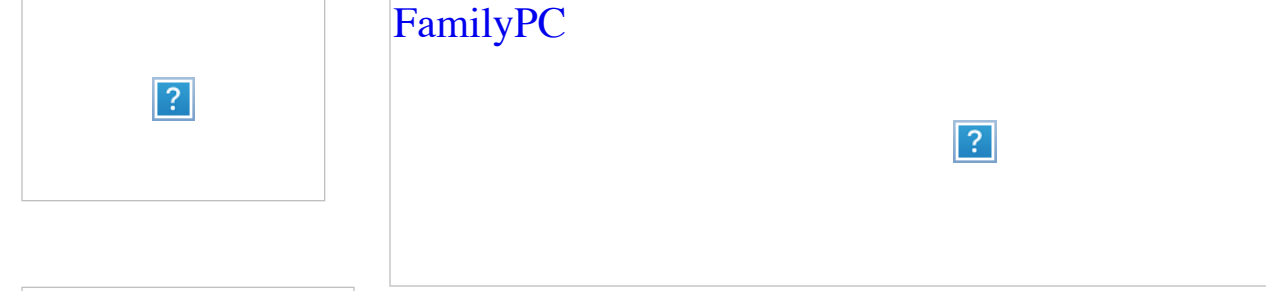


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From the February 1997 Issue of *FamilyPC*:  
Columns



## Computing's Idealist

### A chat with Seymour Papert, author of *The Connected Family*

By [Robin Raskin](#)

In 1980, Seymour Papert, then a professor at the Massachusetts Institute of Technology, wrote *Mindstorms: Children, Computers and Powerful Ideas*. The book presents Papert's ideas about the way children learn -- they learn by doing. These same ideas fueled him to create Logo, a kid-friendly computer programming language that, despite being 15 years old, is still an important programming environment for children (The Logo Foundation, 212-579-8028). Papert, now the Lego Chair at MIT, is an oft-quoted source on kids and education, and on kids and computers in particular.

I recently caught up with Papert to discuss his latest book, *The Connected Family: Bridging the Digital Generation Gap* (Longstreet Press, \$22.95). The book urges parents not to get left behind in the digital revolution and to become involved in their children's computing adventures. On another level, this book is about parents and children connecting with one another as much as with the computer.

Whether or not you agree with Papert's views, there's no denying he has thought long and hard about parents, kids, and computers. Here's what he had to say on some of the key subjects relevant to today's computing families:

#### On the Digital Generation Gap

"There has always been a generation gap, but it has been exacerbated by new media like television that allowed children to deviate from having a strong connection with their parents," Papert said.

In his book, Papert coins the term *cyberstriches* to refer to parents who'd rather not deal with the sweeping changes in communication technologies: "I am worried about the psychological and spiritual consequences of children becoming more independent of their parents in their exploration of the world and it will be far more likely to happen for the worse if parents act like *cyberstriches*, putting their heads in the sand in denial of the changes in the learning environment."

#### On Kids' Edutainment Software

When I asked Papert what he thought of kids' software, he said things could be much better. "There's a powerful industry that pulls in the direction of doing mindless things. It's easier to throw money at attracting eyeballs than at attracting minds," he said. "Bad software gives the power to the machine, not the child."

He chastised companies that try to deceive kids with what I'll call *stealth learning* -- lessons hidden inside entertainment and games -- because it suggests having fun and learning are separate and incompatible processes. Papert argues strongly that learning is better done consciously and knowingly.

#### On Computing as a Social Activity

Whether or not learning on the computer is wrapped in engaging games, it seems to be an individual activity -- one child, one computer. Do computers actually hinder children's social skills by encouraging them to work alone? Papert does not think so. "If you've seen kids with computers, you know that there's no better catalyst to share ideas," he said. "It's a much more socializing experience than either school, which isolates kids, or television, which doesn't encourage any socialization. The computer encourages kids to have conversations with one another."

