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SOFTWARE FOR CHILDREN

By Richard W. Boss

Selecting software for children and promoting its use is a challenge. It is not just a matter of finding software that meets the criteria set by librarians, but also that which children will choose to use. Recent interviews with a dozen children's librarians revealed that only six of the 42 titles on the Association for Library Service to Children's (ALSC) *Notable Computer Software for Children's* lists between 1997 and 2003 are very popular with children. The children's librarians explained that children tend to choose the software that features characters they recognize from books, videos, or films. When they see familiar icons, they click on them, rather than on the unfamiliar ones.

The six most popular ALSC selections are *Nancy Drew: Ghost Dogs of Moon Lake, Sesame Street Toddler, Harry Potter and the Sorcerer's Stone, Dr. Seuss Preschool, Dr. Seuss Kindergarten*, and *Cat in the Hat.* In addition to their name recognition, these titles feature good graphics, animation, and interactivity.

Popular titles not on ALSC's lists include *Arthur* (multiple titles*), Elmo's Reading---Preschool and Kindergarten, Blue's Clue, Freddi Fish* (multiple titles)*, Pooh: A Story Without a Tail, Stuart Little: Learning Adventure, Peanuts: Where's The Blanket Charlie Brown? Nancy Drew: Secrets Can Kill,* and *Where in the World is Carmen Sandiego?* Familiarity with the characters is again a factor, as are the graphics, animation and interactivity. Most of these titles were highly recommended by three online review media: SuperKids Educational Software Review*, Children's Software Revue,* and/or PC Magazine.

Name recognition may lead a child to a product, but will not interest him or her very long if it lacks fun. Among the titles with name recognition that disappoint are *Disney's Learning Adventure: Search for the Secret Keys*. The graphics and animation are not up to the usually high Disney standards. *Elmo's World-Shoes, Bus, and Farms*, a title in a popular series, is not liked by most children because of the difficulty of controlling minute on-screen movements with a mouse.

Among the ALSC's choices that are rarely used are educational products such as *Encarta 99, My Amazing Human Body, Piano Discovery for Kids, Creative Writer 2, Discovering Origami, Encarta Africana, Inspiration, Graph Master, Mind Twister Math,* and *Music Ace* 2. While these are excellent products, their titles suggest that they will not be entertaining, and that they will not feature interesting characters.

Selection Criteria

After examining the selection criteria used by the ALSC, the only review media previously mentioned, and the notes from the interviews with librarians, the author has developed the following selection criteria:

1. The title of the program suggests that the program will be fun

Children tend to avoid titles that sound educational unless a known and interesting character is featured. Some libraries have increased the use of educational titles with dull names by creating appealing icons that arouse the curiosity of children.

2. Getting to the first menu is quick and easy

Children are eager for the program to begin and don't want multiple screens of credits and instructions.

3. For young children, reading ability is not assumed

Children who cannot yet read are frustrated when faced with text. The program should be highly intuitive if it targets young children.

4. The program is fun to use

The entertainment value of the program appears to be the single most important factor in children's decisions to use, and continue to use, a program. That does not mean that the program should be solely recreational.

5. *The program is easy to navigate*

The program should avoid small and/or complex images that are difficult for young children to navigate with a mouse.

6. *The program avoids gratuitous violence*

While children are exposed to violence on television, there is no need to purchase software that has gratuitous violence because there are so many good products.

7. *The program has educational value, but that does not distract from the enjoyment of the program.*

Even programs that have education as their primary purpose should be fun or they will get limited use.

8. *The program offers multiple levels or tracks so that children can experience fresh content when returning to the program*

While young children often like to repeat the same experience, as they grow older the program needs to grow with them. This is especially the case with problem-solving programs.

9. T*he program adapts to individual tastes and abilities.*

Given the diversity of our society, the program should assume a wide range of tastes and abilities.

10. *The program is free of gender bias.*

While gender bias is inappropriate, there will be programs that will appeal more to one sex than the other. Programs that will appeal primarily to one sex should be purchased if they do not reflect a bias against the other sex.

11. *The program is free of ethnic bias.*

Ethnic bias is totally inappropriate.

12. *Graphics are colorful and appropriate to the content.*

Given the television viewing experience of children, lack of color or poor use of color will shorten the time and frequency of use.

13. *Icons are large and easy to select.*

A significant percentage of children have vision problems. The majority have problems with screens that are cluttered with many icons.

