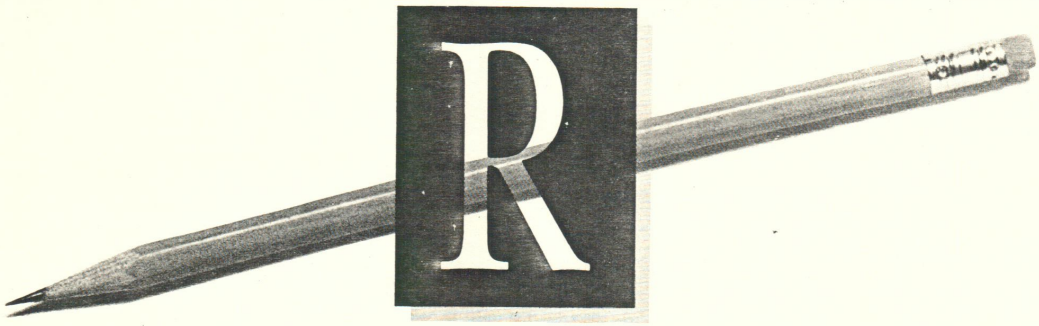
THE RESOURCE CENTER



By MARGARET MORABITO

The most commonly asked question concerning the use of computers in home and school education is, "What software should I buy?" This is often asked after the computer system has been purchased; however, it should be considered as part of the computer-buying process.

Let's assume that you have already bought your Commodore computer and are now wondering which software to buy. There are several major considerations: your hardware setup, your child's learning level, the software itself and the manufacturer.

Hardware

When you are shopping for software, it is important that you match your software selection to your complete computer system. Otherwise, you may be disappointed when the program does not work properly.

For example, you should find out exactly what kind of video monitor a software package needs in order to be completely functional. Sometimes color is required, and if you are using a black-and-white television, the program will be useless. The same applies to sound, if you have a monitor without a speaker.

Most educational software for Commodore computers is on disk. If you only have a cassette recorder, you would be wise to get a disk drive; otherwise, you will eliminate most of your possible software choices.

What about a joystick, a graphics pad or a light pen? Many educational programs take advantage of one of these input devices in conjunction with keyboard control. For optimal use and enjoyment, one of these input devices is recommended.

Before buying educational software, be a smart shopper and do your homework.

A printer is a major peripheral purchase for a computer system. If you've already bought a printer, be sure that the software you buy is compatible with your printer and interface. Often, people buy a program that provides printout capability, only to discover that it doesn't work with their particular system at home. On the other hand, if you don't have a printer and don't want to buy one, then don't buy a program that is inherently tied to printout capabilities.

The User

The second major consideration is the user. Age, developmental level, academic level, interests and needs of the user are of paramount importance to a wise educational software selection. Your child's teacher can be one of your most helpful resources when you are considering factors such as these.

The teacher already knows the yearly plan of study for your child. He or she has given your child diagnostic tests to determine what level your child is on, your child's strengths and those areas that need the most work. Of course, you can still make informed decisions without the aid of a teacher, by simply doing your own careful analysis.

All good educational software is classified according to age or grade level. This is clearly marked on the package. When you are buying educational software, your job is to match the software package to the needs of your child.

Have a clear idea of what kind of program you want and of what that program should accomplish. There is a wealth of software available for broad subject areas, such as math and vocabulary development. You need to decide what areas your child should be working on and then locate software to address those needs. Don't go looking for educational software without a clear idea of the specific content area you want.

Good educational software is clearly labeled with learning objectives–usually two to three sentences that describe the skills or abilities that the program is designed to develop. Learning objectives are important because they help you find a program that does what you want it to do. From there, it's a matter of deciding whether or not those objectives are achieved in an appropriate manner by the particular program.

Child's Readiness for Learning

In all cases, you should evaluate your child's readiness for learning a particular concept and her or his ability to master the computer skills needed to use the program successfully. Your child has to be able to control the program physically and mentally. If hand-eye coordination is required through the keyboard or a joystick, be sure that your child is ready for this activity.

Reading level is also important. Your child must be able to understand the prompts and instructions on the screen. This is particularly

important for younger students; otherwise you, as a parent and teacher, will have to oversee your student every step of the way. This can cause frustration on both sides.

