines or procedures regarding copyright ownership of web-based courses and materials when collaborating with other institutions. Sixteen participants indicated uncertainty. From the 16, eight wrote, "I do not know," and an additional eight also indicated uncertainty from by stating "not certain but I don't think so." Two of the respondents said "Maybe" to this question, and three indicated an outright "No" for the answer. See details as shown in Table 15.
Table 15

Frequency Table Coded Responses From Copyright Follow-up Survey - Question 10

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Response</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your institution have specific guidelines or procedures regarding</td>
<td>1</td>
<td>Yes</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>copyright ownership of web-based/online courses and materials when</td>
<td>2</td>
<td>Not certain, but I don’t think so</td>
<td>8</td>
<td>38.1%</td>
</tr>
<tr>
<td>collaborating with other institutions?</td>
<td>3</td>
<td>I do not know</td>
<td>8</td>
<td>38.1%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Maybe</td>
<td>2</td>
<td>9.5%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>No</td>
<td>3</td>
<td>14.2%</td>
</tr>
</tbody>
</table>
In sum, the open-ended responses to key questions about copyright ownership, management and the availability/non-availability of copyright resources in their institutions provided by the respondents revealed educators' attitudes toward copyright management. Their responses ran the gamut from very positive, "I view this as an opportunity to be informed about my intellectual property rights," to not wanting to be bothered about copyright issues because "We knew when we took our appointment that we lost our intellectual property rights because of the work for hire doctrine," and responses that were shades in between.
CHAPTER SIX: SUMMARY, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter presents a summary of the research findings of the study, a discussion of the results and conclusions from the study and recommendations for further research.

Summary

The study analyzed the legal knowledge levels of Ohio’s post-secondary educators regarding the Copyright Act and copyright ownership. A stratified random sample of 62 post-secondary educators who taught web-based courses from public/state, private, religious and two-year colleges participated in the study. The study utilized two instruments; the copyright questionnaire to assess the knowledge levels of educators regarding the Copyright Act and copyright ownership issues, and the copyright follow-up survey to gather and evaluate educators’ responses to issues related to copyright knowledge, ownership and management in their institutions. Data collected from the questionnaire were subjected to several ANOVA tests, t-tests and Tukey’s post hoc tests. Data from the follow-up survey were analyzed utilizing a modified version of Spradley’s (1976) thematic content analysis method. The study also utilized a legal research methodology to collect, review, and analyze state and federal case law relevant to a discussion on copyright ownership. The law review and analysis identified the knowledge base of copyright law and protection for educators in institutions of higher education. The results of the law review in the light of educators’ responses from the copyright questionnaire and follow-up copyright survey revealed that educators lacked
knowledge of the law about the boundaries of copyright protection for facts and ideas. It also revealed that educators were unfamiliar with the law and copyright provision pertaining to the exclusive rights of copyright holders. Educators were also unstudied in the law with regards to copyright ownership for joint-authors or creators of a work. The legal knowledge score of each participant was the raw score of items answered correctly, out of twenty-one question items. Out of a total of 62 participants 12% achieved competency, as defined by an overall score of 75%. Thirty-four individuals scored at least 50% on either part of the questionnaire. Nineteen individuals scored below 50% on their overall scores. The minimum percentage score achieved was 10% and the maximum score was 86%. Overall, the grand mean score for the group was 57%.

The results of the study reveal that post-secondary educators have some knowledge of copyright act but were for the most part unstudied in this area. Two demographic variables had an effect on post-secondary knowledge of copyright issues. Educators who taught graduate courses scored significantly lower than those who taught undergraduate and professional courses. Additionally, educators who were aware of their institution’s copyright policy scored higher than those who were not. Results from the follow-up survey revealed that most educators feel limited in their knowledge regarding copyright, are concerned about legal issues and request ongoing in-services and workshops to remain informed.
Discussion of Results

Prior studies (Shane, 1999, James, 1981, Chase, 1994, Wertz, 1984) assessing the knowledge levels of educators regarding copyright law and fair use have used a 75% score as indicating proficiency in the knowledge level of the subject matter. Similarly, the present study utilized a 75% score to define proficiency in its subject matter. Based on this standard, the results of this study show 12% of the participants, (8 individuals out of 62 respondents) achieved proficiency. In addition to the 8 participants who demonstrated proficiency by scoring 75% and above, 19 participants (30%) of those completing the questionnaire scored 40% or below. Fifty-four participants (88%) scored below 75%. Thirty-five participants scored at least 50% on either part (part I and II) of the questionnaire.

