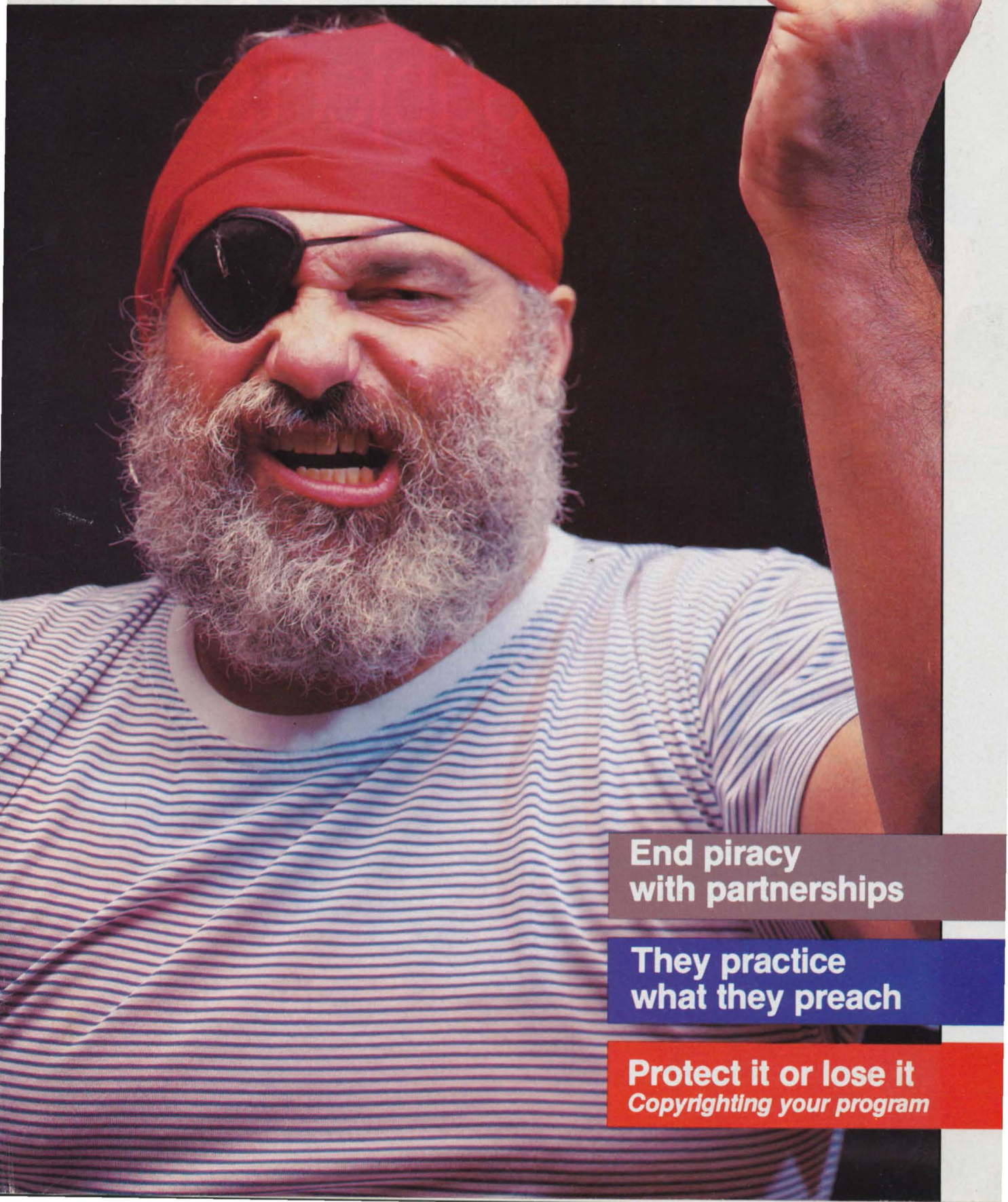


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## The issue: Licensing is imperative

According to one computer lab expert, the lack of facility-wide licenses affects general academia.

by Irwin Hoffman

Imagine a modern high school with several computer laboratories that are shared by all the computer-using departments of the building. Computer science students program in BASIC, Pascal, FORTRAN, C, and Prolog. Business students learn a variety of word processing packages. Integrated software packages are used by the students taking technical English. The mathematics department uses software that graphs functions. Students at this high school have available an open laboratory that allows them to pursue their computing interests, even when these activities are not part of their class assignments.

The above describes the use of four of the six computer laboratories at George Washington High School (GWHS) in Denver, Colo. Students there have access to the wide variety of software because administrators knew about licensing agreements. GWHS officials decided that the best way to handle the volume of students and the diversity of programs would be through a network. Software, licensed to reside on a file server, is available through a site license in all four laboratories.

Site licensing for network systems has many benefits over the usual licensing agreements in which software must be purchased and used at a unique machine and cannot reside on a network or file server. With a network agent, students are able to use a menu to select the compiler, interpreter or application software program they need to use. The teacher is available to teach and his/her time is not usurped with clerical details. Through activities ancillary to their class work, the

students become familiar with a network concept that is used in the business world. File-served software reduces the temptation to steal and an instructor is less reluctant to allow other users in the lab after school.

Under usual licensing agreements, a school that has added extra computers — but has not yet purchased a license to run a compiler, a word processor or a spread sheet on the new machines — may face problems keeping licensed software for older machines from being copied by students using the new computers. In such a case, the time spent investigating the source of copied software and looking for missing disks that have “mysteriously” moved from one machine to another, results in teachers trying to catch copy culprits instead of teaching.

It is difficult for a teacher to have a class of 22 students in a room with 22 computers and have 18 machines licensed for the application software. The “working” but “unusable” computers tempt the honesty of the teacher, especially when it is easy to “reproduce” the needed software. The teacher would probably ask the administration for the needed licenses and receive the typical reply to “make do” until the next budget year. If you were the teacher, what would you do when faced with the choice of educating a portion of your class or being “slightly” dishonest and educating your whole class? Do you think every teacher chooses the scrupulously honest path?

The lack of a facility-wide license also affects the administrators. Principals lose flexibility in producing a school schedule because the lack of site licensing limits the use of the software to fewer machines.

There are still many manufacturers, however, who are reluctant to market their software with network and site licenses. I first became aware of this when the directors of GWHS' computer magnet program tried to purchase software for our networks. One very well-known manufacturer would not let us network their product unless we had a thousand stations, even when we offered to pay for a license for each machine.

In schools like GWHS the sophistication of their computer programs grow to the point that network and site licensing is the best alternative. Manufacturers of quality software must realize that the need for computer networks is a fact of academic life. They must begin to market software in a manner that addresses this situation.

*Dr. Irwin Hoffman is a contributing editor to **Electronic Education** and is also the chairman of the George Washington High School computer lab.*

### Advertisers' Index

Cognotronics .....	15
Electrohome .....	11
Chambers	
International .....	5
General Robotics .....	29
Giltronix .....	32
Hartley .....	27
Logo Computer	
Systems, Inc. ....	2
National Computer	
Systems .....	28
True Basic .....	31
7 Hills Software .....	29