Your child's interests should be considered. You have the choice of many programs that accomplish the same goal. Many of these contain characters or activities that children recognize and associate with favorite pastimes and television characters.

This positive association can break the ice and motivate your child to interact with the well-known characters. Underlying this interaction is the fact that your child is acquiring valuable computer literacy skills. Be very careful, however. There are some programs on the market that rely solely on the child's recognition of characters and are totally lacking in educational value.

Educators have found that colorful, animated educational games with a sound pedagogical aim are far more productive for the child than monotonous drill and practice programs. The key here is that the program must have a strong teaching slant, not just a lot of movement and color.

You should be aware that there are various types of educational software. These include drill and practice programs, learning games (adventure and arcade games), tutorial programs, simulations and creative programs. All of these types may address the same grade level and topic, but the manner in which they achieve their objectives differs greatly. You may want to combine various types of software to give your child variety and exposure to different learning strategies.

Software Features to Consider

Here are some questions to ask in your search for effective and enjoyable educational software.

1. Does the program provide several levels of play? If it does, the student has the chance to start on the beginning level, master that and then move on to more challenging material. This is cost-effective for the parent as well as more interesting for the child. Programs like this can be used a lot longer than those with only one level.

2. Does the program provide options for modifying the questions? In some programs, parents can type in new sets of vocabulary words as their child advances in school. This option for modifying the program gives you more control over the learning process and is less expensive than having to go out and buy new programs as your child advances.

3. Does the program allow and encourage the child to make decisions? There are programs available that have a wide range of settings, plots, characters and activities. The elements of the story line, for example, can be selected by the child. According to the choices made, the story will proceed along a different track. Also, the child can select which type of activity to work on—math problems or vocabulary games, for example.

This control gives the student a bigger stake in the experience. Not only is the child learning how to use the computer, do the problems or play the game, but she or he is also gaining valuable experience in decision-making. The consequences of a bad choice are learned, as are the rewards for a good one.

4. Does the program monitor the student's progress? Score reporting is a valuable feature to look for. Teachers need software that has class-management reporting built in. This retains the scores and progress of an entire class of students. Home users need to be able to keep track of at least one user's scores. This lets children see their progress, and it also motivates them to beat their previous scores. In all cases, score reporting should be done tactfully in the program. Points should be awarded for all efforts made.

5. Does the program provide an outlet for creative activity? Creativity is another valuable feature to look for in a program, and the best-selling programs foster creative play. The Music Shop, The Print Shop and KoalaPainter are three examples of top-selling creative programs. These encourage musical and artistic activities with tangible results in the form of computer pictures and songs. To be most effective, these programs provide options for saving your child's creations to disk and on paper.

6. Is the program difficult to manage? Students should be able to easily discern the point of the program and control their progress. In many cases, menus are the best option for program control. These can be composed of words and phrases or of graphics icons. Choices are made with either a joystick or a single key entry from the keyboard.

Manufacturers' Support

There is so much educational software available for the Commodore

Opportunities for Learning, Inc.
20417 Nordhoff St., Dept. HC
Chatsworth, CA 91311
(free)

Hammet Microcomputer Catalog
Hammet Microcomputing Division
Box 545
Braintree, MA 02184
(free)

Educational Computer Software Catalog
Learning Arts
PO Box 179
Wichita, KS 67201
(free)

MECC Educational Computing Catalog
MECC
3490 Lexington Ave. North
St. Paul, MN 55112
(free)

Sunburst Educational Computer Courseware
Room CE
39 Washington Ave.
Pleasantville, NY 10570
(free)

Family Guide to Educational Software
Garlinghouse Company, Inc.
320 SW 33rd St., PO Box 299
Topeka, KS 66601
($2.50)

Classroom Computer Learning
Peter Li, Inc.
2451 East River Road
Dayton, OH 45439
($3)

Computers in Education
Moorshead Publications Ltd.
25 Overlea Blvd., Suite 601
Toronto, Ontario, Canada
M4H 1B1
($3.25, Canadian)

Table 1. *Additional sources of information about educational software packages for Commodore computers.*

market that there is no reason for you to settle for a program that doesn't have strong support from its manufacturer. The software companies who can never be contacted for advice are starting to disappear. Nevertheless, it is still important for the buyer to check into the reputation of a manufacturer before buying.