The results of this study are disappointing, but not very surprising. The results suggest that participants had some knowledge of copyright, but for the most part needed additional information in this area. In fact, responses from the follow-up survey indicated that they felt limited in their understanding of the copyright laws. The results lend support to previous studies assessing the knowledge levels of educators by James (1981) and Chase (1994). In 1981, James (1981) did a survey of educators in a variety of levels to determine their level of exposure to the copyright laws. He found that most participants said they had some exposure but most felt inadequate or limited in their knowledge. Wertz (1984) looked at the knowledge level of college and university media directors from across the country. In that study 200 media directors were surveyed and only 15% of the 144 respondents achieved a 75% proficiency level in the understanding and application of copyright law. In 1993, nine years later, the study was replicated by
Chase (1994) using the same population, instrument and method. The study revealed that knowledge levels had dropped, with only 10% of the media directors reaching the 75% proficiency level.

The level of knowledge achieved by post-secondary educators in this study is of note. The mean score for educators who completed the copyright questionnaire was in the mid fifty-percentage range. This indicates that post-secondary educators have a level of knowledge about copyright, though not adequate. The scores achieved by post-secondary educators suggest there is a definite need for additional information and continuing education in this area. An examination of the frequency distribution of percentage scores between the two parts of the questionnaire (part I on the Copyright Act and part II on copyright ownership) show some interesting but not overly meaningful differences. The distribution of scores on the questionnaire shows lower scores for part I, which cover questions about the copyright law itself than for part II which covered questions about copyright ownership. The single highest score achieved was 62% on part I with 82% being the highest in part II. However 11% of the participants scored 30% or below on part I, while only 4% scored 30% or below in part II.

The few questions which the participants answered the correct answer more than any other question were evenly divided between the two content parts of the questionnaire. However, question nine dealing with the boundaries of copyright protection for creative forms of expression was answered correctly more than any other question. Fifty-one out of 62 participants answered this question correctly. Question 12 dealing with copyright ownership for joint-authors or creators of a work was the question that overall participants gave the wrong answer. Thirty-six out of 62 participants gave
the wrong answer. The second question answered incorrectly often by overall participants was question 7, which deals with copyright notice on a created work. Thirty-three out of 62 participants gave the wrong answer. The results of the scores suggest that there is a need for continuing education and training for faculty on copyright issues pertaining to their intellectual property.

With rapid technological growth, post-secondary educators are challenged with the need for adequate knowledge in the area of copyright for technological/web-based creations. According to Verduin and Clark (1991), more than half of the people enrolled worldwide in electronic courses are in the United States. While online education has the potential to offer new learning opportunities unrestricted by time, distance, or individual differences among students, existing educational practices cannot accommodate the widespread use of these technologies without corresponding shifts in fundamental views (Dillon & Cintron, 1997). A fundamental foundation for educators who utilize this growing technology is knowledge about the legal and policy implications that govern their products. However, the present study reveals that overall, the knowledge level of post-secondary educators regarding copyright law is somewhat low. If educators are active participants in shaping their institution’s laws and policies, they must in turn have a relationship to what is and must be known about these laws and policies. This knowledge must differ from the standard view in which educators are merely passive recipients of others’ expertise. Through active participation in formulating and reformulating the knowledge base, educators may contribute to knowledge. In the past, university officials and faculty have always regarded legal knowledge as simply a boundary in which they are free to exercise their professional prerogatives (Bull &
McCarthy, 1995). However, McCarthy et al (1994) warns educators not to be merely passive conduits of knowledge of the law, but to play an important role in interpreting and applying the law within their jurisdictions.

When the demographic data were compared to the scores achieved, very little of note appeared. Neither number of years teaching, nor number of years of experience using web-based technology in an institutional setting, faculty rank, employment status, highest level of education completed, type of institution, or participation in copyright law-related conferences had any significant bearing on educator’s knowledge levels. This was disappointing as the researcher envisioned some main effect on educators’ knowledge base from two demographic variables, namely institution type, and participation in law-related workshop on copyright law. The literature suggests that most colleges and universities have a strategic plan for distance education (Campus Computing Report 2000). The report also suggests that private universities have similarly invested heavily in distance education (Campus Computing Report 2000). In general, community colleges and private universities lead other institutional sectors on strategic planning perhaps, because, both have a tradition as comprehensive institutions that provide access to broad communities of students. Community colleges serve a large component of adult students, which may motivate them to consider new ways of reaching and serving their potential clientele (Campus Computing Report 2000).

