Introducing Computer Literacy

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Good rapport between the new computer coordinator and the rest of the staff eased computer literacy into this school system.

Computer literacy has arrived in the Phoenixville Area School District. After almost two years of careful planning, we have set up a computer lab housing 15 microcomputers in our junior high school. All district eighth-graders now take a six-week computer literacy unit in conjunction with a science course. But the fact that computer literacy has been introduced is not unique; it's the process of introducing it that merits discussion.

A committee of administrators and teachers devoted many hours to exploring the idea of computer literacy in our district. The committee scrutinized other districts' efforts and visited classrooms where teachers were using various microcomputers. We asked commercial vendors for information and demonstrations and attended conferences and seminars on computer education. On the basis of this research, we decided that the 16K PET Commodore microcomputer best met our needs.

Having resolved our hardware needs, we confronted the most critical part of the adoption process: hiring a computer coordinator. The importance of the "human factor" in introducing an educational innovation was never minimized. In our proposal discussions, we realized that introducing computer literacy entailed more than purchasing microcomputers and programs; the success of the project would be largely determined by how well faculty and students accepted it.

Although the need for computer education had been voiced for several years, the first official word to the faculty about the reality of the computer unit came when the position of computer coordinator was posted at the close of the school year.

The faculty responded immediately with questions about how, where, and when. The principal and I had anticipated many of the questions and were able to address most of the concerns, but other questions could only be answered after we had found a computer coordinator and the unit had been taught.

We needed an individual who could both educate and coordinate and hoped to find a person with teaching experience in junior high school, familiarity with the BASIC computer language, and either a mathematics or a science background. Fortunately, our requirements were met when a seventh-grade mathematics teacher who had completed three college courses in computer science applied for the position. She was the ideal candidate. Not only did she possess expertise in teaching and computers, she was enthusiastic about the project.

Our early discussions with our new computer coordinator refined the specific duties for the position. Of prime importance was the organization and development of the computer literacy unit. This involved determining and limiting course objectives, composing and writing a course outline, and ordering and obtaining instructional materials, including suitable software.

Future responsibilities would include continued supervision of the computer lab, assisting in developing the scope and sequence of computer education in the district, and working with faculty and administration to introduce computer awareness in the elementary schools.

The summer months provided opportunity for informal faculty discussion and involvement. Several faculty members—including the coordinator—voluntarily enrolled in an inservice course developed by a statewide committee of educators and mathematicians. The purpose of the course was to introduce computer literacy to classroom teachers—the perfect starting point for our faculty members. By September, any faculty resistance and apprehension had largely dissipated.

Since the first nine weeks of school were reserved for course development and staff orientation, the computer literacy coordinator was able to spend time with interested faculty members—both science and nonscience teachers.

Immediate interest was shown by faculty "buffs" who gravitated to the lab during free periods. The next step was to entice the general faculty. This was (cleverly) accomplished by purchasing recreational software such as blackjack and disco music. These programs attracted gym teachers, English teachers, industrial arts teachers, and others.

After this entertainment phase passed, a more serious phase ensued. Teachers began to ask the computer coordinator to describe uses for the computer in their subject area: Can it write music? Can I use it in my wood shop? Can I use it to keep statistics? A pleasant diversion was becoming a powerful instructional tool.

A formal inservice program lasting five hours was offered to the faculty members whose classes would be taught the literacy unit. In the future, more extensive inservice will be offered, and all of the faculty will be encouraged to participate.

The informal introduction to computers that had worked with the faculty was also successful with the students. First to arrive at the computer lab were the student "experts" who were already familiar with, and interested in, the machines. These students served as aides as the project got under way, running the new software and checking out the hardware when all 15 machines arrived. The students were eager for a chance to take part in the literacy unit and to use the microcomputers.

The secret of the project's success can be found in the computer coordinator. Good rapport existed between our coordinator and her colleagues, and this bridge was used to introduce the computer literacy project. Permitting the faculty "to see and touch" the computers at their discretion, without administrative mandate, also generated positive reactions.

The most critical element in establishing computer literacy/education is not the hardware or the software, but the "headware." Curriculum change presupposes people change, and the best facilitator for that change is another human being. EL
