

COMPUTERS IN CHRISTIAN EDUCATION

There is a growing interest in computers among Christian educators and church leaders, but there are many questions to be answered. Here are a few of those questions and some answers for your consideration.

1A. WHAT IS A COMPUTER?

There is no need to understand the inner workings of a computer. It is best to think of it in terms of what they do for us (like we do with television, microwaves, etc.).

A computer is a matchless tool for handling information. With the proper program it will collect, sort, analyze and give back information in a form that:

- Teaches
- Saves time
- Saves space

A simple educational computer system consists of an inexpensive microcomputer (small desk-top unit with a keyboard), a video monitor (your T.V. will do), and a storage device (such as an inexpensive tape recorder or a more sophisticated disc drive).

Special uses of the same computer may involve addition of one or more of these pieces of equipment:

Disc drive- for rapid storage and retrieval of great amounts of info.

Printer- for producing records, sending letters, addressing envelopes.

Graphic Pad- for drawing pictures, graphs, plans on the computer.

Plotter- to allow the computer to draw pictures, graphs, etc.

Light Pen- for operating the computer from the screen (not the keyboard).

Clock- for keeping exact time and doing timing functions.

Speech Boards- To allow the computer to "hear" and "talk" to the user.

Music Boards- so you can have "synthesizer" music from your computer.

Controllers- to allow the computer to operate other equipment.

Modem- to connect your computer to other computers everywhere (phone).

Plus- new applications almost every week!

The important thing to remember is that you don't have to build any of this or understand it. You just plug it in and use it!

A PROGRAM (also called "software") is what makes the computer do certain things that you want done. You can make your own programs, or you can buy them already finished.

2A. WHAT CAN I DO WITH A COMPUTER?

Many helpful educational programs are already available. There are at least four direct types of educational programs:

Information programs (reading material, retrieval of facts and figures).

Drill and Practice- for any subject which requires rote memorization

Objective testing- determining what the student knows (self-scoring)

Simulations- putting the user into a simulated real-life situation

Present programs available are especially helpful in the area of drill and practice, relieving the teacher of the tedious job of watching and correcting as the student learns-- math, spelling, geography, memory verses, all rote memory tasks--and encouraging the student by providing a fun and non-threatening way to learn his subjects.

Other programs exist for building IQ, reading, typing, art and music creativity, and every conceivable special interest from electronics to astronomy. In time, every important aspect of education will have some computer application.

The computer is a natural for recreation. Computer games may be very educational. Some are logic games like Chess and Mastermind. Others are hand/eye coordination games like Basketball and Star Wars.

The Personal Computer should not be thought of as a "toy". It is a most amazing achievement of modern technology, since inside its small housing there are are incredibly tiny packages of electronic "switches" -- often more than a half million of them! The great early computers, such as Eniac and Univac, used vacuum tubes for each of these on-off units. Actually, our tiny computers are much more powerful than those famous giants!

3A. ARE COMPUTERS BEING USED IN CHURCHES NOW?

Yes. Here are some of the ways we use the computer now:

Education- Learning lists of words with fun programs such as "Don't Fall!" (Bible names, places, spelling words, etc.); Learning basic Bible Facts and U.S. History with "The Patient Professor". Sunday School teachers even use "The Patient Professor" to spark interest in their current lessons. Bible memorization with The "Memory Machine", Team competition with "Quiz Baseball", and even reading or typing practice with "Save-A-Story". Some of the exciting game programs are used for recreation or reward. In some programs the computer calls the next student by name and the teacher checks the scores whenever it is convenient. "Super Math" and many other math programs are available to help in this tedious area.

Recordkeeping and Automatic scoring in some programs simplifies the grading process.

COMPUTERS IN CHRISTIAN EDUCATION - Cont.

Composing letters, news articles, and other literary productions (such as this article) are simple procedures with "The Author" text editor. Mailing lists are maintained and printed when needed, Miscellaneous information about suppliers, missions other churches and schools are kept in computer files.