On the other hand, private universities may see distance education as a way to extend their reach internationally as a natural expression of their worldwide interests. Perhaps, there is really no difference in institution type as the ANOVA tests reveal. Instead the results found a significant difference in the level of courses professors taught.
The researcher also presupposed that participation in copyright law related conferences would have a significant effect on the knowledge levels of educators since exposure to information on copyright is likely to increase their knowledge base on the particular subject area. The test results of the study found no significant differences. Again, it seems like mere participation in law-related copyright workshops does not guarantee an increase in the knowledge base of educators. Perhaps ongoing continuing education and hands-on training and application may be required to maintain a comprehensive knowledge base of copyright.

The tests however revealed significant effects on two demographic variables, namely the level of course taught and participant's awareness of an institution's copyright policy in their institutions. In comparing the level of courses taught with knowledge level of copyright law, the difference showed in the extremes. Those who taught graduate courses online scored lower than those who taught undergraduate and professional courses online. However, there was not much difference in the scores between those who taught undergraduate and professional courses. The result on its face does not provide a logical explanation. Those teaching graduate courses would be presumed to have much more knowledge on copyright given their experience in publishing and with copyright related issues. However, a reasonable explanation can be given for the achievement of higher scores, by those who teach undergraduate and professional courses.

The National Center for Education Statistics report shows that a greater percentage of undergraduate courses are offered through distance education than any other type of courses (U.S. Department of Education, National Center for Education Statistics, 1998). Eighty-one percent of institutions reported offering courses designed
primarily for undergraduate students, and 34% for graduate students (U.S. Department of Education, National Center for Education Statistics, 1998). Undergraduate courses offer much more potential for web-based activities than graduate courses (U.S. Department of Education, National Center for Education Statistics, 1998). Thus a cautious inference can be made on the premise that prolific usage of this technology by faculty may precipitate information acquisition of legal or other rules that govern its usage. It is also presumed that most institutions would endeavor to provide updated information on copyright to educators who are creators of this electronic-based teaching method. However, this inference can be rebutted on the premise that a widespread usage of web-based technology by instructors does not guarantee availability of information or continuing education on copyright law, by the institutions they serve. The inference can also be rebutted on the fact that the copyright questionnaire and follow-up copyright survey did not cover questions about copyright in cyberspace only. The questionnaire covered the whole body of knowledge regarding copyright law. The most logical inference that can be drawn for the achievement of higher scores by those who teach professional courses is that some of the questionnaires were sent to educators in law schools. This may account for knowledge on a broad base in the subject area. In addition educators in professional schools also teach professionals who may be in technological industries and therefore may be aware of intellectual property laws.

There was also a significant difference in scores by participants who claimed to be aware of their institution's copyright policy and those who indicated that they did not have one or were not sure. Participants who claim to have a copyright policy scored higher than those who were unsure if their institutions had one, or simply said no. The
issue on the awareness of the availability of an institution’s copyright policy was presented in both the copyright questionnaire and in the follow-up survey. A lack of awareness of the availability of a copyright policy was clear from the responses of (58%) of the participants who completed the copyright questionnaire. Additionally a lack of awareness of the availability of copyright guidelines for web-based technology was indicated by (76%) from the copyright follow-up survey. However, one cannot draw from the results that no such policies exist in participants’ respective institutions. It may be that such policies do exist, but that participants were simply not aware of them. The higher knowledge scores of those who were aware of their institution’s copyright policy than those who were not would seem logical since awareness and exposure to such policies would likely increase their knowledge base and at the very least, increase their awareness of the need to be knowledgeable (Chase, 1993).

The demographic question relating to which institution type participants were currently teaching represents a weak area of the study. Firstly, some participants reported teaching in two or more institution types simultaneously, but indicated their primary institution of employment. Though this question item touched upon current employment, in retrospect, the question should have been reworded to include their primary institution of employment.

The overall scores on the questionnaire serve as a mute testament to the scanty knowledge levels of educators in this subject area, educators’ lack of awareness of availability of copyright policies in their institutions and the need for educators to receive continuing education in this area.
Conclusions

Based on the results of the study the following conclusions can be supported. In general, post-secondary educators utilizing web-based technology for instructional purpose regard knowledge about copyright and copyright related issues as extremely important. There is a general awareness amongst educators that there is limited or inadequate knowledge in this important subject area. Educators’ responses from the survey suggest that there is a need to gain additional knowledge, information and continuing education in this area. Not only are educators aware of the limits of their knowledge levels regarding copyright issues, but also desire information and continuing education on copyright issues.

