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#### **ABSTRACT**

Directed at students, teachers, and administrators who illegally copy (pirate) software in the elementary and secondary schools, this paper clarifies the copyright law as it applies to software and suggests five reasons why school personnel break the law. Research is cited which indicates that the act of copying software penalizes software publishers and consumers as well as the software programmer. A district-wide policy is suggested as one way to eliminate "softlifting" in public school systems, and steps that must be taken before adopting such a policy are outlined. Also discussed are strategies for enforcing district policy for eliminating piracy of computer courseware at the K-12 grade levels. (DJR)

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# SHOPLIFTING? NO, SOFTLIFTING!

by

#### Laura Chase Bullock

Are you a softlifter? ADAPSO, a computer software/services industry association, states that "Softlifting is performed by individuals illegally making copies for their own use, or use by a friend." They further state that "Software Piracy occurs when organizations choose consciously to encourage, or unconsciously to allow employees to make and use illegal software copies."

Thirty-nine educational software publishers were surveyed about their copyright policies in the 1985 November/December issue of *Electronic Learning*. The results of the survey showed that these publishers continue to disapprove of anyone illegally copying copyrighted software.

Are you listening teachers, administrators, and students? Or have you turned deaf ears on the subject of illegally copying computer software? Experience as a computer teacher the past five years has shown me that educational piracy can take on epidemic proportions. Like a contagious disease, it can spread from student to teacher to administrator, unless a policy for eliminating the incentive for making illegal copies of computer software, is established.

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## What does the Law say?

"The unauthorized copying of software is a crime." This phrase accompanies a full-page advertisement sponsored by the Software Publishers Association in the 1985 November issue of *Personal Computing*. The picture of a smartly-dressed woman executive is shown in the ad with the headline "a common criminal" next to her photograph. The commercial message proceeds to mention that "the unauthorized duplication of copyrighted software is a violation of United States and Canadian Copyright Laws, and is punishable in civil and criminal court by fines and imprisonment."

More and more companies are advertising their no-nonsense stand on the violation of software copyright in today's computer magazines and newsletters. ADAPSO even distributes a brochure called, "Thou Shall Not Dupe," to individuals requesting the publication. Why are these companies going to the expense of advertising the subject of copyright infringement? One reason is they want to make the public aware of the copyright law. There are countless people at work and at home who still don't know they're breaking the law.

For the benefit of these misinformed persons, the federal copyright law, revised in 1976, was amended in 1980. The amended Section 117 says:

"...[It] is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that computer program provided:



- "(1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner, or
- "(2) that such a new copy or adaptation is for archival purposes only and that all archival copies are destroyed in the event that continued possession of the computer program should cease to be rightful."

In other words, a person may create a copy of his 'master disk' only for archival purposes. This disk is to be used as a backup only if the information on the original disk becomes destroyed through human or technical error. Copying software for any other reason is illegal.

### Piracy Justification?

Why do people, specifically school personnel, break the law and copy software? Several reasons come to mind: cost, technical ease, lack of being prosecuted, ignorance of the copyright law, and not having a school policy on the subject.

Let's look at the cost factor for a moment. A well-written educational program on a single disk can be purchased anywhere from \$30.00 to \$60.00. Specialized programs will cost the user anywhere from \$100.00 to \$500.00. Examples of these programs include: a word processing package featuring a built-in data base and spread sheet, interactive languages like LOGO and Pascal, and sets of reading or math disks covering specific skills for grades K-12.

With a little computer knowledge and the help of commercially available software like



LockSmith or Copy II+, a teacher, student, or administrator has the ability to copy most of the software on the market, and thus save the school a bundle of money. The school can buy or preview one or more sets of disks, and in a matter of minutes duplicate the original disks onto blank ones that cost approximately \$2.50 to \$3.00 each.

With regards to technical ease, it only takes seconds to break the copyright law if the teacher or administrator has the proper knowledge and tools. And no one has to know because the illegal action can take place in the administrator's office, during the teacher's planning time, before or after school, and of course at home if school personnel are allowed to take hardware and software home at night or on the weekends.

It's not likely that the teacher, administrator, or student that steals (pirates) software will be caught and prosecuted. Realistically, how would anyone find out, and if they did, how motivated would they be to call up the software company or companies in question and "squeal" on their school's unethical behavior? Certainly, a principal or teacher wouldn't make the call and have attention drawn to himself or his school. Even parents might assume the school has permission to make several copies of software for the students in each class. A lot of students make copies of software for their friends in the neighborhood and at school, so why would they take exception with their school's behavior in this area, especially when it confirms their own philosophy of copyrighting software.

As stated previously, many educators are not aware that they are in violation of the copyright law when they make illegal duplicates of software. As long as these people aren't informed about



the law, they will continue to carry out a practice that they believe to be legal. A district without a school policy, on the subject of copyrighting software, leaves the door open for its educators to continually break the law. And there isn't any justification for breaking the law, only excuses.

