Humble Beginnings:
Lessons in Computer Utilization

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In the fall of 1981, I had just started the year with a new principal. This was not necessarily a year of extra innovations. I had heard rumblings, however, of the little computer "monsters" invading schools and capturing teachers and students alike. A friend invited me to take a computer class that was being offered at a local computer store. I naturally agreed since computers translated to "new technology," a phrase being bounced around in media circles. I learned *nothing* in this class, because my teacher was a computer genius and geared each session to my classmates—a lawyer, three businessmen, and a legal secretary.

Lesson 1: It is a mistake for an educator to take a class from a non-educator. *However, proper training of the staff is the number one*

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priority in beginning a computer program, and I recommend instruction by someone from a local college or some enthusiastic person from your system who can tailor the classes to your needs.

My principal praised me for taking this computer class. He was very excited and saw vivid pictures of Bluford School leading the computer revolution under my "expert" leadership. His enthusiasm motivated other staff members to venture out to workshops, one by one.

Student interest and parental pressure forced other actions. We began searching for ways to get our very own computers. Having participated in the Campbell Soup Labels for Education project in the past, we were overjoyed at the discovery that thirty-two thousand labels would procure our first computer, a Texas Instruments. We ate a lot of soup that year and, by the mailing deadline, had

Students can be used to teach other students about computers.

enough labels.

By this time, our local school system had been bitten by the "monster," and a computer package was offered for schools through capital outlay. Our newly-formed Computer Committee requested two computers through our principal.

Lesson 2: "Where there's a will, there's a way." *The need to be resourceful in locating funds for hardware and software is essential and timeless. You must be aggressive and creative in finding the way.*

Gradually the entire staff was involved in computer in-service. To chart the course for this important program, the principal had appointed a Computer Committee, consisting of one teacher from each grade level plus the media specialist. The committee set goals, objectives, and guidelines. Some of the guiding principles established were

> The main goal is to expose *all* students to the computer and help them become comfortable operating it.
>
> The computer will circulate to each classroom for one-half day per week.
>
> The students will be trained to teach other students.

The responsibility to carry out these principles became mine by acclamation. The first things I noticed were that the computers did not have wheels and that not all parts matched in size. A mobile computer was needed. We checked the market for a cart that would hold a huge nineteen-inch monitor and could not find one. Creativity in its highest form was called for. By using audio-visual carts and old typing tables, I was able to make the computers mobile.

Lesson 3: "It's easier said than done." *No matter how well you plan, there will be rough spots. The end result is worth the struggle.*

One problem solved naturally led to another: how to make teachers comfortable as the "monsters" invaded their space. The idea was that the easier and less threatening we could make this "invasion," the better it would be.

The plan of letting the students teach each other to use the computer was a good one. It was decided that two students from each classroom would be trained to handle the computer instruction. I borrowed computers from my friendly computer store, scheduled students from each grade level for one whole day, and trained the students to operate the computer. They were awarded "Apple Polisher" certificates after passing the written and practical evaluations.

Lesson 4: Fear of the computer is strictly an adult disease. *Using students to teach each other*

eliminates the fearful classroom teacher's alibi for failing to provide computer experience to students.

The "Apple Polishers" proved to be excellent teachers, and by early spring all students were operating the computers. They were enjoying such programs as *Hello, Pizza Hut, Lemonade Stand,* and *Brick Out.*

It was time for the Computer Committee to talk software and future strategy. Fortunately our system had joined the Minnesota Educational Computing Consortium the previous fall, and we needed only to explore what software was available. We found many programs from which to select. Since our goal for the year was computer awareness for all students, we chose programs of drill and practice and "just-for-fun" in order to accomplish our goal.

Lesson 5: Programming is not the only function of the computer. *There is great danger in rushing into programming when you only have one or two computers. Much learning can take place simply by using available software.*

Meanwhile back in the media center, our school system had chosen to make available only the Apple, and we decided that, to prevent confusion, the TI-99 would remain in the media center. Because the TI-99 was practically indestructible and very simple to operate, I set it up in a learning center. Clear directions were placed beside it along with several of the extremely well-done software packages. The students were not shy about using it, and soon it was the most popular learning center in the media center.

