Course Design for PC Training

Don't let the personal computers you've invested in collect dust! A program of PC training which targets employees at all levels of computer literacy will let you reap the benefits of this new technology.

By JAMES HALL-SHEEHY

A few years ago, colleges of engineering here underwent a technological transformation as students discovered the electronic calculator. Abandoning their slide rules, engineering students stood in long lines and paid several hundred dollars each to order these new tools. Electronic calculators quickly proved valuable not only for processing work quickly and accurately, but also as status symbols for students lucky enough to get them. Today, electronic calculators that do similar types of work are sold almost everywhere, including drugstores and supermarkets, and many cost less than 10 dollars.

American business and industry is currently facing a technological trend very similar to that of the electronic calculator —the arrival of the personal computer in the work place. As these new business tools become smaller, more powerful and less expensive, they have the potential of reaching every corner of the working world and pose a challenge for the future of training and development. One prediction forecasts a computer for every two white-collar workers by the year 1990. Many of these people may well have ac-

cess to two such computers, one at work and another at home. As trainers, helping people "figure out" what a personal computer is, how it can work for them, and even why they don't have to fear it is clearly a major task for the near future.

In 1983, American General Corporation made the decision to purchase 1,000 personal computers to be placed throughout its operation. The PCs began arriving late in the year and were installed, primarily in the offices of managers and executives. Training was mostly one-on-one, conducted by a PC expert whose job quickly became overwhelming as the demand for information and the number

of PCs grew. The need for a comprehensive approach to training reached its zenith when a manager who had purchased six personal computers for his staff confronted the PC coordinator: "Everyone tells me that these things are the greatest thing since sliced bread, but in five months all mine have done is collect dust. I have people who don't even know how to turn them on, let alone what they can do. How do I make them useful?"

How indeed? That question led us to explore the training issues surrounding personal computers, and to design a training strategy that addresses some of the needs created by this new technology. Our evaluations led us to believe that there are two basic considerations to personal computer training that must be addressed in any curriculum: What is needed to understand a personal com-

puter?; What is needed to become productive on one?

For many potential users, the personal computer is a completely foreign tool. Most people have no concept of computers in general, and a few even harbor some fear of them. Training has to be sensitive to these considerations as well as to the needs of those who have a more sophisticated knowledge of PCs. We decided on a training program that assumed two levels of knowledge: One for new users of the technology and one for those with specific applications needs.

With this structure in mind we evaluated a number of existing training programs. Our criteria required combining the theory essential for basic understanding with as much hands-on experience as was possible or practical.

What we found in the marketplace were programs that focused on the wide variety of things that a personal computer might do without really giving students a feel for which applications were suited to their needs. In short, programs often provided too much technical theory, and too little of what a person really needed to know to become productive. Our approach had to provide a more balanced content that made the best possible use of available resources. Time and presentation format were also important considerations. We felt no class should be more than 90 minutes long, and that students should have access to equipment and materials at laboratory times when it was convenient for them to practice.

Enrollment is controlled through a student needs profile which is completed by everyone registering for a course. It provides basic information on experience, as well as on how computers will be used in various jobs. Profile information is main-

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tained on each student and used to determine course placement.

A different curriculum was designed for each level of experience with the PC. Advanced students needed only Applications Training. This provides an introduction to the various software packages on the market with an emphasis on how they are being used in our company. For intermediate level students we added Computer Basics which presents an introduction to the use of the computer and its possible functions. Finally, for those students with no computer experience, we designed the primer course, Introduction to Personal Computers. This can be offered either for classroom or individual viewing. Open classes are offered to those below management level, with anyone at management rank or above given the choice of learning in peer groups or by themselves.

All of these classes are designed to provide basic information and allow whatever degree of hands-on experience is required. Learning takes place in a classroom equipped with six PCs. A closer look at the training shows how we tailored it for our employees.

Introduction to personal computers: course description

The introductory course explains the objectives of the course, what the student will experience, and where this course fits in with other related courses.

Begin the program with an introductory film. It should explain the basics of computers and how they operate, and provide definitions and concepts in an easy-to-understand format. The following topics then should be covered:

■ *Role of computers at our company:* Type of work computers perform here; how PCs differ from large mainframe units; company policies regarding the placement and use of personal computers.

■ *Capabilities of personal computers:* A quick review of available software, with examples of company applications; an introduction to portable computers (available for take-home work), and discussion of their versatility.

Hands-on experience, using a diskette supplied by the computer manufacturer introduces the keyboard and the handling of diskettes. The goals are to help people overcome any fear or apprehension that they may have in working with a computer, provide an introduction to the basic keyboard, the use of basic commands and key combinations, introduce the concept

of menus, and show how a cursor works. This part of the course should be as much fun as possible and include, for example, game software.

Workbook materials include a dictionary of data processing terms, especially those commonly used with a PC. Information on the use of PCs at our company, as well as other types of materials that will help a person understand and appreciate personal computers are also included.

Computer basics: course description

This course introduces actual functioning of a PC. During these classes, familiarize students with DOS (disk operating system), diagnostics, who to contact if problems arise, and the importance of saving work and documenting applications.

Further, students should be taught how to: format a diskette; copy a diskette; take care of a PC and its software; load and run application programs; and power up and operate the system, including printer.

Hands-on experiences include working with word processing, data management and spreadsheet applications.

Workbook materials contain information on all of the above subjects, as well as examples tailored to our company's applications. The course uses several different types of software packages, and takes place in two 90-minute sessions spread over a two-day period. The course format is conducive to either small group or individual study.

Applications training: course description

Applications training covers specific software packages available at our company, and instruction on application development for any product or service used in the organization. Examples of current programs include filing, data base, spreadsheet and word processing applications.

Additional courses are offered as they become available, or as they are requested. Applications training generally is handled on an individual basis.

In addition to the three regularly scheduled classes outlined above, other information can be offered through general information programs and executive programs. The general information programs present a variety of information that may be of interest to any of the student groups. Structured perhaps as

brown bag seminars, topics can include information and demonstrations of new products or software, demonstrations of applications and adaptation of software for our company, and special interest topics (e.g., how to increase memory capacity, customizing the PC for new functions). The executive presentations are structured as day-long seminars designed to promote the use of the personal computer facilities, introduce productivity aids, and give senior management hands-on experience. Further, the seminars help to promote our in-house training programs and facilities in general.

These courses are not designed to produce computer wizards, but rather to make people comfortable in working with personal computers. The information shared is often common sense in nature (how do you take care of diskettes, why do you create back-ups), and hands-on experiences are made as much fun as possible to motivate people to work with their machines.

In devising training materials for personal computers, we have found these to be important guidelines:
■ Assume no one knows what a PC can do—especially for them.
■ Keep it simple.
■ Explain all jargon.
■ Take people through at a comfortable pace.
■ Introduce all of the equipment and let people touch it as you do.
■ Use personal anecdotes (stories that break the ice and make people more comfortable).
■ Don't expect overnight success.
■ Be patient.

The arrival of the personal computer in the work place has opened the doors to new worlds of experiences and challenges. As trainers, we can view these challenges as ones that offer a unique new series of productive opportunities, or we can watch as a Pandora's box of problems is opened on unsuspecting employees. The approach our training assumes is a highly active one that we hope will inform, demystify and open the doors of enhanced productivity for those who attend.