#### Who Loses?

It was stated earlier that one of the reasons software companies are advertising so much is that they want the public to be aware of the copyright law. These companies also want to stop losing money; by educating the public about the copyright law, they hope to eliminate the number of illegal copies being made, and thus show more of a profit. Jerome L. Dreyer, president of ADAPSO, states in the September 1985 issue of *Datamation* that "Studies by Future Computing, a market research firm, indicate that for many leading business software products there exists more than one illegal copy for each licensed copy." He continues to disclose "Though not every unauthorized duplicate would have translated into a sale, it is likely that without illegal copying the industry's revenues would be increased at least 25 percent annually - more than \$600 million additional during 1984."

Figures for educational piracy are not as easy to come by as the ones for the business world. However, in the March 1985 issue of *The American School Board Journal*, Sally Banks Zakariya uncovers some illegal software statistics in her article, "Play fair with publishers, and put school software pirates in the brig." She acquires her information from Carol Risher, director of copyright and new technology for the Association of American Publishers, which has a membership of more



than 50 software publishers. Risher says, "The piracy problem is very bad; it's pervasive." She continues by stating, "I've had software publishers tell me that for every one copy they've sold, there are at least ten illegal copies out there."

In the 1984 book, <u>Software Quality and Copyright</u>, Virginia Helm emphasizes that "developing an instructional program can cost from \$20,000 to \$40,000 or more, depending on the software package, and that the development of the program doesn't even include the testing, packaging, and marketing of the program." This can cost the publisher hundreds of thousands of dollars. If a school starts making illegal copies of this software, the publisher has lost enormous profits.

By now the reader should know that the publisher loses when anyone makes an illegal copy of a software product. Without a doubt, the consumer also loses when illegal copying is rampant. In ADAPSO's "Thou Shalt Not Dupe" brochure, a section on the myths and facts of software is given. One of the facts reveals that "when illegal copies are produced, cheating the developer of revenues, the software company is faced with having to charge legitimate users higher prices."

Not only do publishers hike the price of software to honest consumers, they continue to pour large sums of money into protection schemes to discourage present and future pirates. The publishing survey, conducted by *Electronic Learning* found that "97% of those surveyed copy protect all or some of their software, "in the hope of preventing copying.

It is unfortunate that so much money is diverted into copy protection schemes, and not into



producing more quality software. Besides penalizing the publisher and the consumer, copying software also hinders the programmer. This act of piracy robs him of the profits he deservedly earned for his intellectual endeavors. A lower return on his investment may encourage him to leave the field, and thus lower the quality of software programs being written for the market.

#### What is the Solution?

One strong option, opened to schools who want to eliminate softlifting in their district, is to establish a policy that will serve as a code of ethics for all of the schools in the district. An explanation and detailed analysis of this option follows.

The International Council for Computers in Education (ICCE), a professional organization for computer-using educators, has designed a policy on software copyright; provisions in this policy have been included in plans adopted by the Sarasota County (Florida) schools and the policy has also been adopted by The California State Board of Education. Briefly, it encourages the following actions: (1) that the moral and legal problems relating to software piracy will be taught in each school in the district, (2) that district employees will be expected to adhere to the federal copyright law, particularly the amended Section 117, (3) that software will not be copied on disk sharing systems, (4) that illegal copies of software may not be made or used on school hardware, (5) that school employees who violate copyright laws will not be able to get legal or insurance protection by the district, (6) that a specific individual in the district will be the only person in the district who will be able to sign software license agreements, and (7) that the principal of each



school will be responsible for enforcing this policy at his school. (For a copy of this policy, refer to the September 1983 issue of The Computing Teacher, or write ICCE, University of Oregon, 1787 Agate St., Eugene, OR 97403).

Certain steps must be taken before adopting a district-wide policy similar to the one projected by the ICCE. These include:

- (1) A re-evaluation of the school's current policy on copyrighted software, or if none exists, a decision to adopt preventative measures before a computer program is initiated.
- (2) After step one has been approved, a committee of district personnel needs to revise or draft a school policy that addresses the software copyright issue, as it relates to the district's entire population of teachers, administrators, parent volunteers, students, and possibly hardware and software vendors.
- (3) As soon as a district-wide policy is adopted, it should be thoroughly discussed with specific school personnel. The superintendent should discuss the district's position with the principals, who in turn should distribute a copy of the policy to each teacher at a teacher's meeting or

institute. Parent computer volunteers should then be briefed on the school's software policy by the teacher or computer specialist they'll be working with throughout the year.

- (4) Next, the school's stand on copyrighting software should be incorporated into every computer class at the elementary, junior high, and high school levels. This can be accomplished by the school's computer specialist, or the classroom teacher who plans to use computers with his students.
- (5) Finally, administrators should communicate the school's software strategy to parents via a newsletter or scheduled parent's meeting. Prospective software and hardware vendors in the immediate vicinity should also be advised of the school's stand on this issue.

