Making smart choices about digital technology and young children

It's commonplace these days to see a four-year-old playing a game on a Smartphone or a toddler using an iPad in a restaurant.

Young children are growing up immersed in a rapidly changing world of digital technology. That presents remarkable possibilities but also new challenges for parents, caregivers and educators.

Former kindergarten teacher and U of A PhD student Suzanna Wong is excited about potential benefits for early learning. In her research, she is observing 11 children aged three to five in their homes in Canada and Australia. Her interim findings show young children are "very sophisticated" users of technology. Whether a Smartphone, tablet or the latest app, they're quick to incorporate it into their lives and their learning.

"They move with ease between physical, digital and print media," says Wong. She describes a five-year-old playing Lego, shifting between physical blocks, printed diagrams and a YouTube instruction video.

Wong says her subjects are learning the basic foundations of literacy: recognizing sight words like Go, Play and Download, for example, and understanding the basic left-to-right concept of print. Technology also gives children control, allowing them to pursue an idea, find information or create something new without waiting for adult help. "That sense of power is so important at this age. They're so proud to be independent."

Used properly, says Wong, interactive technology can be social, creative, intellectually challenging and educational. Like many researchers, she cautions parents and other adults to think critically about children's use of technology. "I always tell people there is no app to replace a parent or a teacher. As parents, educators and caregivers, we need to be informed and aware of how children are using technology so we can support them."

U of A PhD student Suzanna Wong's research shows that digital technology can benefit young children when used properly.

Here are some tips:

- **No screen time under age two:** This is recommended by the Canadian and American pediatric societies.

- **Take a balanced approach:** Children need "real world" time playing with toys, creative materials and other children. Balance digital activities with physical, social and independent play.

- **Go for the interactive:** The best technology allows children to create something new, use their imaginations and make choices.

- **Choose learning over winning:** Look for games that encourage learning and collaboration over winning. Focus on internal rewards (mastering a skill) rather than scoring points or other external rewards.

- **Stay real:** Don't let screens take the place of "face time" and verbal interaction with adults, which is essential to children's healthy development.

- **Be part of the picture:** Talk to children about what they're doing, ask questions, encourage them to explore new ways to use the technology.

- **Screen the screens:** Make sure the game, app, e-book or website is appropriate for the child's age and stage of development.

- **Beware of "educational" claims:** Many educational claims on children's apps and computer games are not backed up by research, says Wong. Look for independent, reputable advice.

- **Encourage independent play:** Children don't need to be entertained all the time. Independent play develops problem solving, imagination and creative thinking.

- **Set limits:** Decide what type of device, what type of activity, when and for how long. These are the first steps in learning responsible use of media and technology.

For further information

Screen Smart: Helping Families Manage Media http://www.screensmart.ca/home

Media Smarts, Canada's Centre for Digital and Media Literacy http://mediasmarts.ca/

The 2Learning.ca Education Society: Early Learners in a Digital World http://www.2learn.ca/2el/