Another conclusion drawn from the study is that post-secondary educators are fairly unstudied in the area of copyright and copyright ownership. For the most part educators do have some legal knowledge as the study’s results reveal. However, less than 20% of the participants achieved proficiency in the copyright questionnaire. Perhaps because educators realized their limited knowledge base on this important subject area, those who participated in the follow-up study were enthusiastic in their comments about copyright management and related issues.

The responses of participants from the copyright follow-up survey suggest that from an institutional level, copyright issues governing web-based technology have not been addressed or may not be high in terms of institutional priorities. These responses support the findings from previous report by the 2000 Campus Computing that show a low percentage of campuses indicating that they had a policy regarding copyright ownership of web-based courses and materials. Compared to 77% of the participating institutions
who indicated they had provided support for faculty developing instructional software/courseware, only 37% the indicated they had policy regarding ownership of web-based resources developed by faculty (Campus Computing Report, 2000). Amongst the various reasons for the low priority given to this issue, the most striking is perhaps, that the financial implications derived from ownership questions are not comparable with other concerns such as patents and trademarks (Weedon, 2000).

Additionally, commentators on intellectual property laws have suggested that the application of the copyright law to education is ambiguous, confusing and misunderstood (Sinofsky, 1982). A number of factors have contributed to this situation. First the law itself is unclear (Chase, 1993). The 1976 general revision of the Copyright Act attempted to fill the gaps in old legislation regarding newer technologies like video recording, mimeographing, and microcomputers; but for the most part, the Act did not envision the rapid increase, growth and use of other forms of electronic delivery systems. Coupled with this, the perceived low risks of legal action for infringement of copyright and loss of copyright owned by universities, together with the perceived low potential of copyright generating revenue may contribute toward this issue not being given priority. From personal dialogue with officials in institutions dealing with copyright management of web-based technology, it seems the major difficulty for institutions is in knowing where their best interests lie both from a legal standpoint and with regard to their relationship with faculty. The recommendations of this study are sensitive to these needs and also take into account that future strategy to effectively prioritize, manage and provide accessible information to educators will have to be pioneered from an institutional level. The recommendations of the study also recognizes that the task involved in encouraging a
more professional approach to increasing the knowledge base of copyright for educators would be greatly aided by making more information available at an institutional level. A final conclusion drawn from comments and responses of participants in the study reveal that educators were knowledgeable about a range of key resources and services that may be useful in getting the copyright information out. Suggested resources and services range from web-based resources, in-services, pre-services, and workshops. However there was evidence of some concern amongst educators regarding the presentation of copyright information through in-services, and workshops. Aware of the complex nature of copyright law, educators preferred copyright presentation to be relevant to their web-based technological needs, easily understandable and for the most part, practical.

Recommendations

The following recommendations for additional study and action were formulated from the conclusions of this study:

Methodology Recommendations

The gathering of data utilizing two instruments proved to be a very useful technique. It had the advantages of testing the knowledge levels and providing feedback of responses from educators regarding copyright information. However, given the limitations of a traditional mailing data collection method the return rate for respondents was only fair (54%). An alternative method of data collection would be an email survey and questionnaire which may likely yield a higher return rate. Similarly, participation in the follow-up survey depended on the willingness of respondents to continue in the study. A high return rate was not guaranteed. The researcher had to make several phone calls
and email reminders to participants in order to meet the two-week deadline. Although the telephone calls and email reminder likely increased the number of returns on the survey, an email follow-up survey may prove to be more efficient and may handle the challenges of a conventional mailing data collection method.

**Institutional Level**

As web-based, electronic and related delivery systems continue to increase, the complexity of access to and unawareness of copyright information may escalate. Increased effort in providing for and making accessible information relating to copyright may be required to achieve a comprehensive knowledge base of legal information among educators on this subject matter. The responsibility is upon institutions to facilitate such a process. The demonstrated level of legal knowledge about copyright in this study warrants a holistic institutional approach to the issue of knowledge for its faculty. In this regard, it is recommended that universities and colleges review existing customs and dissemination practices with regard to copyright policies and management. Most educators indicated that they were not aware or do not seem to know where and how to access this information. In addition, most institutions are struggling to keep up policies and guidelines in this area. For the most part, policy consideration for copyright protection did not envision the rapid technological developments that distance education have posed. As a first and practical step, each institution must examine and review its current copyright custom and dissemination practices to ensure that educators are aware of and have access to this information.