14. *Speech and sound are appropriate to the content.*

Children like speech and sound, but not" noise" that is unrelated to what is happening on the screen.

15. *If appropriate to the content, the program has printing capability.*

Saving the result of a successful effort or printing something to show someone else should be possible.

16. *The program is highly interactive.*

Regular feedback motivates children to continue.

17. *The skills required are appropriate to the ages of the children*

There is nothing more frustrating for children then to be presented with tasks that they cannot accomplish.

18. *Children can use the program without assistance*

Children like to be independent of adults when using computer programs.

19. *Children have control over the order of display.*

Control of the order of display avoids boredom.

20. *Children control the rate of display.*

Not all children respond quickly, therefore, it must be possible to control the rate of display.

21. *It is easy to go back to the previous step.*

It should not be necessary to start over in order to go back to the previous step.

22. *It is easy to get in or out of any activity at any point.*

Children should be able to get out of an activity that is boring and into one they prefer.

23. *Children know when they have made a mistake.*

Error messages should be non-judgmental, even humorous.

24. *When a key is held down, only one input goes to the computer.*

Inexperienced users who hold down a key should not be frustrated bya freezing of the screen or an error message.

25. *Pounding on the keyboard does not terminate or freeze the program.*

The program should anticipate pounding on the keyboard by small children and frustrated children.

26. *The available hardware is appropriate to the program.*

The operating system, processor speed, memory, disk space, display type (SVGA, VGA), and sound card type meet the requirement of the program. Selectors should be fully familiar with the available hardware and should not even consider software that cannot function well on it.

27. *The program is easy to install and maintain.*

It must not be necessary to have a PC technician install and maintain the program. [Although larger libraries should have a PC technician on staff and should consider remote PC management]..

28. *The program is a good value for the money.*

A good program can be too expensive.

Given the importance of "fun" in software programs, it is important to involve children in the selection process. While it is not practical to involve children in the screening of the hundreds of software programs that become

available each year, it is practical to involve them in the final step of selection.

The Steps of Selection

The first step in selection is an examination of distributors' and publishers' catalogs and publication announcements. Each year there are as many as 1,000 new or revised software programs for children. It is not realistic to obtain review copies or even to read reviews of this many titles. The first cut of up to 90 percent of the titles should be based on the descriptions in the catalogs and announcements. The remaining titles can then be checked in the various reviewing media.

The second step in selection is consultation of review media. The major review periodicals are **CD-ROM Today** (401-696-1688), **Children's Software Revue** (313-480-0040) , **Family PC** (800-413-9749) , **Home PC** (800-829-0119), **Multimedia World** (800-766-3294 x 205), and **PC Magazine (**subscriptions to be placed at www.zdmcirc.com).

The most comprehensive is **Children's Software Revue**. It reviews up to 70 titles per issue.

The major online review media are Children's Software Revue**, PC Magazine, and SuperKids Educational Software Review.** The last does not have a print counterpart. **Children's Software Revue** is the most comprehensive. It has an archive of more than 6,000 reviews on its Website. The online version is only available to subscribers to the print edition-one which comes out six times a year at a cost of $26 if the order is placed online.

The third step is obtaining copies for evaluation. Unfortunately, distributors and publishers are extremely reluctant to provide copies for review. They fear that the programs may be copied during the review process. Libraries with branches can usually afford to purchase a review copy and order additional copies of the titles they select. Small libraries may lack the financial resources to purchase review copies. They should, therefore, consider forming cooperatives for the purchase of review of children's software. Another option for small libraries is to go to a nearby large public library or school that has an extensive children's software collection. There are also a few state library agencies that obtain copies for evaluation for the benefit of

collection. There are also a few state library agencies that obtain copies for evaluation for the benefit of libraries in their states.

The third step is the viewing of the programs under consideration for purchase. It is in this step that the participation of children in the selection is highly desirable. Children often react differently to software programs than adults, even adults who regularly work with children. For example, *SuperKids.Educational Software Review* uses panels made up of both children and adults. The children often assign much lower ratings to programs than the adults. Having children review the programs with someone who interacts well with children and who can ask questions about what is liked, what is disliked, and why, may be time consuming, but it may significantly improve the selection process.

Finally, feed back from librarians who work directly with children using children's software should be sought as a way of improving the selection process.

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