

## Computers and young children— some things you need to know



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If you are worried that you need to provide your young children with a computer before it's too late, set your worries aside. Your child doesn't need a computer until late elementary or middle school. And if you have a computer for your children, don't worry that you are ruining them for life.

WHEN IT COMES TO COMPUTER SKILLS, THERE IS NO SUCH THING AS STARTING TOO EARLY, RIGHT? WRONG! WELL, AT LEAST WE NEED TO PROCEED WITH CAUTION. IF YOU ARE THE PARENT OF EARLY CHILDHOOD-AGE CHILDREN (BIRTH THROUGH AGE EIGHT), THERE IS GOOD INFORMATION AVAILABLE TO HELP YOU DECIDE WHEN TO ENCOURAGE YOUR CHILDREN TO BEGIN COMPUTER USE.

“For to everyone who has will more be given, and he will have an abundance.” (MATT. 25:29)

The Matthew Principle is a factor in education that assumes children with early advantages will do better in school. This is sometimes referred to as *accumulated advantages* or the *multiplier effect*. The child with parents who read to him from an early age, for example, will develop language and thinking skills that will put him at an advantage in school. This advantage multiplies itself over time.

It is easy to assume that if we teach young children math, reading, and computer skills at the youngest age possible, this will result in accumulated advantages for the child. That, however, is not always the case.

“When I was a child, I spoke like a child, I thought like a child, I reasoned like a child. When I became a man, I gave up childish ways.” (1 COR. 13:11)

Young children think and learn in different ways from older children and adults. The brain of a young child has the enormous task of developing language, social, and emotional skills that will enable that child to successfully learn everything else needed to survive

and thrive. From age 9 to early adulthood, the brain undergoes major changes that allow it to use the skills learned in the early years. Pushing skills appropriate for older children on to younger children can have negative effects, especially when the learning of those skills prevents other important learning.

This explains why reading to a young child will create more advantages than starting a child on an early reading program with phonics and flash cards. Reading to a child supports language development, and children need fully developed language skills before they can make good use of sight words and decoding skills. We can give our child advantages early, but we need to practice discernment and have respect for the learning system God created for His youngest children.

Computers and their programs become obsolete at an astounding rate. The computer activities your children are using in school will change by the time they are looking for jobs or applying to college. Think about what you did on computers as a grade school student. Chances are your current cell phone

has more computer power than the machine you used back then. Children should be comfortable with computers, but this does not require computer introduction at a very young age. Given the emphasis on computer learning in school, children will have ample exposure before middle school.

When you review software or applications, beware of educational promises. Little research has been done on computers and learning, primarily because computers change so fast there isn't time to complete the necessary research. Many computer products assume learning happens. For example, a game that promises to develop problem solving skills may only be teaching your child to memorize the steps needed to get to the next level or to try any option without thinking things through. Children need to learn to stay focused on a problem and to begin to apply logic by understanding consequences. Computer play encourages them to bounce from one thing to another, and in the virtual world of computers, there are no real consequences.

When the business world considers a course of action, it often conducts a cost/benefit analysis. It is unwise to assume that any change—even a change for the better—is the best choice in the long run. Because young children have many important skills to develop in little time, a cost/benefit analysis should also be used when deciding to encourage children to use the computer. Computer, video games, and television all involve screen time, and the recommended amount of screen time for children can be as low as two hours per day.

In addition to increasing the chances of obesity, lengthy amounts of time spent sitting in front of a screen also replaces the learning of more immediate skills. Young children need to develop language, emotional, and social skills. We know that children develop these skills when they play with each other. The more time your child spends on the computer, the less time you child spends developing the skills that are so important to future learning. This is the cost/benefit analysis: Spend a lot of time



on computers now, and the cost may be difficulty with learning later.

For young children, the distinction between education and entertainment frequently is blurred. This is great when your child is enjoying a good book or building a skyscraper out of blocks. Learning should be fun. The computer is best used, however, when it's seen as a tool for learning rather than entertainment. A child can have all the memorized facts in the world, but will not be able to use that knowledge if he doesn't work and play well with others. If you find yourself saying "but he loves it!" remember that many people who develop computer programs are more interested in marketing than education. Even if your child loves playing on the computer and seems to be very good at it, she still needs to learn other things.

Children need to become adept at the workings of the real world before they become experts in computers. Playing with blocks, painting, experimenting with water play, climbing on the monkey bars, etc., are all skills that will support future computer skills. These activities develop visual special skills. A child needs to be able to manipulate the three dimensional world, in which he lives, before he can manipulate the two dimensional world of the computer. It is ironic, yet true, that the less a child plays on the computer when she is young, the better chance she has of learning how best to use it when she is older. Remember that Bill Gates and Steve Jobs did not learn about computers until they were well past early childhood.

If you have young children and are worried that you need to provide them with

a computer before it is too late, set your worries aside. Your child does not need to have a computer until late elementary or middle school. Even a small amount of computer time at preschool or at a friend's house will be more than enough to acclimate your child to the world of computers. If you have a computer available for your children, don't worry that you are ruining them for life. Do not assume, however, that all computer time is beneficial. Parenting is about balance and teaching children to make wise choices. Let children be children so their brains can grow and develop. This is part of God's plan for them.

### For Discussion:

- ▶ Keep a log of how much time your child spends in front of a television, computer, or video-game screen. How does this compare to the recommended two hours a day?
- ▶ What can you do to encourage your child to play in a variety of ways?
- ▶ What kind of attention span does your child have outside of time spent in front of a screen? How can you help your child extend his attention span?
- ▶ How do you use the computer? How does this compare to the ways in which your children use the computer? How did/do your parents use the computer?
- ▶ How can playing with blocks when you are young make you a better computer user when you are older?

### For Further Study:

- ▶ *Failure to Connect: How Computers Affect Our Children's Minds—and What We Can Do About It*, By Jane M. Healy, Ph.D.  
(A great book on how to best use computers with children of any age.)