At the end of the school year we asked for the teachers' assessment of our year with the computers in order to plan for the next year. Some of their comments follow.

> Much easier than I thought.
>
> It's so personal—calls the students by name.
>
> The kids are so uninhibited—they love it.
>
> I like what we're doing with computers.
>
> We need more computers.
>
> It's a problem to get the computer to my room.

In the fall of the second year of our computer program, we felt like old pros. We had a second TI-99 from Campbell Soup Labels (this time we only needed sixteen thousand labels). We had hoped for a third Apple, but we were not so lucky. We finally located mobile carts for the computers. Software was available in abundance. Evaluations

from the previous year were in hand.

The basic procedure of the previous year was used for fourth graders, since they are new to the school. The program was modified so that fifth graders could continue from the preceding year. However, the big change was at the sixth grade level. The evaluations indicated that it was too inconvenient and risky to get the computer to the sixth grade hall because it is located in another building. It was decided that the sixth graders would come to the media center to use the computer in the conference room. To prepare the sixth graders, I did a demonstration refresher class for each classroom. The procedure was explained, and directions were placed at the computer for handy reference. Each sixth grade teacher was responsible for scheduling students during their weekly "half day time." Each teacher and I also planned the weekly activities for the students. With prior planning and training, the students required no supervision or assistance from me.

Having the two approaches—one mobile and one stationary—to student utilization of the computer has proved very successful. I can see the natural progression from the fourth grader who needs an "Apple Polisher" to the sixth grader who is exploring programming on his own. Students are so turned on to computers that they are willing to do whatever is necessary to learn how to use one—even if it's different. Computers are motivators for mathematics, science, and social studies.

Lesson 6: There's more than one way to slice an Apple. *Flexibility, as usual, is the key to*

This Forsyth County Public Library patron used the library's computers to complete a school project on the history of computers.

the success of most programs. What works for one teacher won't work for another; what worked last year won't work this year.

I don't know what next year will bring (more computers, I hope). I do know that we have enjoyed the computers and that our program has worked. The proof is in the students. On School Library Media Day, I had each student fill out a form and name his favorite thing in the media center and why. The computer won, with such comments as these:

It's fun and educational.

It helps me in math.

It is a challenge.

It tests my knowledge.

It's and adventure into another strange but beautiful world.

It's fun.

You can do so many things with it.

Appendix A

The computer program described is intended as only *a* program that is successful, not *the* only successful one. The following background information will help readers get a clear picture of the school itself. The school's philosophy is modified traditional, and the grade levels are four through six. The enrollment is approximately four hundred students. Instructional and support staff include seventeen classroom teachers; one full-time teacher of the academically gifted; one and a half teachers of the learning disabled; an itinerant art, music and physical educational specialist; and one media specialist (the author) who heads a flexible scheduled media program.

Appendix B

Software

Texas Instrument 99/4A Computer
Addition/Subtraction I
Addition/Subtraction II
Beginning Grammar
Computer Math Games II
Division I
Hangman
Multiplication I
Number Magic
Reading Flight

Apple Computer: Minnesota Educational Computing Consortium (MECC)
Elementary Volume 1 — Mathematics (Games and Drills)
Elementary Volume 2 — Language Arts (Logic, Spelling, and Vocabulary)
Elementary Volume 3 — Social Studies (History, Economics, and Geography)
Elementary Volume 4 — Math/Science (Ecology, Astronomy, and Arithmetic)
Elementary Volume 5 — Language Arts (Prefixes)
Elementary Volume 6 — Social Studies (Simulations)
Elementary Volume 8 — Geometry (Points and Angles)
Elementary Volume 13 — Nutrition
Special Needs Volume 1 — Spelling
Spelling Volume 1

Other Software
Turtle Tracks, by Scholastic Company