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Does technology hinder or help toddlers' learning?

Comments (226)

By Philippa Roxby Health reporter, BBC News



Screen time could help children as young as two to learn words and be curious.

Children under five years old have an uncanny knack of knowing how to master new technology.

From smart phones to tablet computers and game consoles, it is not unusual to see toddlers intuitively swiping screens and confidently pressing buttons.

Even if parents enjoy the momentary peace that comes with handing a small child a gadget to play with, parents secretly worry that this screen time is damaging their brains.

But it appears that screens can be beneficial to learning - and the more interactive the experience the better.

Research from the University of Wisconsin, presented at a meeting of the <u>Society for Research in Child Development</u>¹ this week, found that children aged between two and three were more likely to respond to video screens that prompted children to touch them than to a video screen that demanded no interaction.

The more interactive the screen, the more real it was, and the more familiar it felt from a two-year-old's perspective, the study suggested.

Heather Kirkorian, assistant professor in human development and family studies, carried out the research and says touch screens could hold educational potential for toddlers.

When she did another test on word learning, the results were repeated.

¹ http://srcd.org/

"Kids who are interacting with the screen get better much faster, make fewer mistakes and learn faster.

"But we're not turning them into geniuses, just helping them get a little more information."

Helpful tools

So breathe more easily parents, your toddler is just doing what comes naturally and interacting with the world.

In any case, technology, in the form of phones and tablets, is here to stay. Many primary schools and some pre-schools have introduced iPads into the classroom to facilitate learning. Technology, understanding how things work, and ICT are part of the curriculum.

"I'm not one of those people who think we shouldn't expose children to mobiles, tablets etc," says Helen Moylett, president of Early Education, a charity that aims to improve teaching practice and quality for the under-fives.

"They can be really helpful and interesting tools if used in the right place to help us learn - and not all the time, or instead of other things."

However, her main concern is that parents are not always good role models.

"I see parents texting while they walk. Often they are so plugged into their device that it becomes a barrier to communication with their child."



"I'll just do this headstand, then I'll go and play on mummy's phone"

A recent study from Stirling University's school of education found that the family's attitude to technology at home was an important factor in influencing a child's relationship with it.

It concluded: "The experiences of three to five-year-olds are mediated by each family's distinct sociocultural context and each child's preferences.

"The technology did not dominate or drive the children's experiences; rather their desires and their family culture shaped their forms of engagement."

Christine Stephen, study author and research fellow at Stirling, says most parents understand the dangers of addiction and passivity, and set up rules on screen time to make sure that children do a wide range of indoor and outdoor activities.

Bad habit

But there are other experts in the field who disagree.

<u>Psychologist Dr Aric Sigman has regularly said that children are watching more screen media</u> than ever², and that this habit should be curbed because it could lead to addiction or depression.

"We can get in a terrible panic about [screen time], but toddlers are very curious and savvy"

—Helen Moylett Early Education charity

He calculates that children born today will have spent a full year glued to screens by the time they reach the age of seven.

If true, few people would argue that this fact is scary.

Yet, if only 9% of UK children do not have access to a computer at home or school, as studies suggest, then screens are pervasive. There is no going back.

The key must be for children to use their time in front of them to best advantage by downloading the best apps and the right software to aid their learning.

Jackie Marsh, professor of education at the University of Sheffield, says there needs to be more research done in this area.

"We are going to outline what we feel should be the principles for good apps because there is a lack of a central resource for teachers.

"It's not just a case of giving them the iPad," she says.

"It's finding the right quality of apps that's important."

Develop skills

She also maintains that good-quality programs and particular software can help children with learning difficulties develop the skills they are lacking.

Online environments can also provide children with a virtual space to develop in confidence - something they might not be able to do in the home or the classroom, she says.

Her message to parents is that two hours of screen time each day is enough for children aged six and under.

Although there is a minority who consider screens not to be healthy, there is no evidence to suggest they are detrimental, Prof Marsh adds.

² http://www.bbc.com/news/education-19870199

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Children quickly get bored with one type of media, research suggests, and tend to combine screen time with playing with toys and running around in circles outdoors.

"We can get in a terrible panic about this, but toddlers are very curious and savvy," Ms Moylett says.

"Children are going to be exposed to all sorts of things."

Perhaps, in the end, they just want to enjoy technology the way adults do.

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Comment number 226.

brummie123

20th April 2013 - 23:36 Dad I need a pc for my school work is a utter lie kids say to there parents.

Its all about games and social media.

Mobile phones and computers turn children into atom atoms with poor social skills and poor manners.

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Comment number 225.

Golgotha

20th April 2013 - 23:32 224.Black_And_Proud

"I played football and cricket with the kids today, and had a nerf gun battle. Does that count?"

I don't know, technically football and cricket aren't two player games and a nerf battle kind of imples more than two people.

Comment number 224.

Black_And_Proud

20th April 2013 - 23:02 @222 paul

"Yes reading stories is great but have you tried playing two player games with your child also?"

I played football and cricket with the kids today, and had a nerf gun battle. Does that count?

Comment number 223.

Dave H

20th April 2013 - 22:41 I started programming when I was 6 and it used to infuriate me when my parents restricted my computer time. There's plenty to learn from tablets and toddlers learning to use them at an early age can only be a good thing in my opinion. More is coming, there'll be a tablet per child in school soon and I believe mass-dissemination of information is the likeliest way to bring peace to the world.

Comment number 222.

paul

20th April 2013 - 22:39 Yes reading stories is great but have you tried playing two player games with your child also?

Report this comment (Comment number 222)