#### On Schools and Home Schooling

Papert points out that there are many more computers in homes than in schools, which means that an increasing number of students spend more time on computer-supported learning activities at home than at school. He sees families who are using their family PC and software for learning at home as a major source of pressure for educational reform -- pressure that will result in school reforms that may lead to breakthroughs in teaching and learning. As a result, "the really courageous schools might throw their curriculum out altogether and create an environment where kids can really think and do," he said.

Schools are being pressured to change by several other forces as well: large corporations that want new curricula to help educate a new generation of employees; adults who expect learning to be a lifelong experience; and, finally, children themselves, who have become more powerful voices in education. And the personal computer, Papert claims, is in part responsible for all of these pressures.

Papert believes that home schoolers, because they tend to think more about learning than most parents, have a great deal to offer in terms of their knowledge and enthusiasm about education. He also believes that the Internet in particular can help both public schools and home schoolers share references and learn from one another.

#### To Our Readers

Papert argues all his points with passion and conviction. But he argues none more emphatically than this: Whether they have a brand-new multimedia computer with all the bells and whistles, an old Apple II with only a few software programs on 5.25-inch floppy disks, or no computer at all, parents must realize that bridging the digital generation gap takes time. It takes shared time, parents and kids together, exploring the new educational possibilities offered by the digital world.

When I asked Papert what he could share with *FamilyPC* readers in particular, he said: "My whole book is advice to the readers of *FamilyPC*. The book might very well have been named *Family PC and Learning*, because that's really what it's about. It's about much more than computers." To borrow a phrase that guides me in writing this column, Papert's book is about parenting in high-tech times.

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### PAPERT on Software

*Key questions are your guide to good software*

Seymour Papert, Lego professor at the Massachusetts Institute of Technology, is not in love with software for its own sake, but rather with software that gives children a chance to explore and grow. Here are his personal criteria for selecting sound software:

- **Is the toy running the child, or is the child running the toy?** Papert does not like software that treats children as if they were answering machines, learning facts without skills. The best learning comes at some effort, not disguised as a game.
- **Is there room for fantasy-making, make-believe, and imagination as well as facts and skill?** Logo and its more recent descendant, MicroWorlds (The Logo Foundation, 212-579-8028), are good examples of how you can learn facts while you're in a make-believe environment.
- **Is there something to share?** Good examples are software programs that let you make a picture, a card, or a project.
- **Try it before you buy it.** If after 5 minutes you can't understand anything about what's going on -- that's bad. But if after 5 minutes you can understand everything, that's worse.

In *The Connected Family*, Papert uses Netscape Navigator (www.netscape.com; 415-937-3777), MicroWorlds, and Logo as examples of the kind of software with which you can do things. They are open-ended and, as such, are "good constructivist tools" -- tools that let children discover things for themselves rather than spoonfeed them facts.

"The scandal of education," Papert said, "is that every time you teach something you deprive a child of the pleasure and benefit of discovery."

### RASKIN Responds

*Papert's ideals are worthy of consideration by parents*

Papert definitely takes the high road when it comes to families and computers, but it's a road that most parents, with the time constraints placed on them, will find hard to navigate. While families should strive to follow Papert's lead and get involved with their children and with open-ended software tools, as well as with a total understanding of the PC from programming to troubleshooting, I suspect few of us have that sort of time or commitment. I also believe that simple edutainment titles that drill on certain subject areas, from learning about fractions to practicing a foreign language to doing spelling drills, have their place in this world. And despite our noblest intentions, kids, like parents, need to find a little mindless relaxation now and then. Kids brought up with rapid-fire media and thrilling toys will expect some of the same sensations from their computers. And, realistically, all of us resort to electronic baby-sitter activities now and then.

Surely the world needs people like Seymour Papert who refuse to stop dreaming about the best that PCs have to offer. But he offers only the high end of the scale. It's up to each one of us to find where we stand in relation to that ideal -- and not to be too hard on ourselves when we stray from it.