Is it necessary that all students, teachers, parent volunteers, and administrators abide by this contract? Yes! If exceptions to the outline are permitted, the school policy will lose its credibility. Everyone who comes in contact with the computers in the school must be aware of the school's platform on software copyright, and should be expected to adhere to its rules and regulations.



### How can a School Policy

#### be Enforced?

Enforcing a school software policy with students can be accomplished in many ways; the depth of information imparted to them on this subject will vary according to grade level. Students in grades K-3, and especially those who have computers at home, will benefit from a general talk about the school's policy regarding software copyright. It is unlikely that these students will have the tools or unsupervised time to challenge the school's policy, but they need to be made aware of the provisions set forth in such a plan.

From fourth grade through high school, a section on copyrighted software should be incorporated into the computer curriculum taught at each grade level. The school's position should be discussed in detail with these students; it is not enough to expect them to follow this policy without knowing why such a policy was deemed necessary by the district. Computer students can be encouraged to get together and write their own version of the school's policy. By signing their own contract, these students would be taking responsibility for their own actions. Any deviation from the contract might produce the following consequences: suspension of the student from the computer class, expulsion from using the computer without teacher supervision, or punishment determined by a committee of students who have faithfully carried out the rules set down by the agreement.

Besides drawing up their own policy, students could be taught the difference between 'public domain' software and copyrighted software. This could be done by breaking the students into



teams and then having them design, code, and enter in a simple adventure program using BASIC. After testing the programs, each team would be designated as having written public domain or copyrighted programs. Anytime a student in the class wanted to view a public domain program, he would be allowed to insert the disk and run the program. Yet, anytime a student wanted to view a copyrighted program, he would have to put 10 cents in a can by the computer first, and then run the program. At the end of the experiment, the money collected in the can would be divided among the team members who wrote the copyrighted software. This money would serve as a royalty for their hard work. After the exercise was over, the teacher would discuss the results with the class and see how each group felt about their programming contributions.

Questions that would spark a debate on this subject include:

- (1) What training does a person have to receive in order to become a programmer?
- (2) How do programmers get ideas for software that will sell?
- (3) How many man-hours does it take for a professional programmer to design, code, and test a program?
- (4) How much does it cost the publisher to market a program when it is ready to be sold to the public?
- (5) What are the royalties a programmer would make on a successful program?
- (6) How much would a programmer and publisher lose every time an illegal copy of their program is made?
- (7) What are the advantages/disadvantages of writing software for



public domain?

(8) How can you distinguish a copied program from an original one?

### Teacher enforcement?

If teachers have something to lose, like the legal or insurance protection cited in ICCE's policy on software copyright, then they might think twice about violating the policy in their district. Losing benefits would deter most school personnel from acting unwisely.

Another procedure that would insure honesty from principals and teachers alike, would be the barring of any backup programs like Locksmith or Copy II+ from the school. With those temptations out of reach, the probability of anyone being able to copy commercial programs successfully would be remote.

Consistency must be the key to a school's software policy or confusion will set in. It is imperative that exceptions not be permitted by anyone when it comes to the school's position on this subject. Teachers can maintain the consistency needed in the program by setting a good example in front of their students and their peers. They can refuse offers of free, pirated software for the school, and they can support other teachers who uphold the policy set forth by their district.



## What direction will your district take?

The issue of copyrighted software will continue to be a controversial one. Five to ten years ago the problem of illegally copying software was practically nonexistent in educational communities. This was due to the small number of microcomputers being used in a school setting, and the unavailability of quality educational software.

How times have changed! Now, according to Talmis, a New York market research firm, there are 1.2 million computers in public and private schools, and nearly 14 million computers in homes across America. The advancement of computers in the schools, and especially in the home market, has forced publishers to come up with a higher level of educational software for both markets.

With more personal computers in the schools, more software, and students enrolled in computer instruction, districts must now endeavor to take a stand on the issue of software copyright. They can either design and enforce a school policy like the one presented in this article, or they can choose to ignore the copyright law, and instill 'piracy' as a preferred behavior among their students and colleagues. Which direction will your district take?

#### Sources:

ADAPSO, "Thou Shalt Not Dupe", ADAPSO brochure, copyrighted 1984. (To receive this brochure write to: ADAPSO, 1300 N. Seventeenth Street, Suite 300, Arlington, Virginia, 22209).

Dreyer, Jerome L., "Software Piracy: End-Users Pay the Price, "Datamation, Sept., 1985.

Helm, Virginia, <u>Software Quality and Copyright: Issues in Computer Assisted Instruction</u>.

Association for Educational Communications and Technology, Washington, D.C., 1984, p. 31.

Software Publisher Association, "a common criminal", Personal Computing, Nov. 1985, p. 156.

Williams, Christopher and The Editors of El, "Untangling the Copyright Issues", *Electronic Learning*, Nov./Dec. 1985, pgs. 46-51, 77.

Zakariya, Sally Banks, "Play fair with publishers, and put school software pirates in the brig", The American School Board Journal, March 1985, pgs. 38-41.