This can be done fairly easily. Find out if the program has good-quality documentation. The more reputable manufacturers will provide comprehensive documentation that discusses the best ways to use the program with your child. The manual often includes lesson plans that the teacher or parent can follow. It will also state the manufacturer's guarantees, warranties and the customer service phone numbers.

Many educational software companies now have preview policies. These allow the purchaser to use the program for a limited period and then return it if it doesn't do what it claimed to do. Some of the better preview policies are aimed directly at schools, but home users can also find these kinds of deals.

Does the company offer to supply updates to the program at a reasonable cost? This is particularly important for school buyers who are making large acquisitions for complete curriculum programs. Furthermore, the manufacturer should offer backups of the program at a minimal cost, or, even better, provide a backup with the package.

Many companies that are writing educational software are working with accredited schools and teachers in hopes of creating truly useful software. Granted, a company's association with an educational institution is no guarantee that all the programs created will be appropriate for your purposes, but at least the manufacturer is making a serious effort to produce quality educational software. Most manufacturers clearly display their affiliations with educational institutions and textbook companies.

Where To Buy Educational Software?

You should try to see the software in action before you buy it, but, unfortunately, this is impossible in most cases. Nevertheless, there are plenty of locations for you to look for educational software, and you might be fortunate enough to come across a well-informed salesman. Following are four avenues through which you might find appropriate programs.

1. Many Commodore owners buy software in the same department store in which they bought their computers. These stores often have a large selection. Even if there is no one knowledgeable enough to test-run a program for you, you can at least look at the packaging to read the learning ob-

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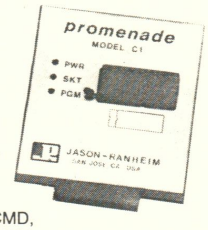

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jectives of the program and the grade level. You might even be able to look over the documentation.

Don't buy a program you can't test in the store unless you are given the option of returning it if not satisfied.

2. Ordering software through advertisements in computer magazines is another avenue. You usually get lower prices on software through mail-order, and you get a wider selection. There is no way, however, for you to see either the program or its documentation before you buy it. You should at least be given the opportunity (in writing) to return the program if it does not do what you thought it was supposed to do.

3. Another logical avenue for educational software is through dedicated computer stores. Unfortunately, most of them don't carry Commodore computers.

4. The fourth source is through educational software catalogs. There are several software manufacturers, software sales centers and educational magazines that describe, review and sell software for Commodore computers. These publications may be one of your best bets for ordering good quality educational software that has a strong guarantee and a return policy.

Even though you still have the hurdle of not actually seeing the program tested, some of these publications do provide reviews by educators who have used the software. Elsewhere in this article is a list of educational catalogs and other resources for educational software reviews.

Conclusion

The job of deciding which kind of software you need for your child or student is difficult. Teachers and software manufacturers realize this and are working together to produce higher quality educational software and to provide competent reviews of programs. Still, out of the hundreds of programs on the market, there is a large amount of unsound software that will most likely disappoint you and your child.

Your best bet is to take as a starting point the advice given in this article, and then do even more reading and research into which programs teachers and parents recommend.

If you've been particularly pleased or displeased with a certain educational program, drop me a letter detailing the name and manufacturer of the program and what you did or did not like about it. Your experiences will help others in their software selection. R

Address all author correspondence to Margaret Morabito, c/o The Resource Center, RUN *editorial, 80 Pine St., Peterborough, NH 03458.*

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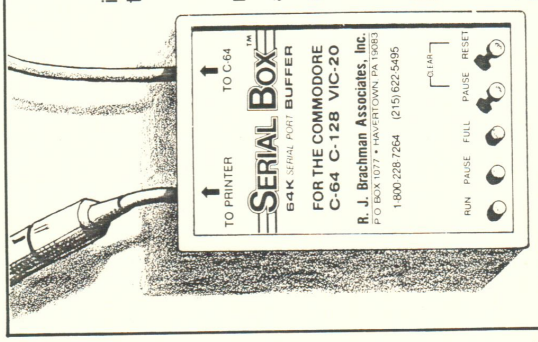

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