Secondly in the area of copyright ownership, institutions must have a clear strategy on how to address issues of ownership and management of web-based intellectual
property and to make such information available to educators. The difficulty from a policy point of view is that for the most part, there is no clear established position from the law. As Chase (1993) maintains the law itself is evolving and remains unclear. However, the issue that most institutions are struggling with is whether web-based courses and resources created by faculty qualifies for copyright protection.

The problem is that at many universities, electronic courses do not fit into existing institutional policies for intellectual property (Blumenstyk, 1999). Observers say that in some ways, electronic courses are like inventions, in which case, the universities usually own the patent rights to their professor’s inventions and share with them the income from licenses on those patents (Leibowitz, 1999, Blumenstyk, 1999). In other ways, online materials are like textbooks. Universities rarely claim any rights to such works, leaving professors to deal independently with publishers. When trying to determine in which category to place electronic courses, observers say they can be classified as one, the other, or both (Guernsey & Young, 1998).

To compound this problem, policy interpretation and formulation may vary from institution to institution based on the institution’s current intellectual property needs. A clear strategy would enable institutions to assume leadership and direct effective initiatives to provide ample education and information to educators who create this type of intellectual property. The 2000 Campus Computing Report shows that most colleges and universities have a strategic plan for distance education or are developing a plan (Campus Computing 2000). An extension of the plan’s focus to include broader issues that incorporate copyright ownership of web-based/online resources created by faculty is crucial.
As with any pedagogical change, successful implementation of an effective policy that provides for the continuing education of copyright law is dependent upon faculty acceptance and participation. As a result any purported knowledge base for educators should represent itself as a resource for administrative action and include a thorough understanding of educators' experiences in utilizing technology. The purpose of increasing the knowledge base of educators is not to supply additional legal information; rather, it is to make available the wide range of intellectual materials that can help them understand the circumstances and the opportunities that their work presents to them.

Most importantly there is need to provide a number of resource platforms for easy access to all information about copyright. Resource platforms may include in-services, pre-services during orientation week for faculty, departmental workshops and ongoing continuing education on this subject area. Institutions can also develop a direct system that is accessible to all for signaling update on copyright information. Institutions of higher education should promote and provide opportunities for educators with responsibilities related to the legal utilization of web-based technology to increase their knowledge of, and exposure to, copyright issues. Resources should be allocated to stimulate participation in law classes and workshops as well as to provide in-service meetings on the subject of copyright. In turn, post-secondary educators should seek opportunities to sustain and increase their awareness of, interest in, exposure to, and knowledge of copyright.
Further Study Recommendations

The study met its main objectives of providing illumination on current legal knowledge levels of post-secondary educators regarding copyright law in higher education and their responses to copyright ownership and management issues. The study also defined the current knowledge base through legal research. However, the study investigated only one constituent campus group’s knowledge level and awareness of copyright and copyright ownership. Additional studies can be conducted using other campus groups such as administrators, media directors and students to provide a more comprehensive description of the level of legal knowledge of copyright and copyright related issues. Such studies would provide important data about the knowledge base of various campus constituents and can be used in locating best practice to increase or sustain a knowledge base of copyright. With this knowledge, campus leadership may review or revisit their current copyright policies to determine their applicability to the growing web-based technology.

The legal research in this study defined and established the knowledge base for copyright. However, the low scores achieved by participants in the copyright questionnaire reveals that post-secondary educators may need additional legal information in the following areas: copyright ownership for joint-authors or creators of a work, the exclusive rights of the owner of copyright under the Copyright Act of 1976 and copyright notice on a created work. Future studies that include an analysis of each item on the questionnaire will highlight the specific areas that need the most attention in legal
education. Future studies should be limited only to quantitative or qualitative research methodologies but should include legal research methods as well.

Future studies can investigate current university intellectual property policies. Areas of focus may include how many institutions have a copyright policy, how well distributed is that policy and if post-secondary educators are aware of its existence? Several comments from the study’s participants indicated that post-secondary educators are not aware of their institution’s copyright policy. Future studies may also examine the availability of in-service, pre-service and formal continuing education training on copyright issues in institutions of higher education. Finally, given the level of legal knowledge of educators, future studies can be done to investigate best practices in getting this information out to faculty members. Participants in this study indicated that the web-based information and in-services were the most popular means of getting the information out. The use of library sources and training during orientation were also mentioned as possible ideas.
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