Guidelines for teaching early childhood teachers and other adults about computers and their use are offered. Discussion focuses on how attitudes of the adult learner can impede learning, how the trainer can encourage teachers and other school personnel to learn about computers, and the trainers' "invisible agenda" of educational goals that supplements the program of formal instruction. Trainers are advised to vary the pace and rhythm of instruction; avoid jargon while introducing basic concepts; encourage the development of useful computer habits by learners; recognize that, for adults beginning to learn about computers, memorization of routines is not as effective a strategy as understanding the program; provide explicit models for understanding concepts; and suggest strategies for continued learning. (RH)
Teaching Early Childhood Educators and Other Adults How to Use Computers

Linda Baskin

For children to realize the greatest benefits from their computer experiences, their teachers and administrators also need understanding of microcomputers and their uses. In some instances, school- or program-sponsored training sessions or workshops are being offered to introduce microcomputers to adults who will be working with children.

Successful computer training takes into account the attitudes and motivations of those being trained. In addition, the trainer’s goals and the way he or she paces the sessions, teaches basic concepts, and deals with jargon influence learners’ receptivity to computers.

Attitudes of the Adult Learner

Perhaps as a result of many years of “computer mystique,” some teachers and administrators are intimidated or skeptical about computers while others look forward to using micros in their class or center. In a sense, the very power of the computer seems to reinforce the idea that learning to use computers is difficult.

Some teachers and administrators associate computer use with mathematical skills or the ability to write computer programs. The jargon often used by sales people, experienced users, and others “in the know” tends to increase some people’s doubts about their ability to learn.

Another problem is that teachers and other adults may react negatively to being in the unaccustomed student role. Those who are knowledgeable and informed about their jobs may find it uncomfortable to be in the position of awkward beginners.

Adult learners also vary in the degree to which they are experienced with computers; they range from having little or no experience to having worked extensively with data processing concepts or large computers. Some may have prior conceptions about how a computer works or what it can do. Training must be sensitive to these differences and experiences.

Role of the Trainer

The trainer’s enthusiasm can go a long way towards encouraging teachers and other school personnel to learn about computers. Starting with examples drawn from daily life, the trainer can illustrate the computer’s potential to extend capabilities. Realistic examples of how computers are helpful in the classroom, office, or at home can inspire enough momentum to carry adult learners past early frustrations.

The trainer may want to point out that anyone who is really interested can learn how to use a computer and that everyone has such basic questions as “Can you re-use a disk?” or “What is software?” when learning about computers for the first time.

The trainer can also provide a variety of ways for learning to take place. For example, if a training session or workshop includes written instructions, demonstrations, and hands-on experience, learners are bound to find some of the training methods familiar and comfortable to them.

The Training Situation

No matter what specific computer topics are being taught, experienced trainers also have an “invisible agenda” which is at least as important as the topics listed on a printed plan for the training session. Among the items on this agenda are goals such as providing adult learners with good computer habits, helping them understand jargon, and creating enough interest to motivate learners to continue learning about computers when the training session is over.

Training Techniques

Vary the pace and rhythm to facilitate learning. The concentration and intensity of the learning situation can lead to tension and fatigue. The trainer must, therefore, time sessions carefully, for example, overly long or evening sessions are tiresome. Planning a variety of
activities (hands on, discussion, lecture) can vary the rhythm of the learning situation and maximize the efforts of the learners. Judicious use of humor is another tonic for those who are working hard on new concepts and skills.

Introduce basic concepts while avoiding jargon. Terms such as RAM, K, and byte easily roll off the tongue of the experienced computer user but are confusing for those who are not sure what they mean. To avoid jargon, the trainer should select a set of terms useful for beginners, explain them clearly, and use them consistently.

Encourage useful “computer habits.” Experienced computer users respond to computers and programs in ways that may not be obvious to the beginner. For example, watching the screen to see the computer’s response to typed commands is fundamental to learning to use computers. Other common habits are pressing the “Return” key to proceed when nothing else is happening and watching the disk drive lights to determine if activity is taking place. The trainer can point out that developing habits like these can be helpful to new computer users.

Avoid advocating straight memorization. While memorization is often a necessary starting point, it is not a good long term strategy for using a computer. Without an overall understanding of the program, the new computer user may be unsure of what to do next. To decrease the need for immediate memorization, “cheat sheets” summarizing specific commands and procedures are invaluable.

Provide explicit models for understanding concepts. Trainers are likely to have constructed a mental image of a computer program to help them organize information about the program. For example, a trainer might think of a word processing program as a diagram of connected boxes with each box representing functions such as editing, printing, and formatting. Drawings are particularly effective in conveying the visual image of parts of a computer program working together. Access to the trainer’s conception of the program will help the learner to follow the trainer’s instructions as well as encourage him to create his own models.

Suggest strategies for continued learning. Training is only an introduction to computers and adult learners must continue to practice on their own. Suggestions on how to proceed can be very helpful. For example, how much time should be allowed for practice? How can real life constraints on practice time or computer access be handled? What materials are available for later study? Who is available for questions after training? Although there may be no easy answers to these questions, a discussion can bring out alternative solutions to these problems which fit within the real world of the adult learner.

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