Through telephone connections we receive up-to-the minute information from such great data banks as UPI, and The New York Times, as well as the offerings of more than a hundred other computerized information services.

4A. DO WE NEED COMPUTERS TO EDUCATE OUR STUDENTS?

You can do the job without computers. The most important aspects of Christian Education, such as developing Christian Character, is primarily a matter of personal example by teachers. But the computer can help in many ways, and here are some thoughts to keep in mind.

The public schools are moving rapidly toward computer assisted education. Christians have always led the way in education and all of its innovations. Remember that the first great use of the printing press was printing the Bible. Why should it be any different with this great new method of education?

Tomorrow's graduate will be considered impoverished if he does not know how to use computers.

Today's student's can profit greatly from the benefits computers have to offer. Remedial and advanced work are special bonuses of computerized education.

5A. ARE THERE ENOUGH PROGRAMS AVAILABLE TO MAKE IT WORTHWHILE TO HAVE A COMPUTER IN THE CLASS?

We are near the point right now where it is obviously worthwhile to have one or more computers in the classroom. The situation is very similar to the early days of Hi-Fi when only a few had the expensive equipment necessary to enjoy stereophonic music. When the quantity of good recordings reached a certain point it became a "necessity" for everyone to own a stereo. We need Christians in this vital field NOW so that we will have Biblical material available once that point is reached. Otherwise Christians, and Christian Schools will find nothing available to them except what is being produced by humanistic educators.

6A. CAN WE AFFORD A COMPUTER?

A microcomputer is one of the BEST BUYS in education today. It is truly affordable. Even students are buying them for themselves in some places. Many teachers can afford a personal computer. Any school can afford at least one to get started. They are worthwhile special projects for parent association. Often a single person would be willing to donate one if he knows it will be put to good use. Here are some surprising facts about the cost of a microcomputer. If you purchased an Apple II and Disc drive (there are several less expensive computers on the market), the "cost per student" (assuming 20 students for three years) is only \$25.66. And if you assume just 1 hour computer time per student the cost per student/hour plunges to \$.68!

7A. WON'T TODAY'S COMPUTER BECOME OBSOLETE?

Nearly everything is replaced in time by something better, but the computer you buy today will still be able to do what you bought it to do 5 years from now. The market has remained surprisingly steady for the past three years. There is too much out there by way of support systems for the industry to change overnight.

Even when you do update your capabilities with newer equipment, the older models will find other valuable spots to fill. No one should wait for future developments in this field. The future is now!

8A. WILL COMPUTERS EVER REPLACE TEACHERS?

Absolutely not! Did books, or movies or television make the teacher less important? Computers are just a "better book" which the wise teacher will use to accomplish his God-given objectives.

9A. WILL STUDENTS HAVE DIFFICULTY GETTING USED TO COMPUTERS?

Children of all ages gravitate naturally toward computers and their TV screens. They consider the television their friend and can hardly wait to get their hands on the keys of the computer. Well designed programs require a minimum of teacher's attention. One important aspect of computerized drill and practice is that the student can accept "wrong" from the computer with less frustration than he can from his teacher. "Right can be enforced by friendly sounds from the computer and by later recognition by the teacher.

10A. DO I HAVE TO LEARN COMPUTER PROGRAMMING?

Today's educational programs are being designed in such a way that the teacher can enter information without learning any computer programming at all. Many want to learn it, however, and find that it is not very difficult to get started.

11A. WILL GOD BLESS THE USE OF COMPUTERS?

Some people have the funny idea that computers are the special tool of the devil. Some thought that about printing and radio too. There is a right and a wrong use for almost everything. Let's allow this instrument to be used for the work of righteousness!

One thing God will NOT bless is the failure to recognize and use what He has given to us.

I hope you have been encouraged to consider using personal computers in your ministry of Christian Education. Remember that the Lord's Work deserves the best!

If you would like further information on this subject, please keep in touch with us.

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