
BENEFICIAL WAYS TO USE CHILD SCREEN TIME DURING THE PANDEMIC AND BEYOND

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There is an ongoing and spirited debate about the benefits and drawbacks of child screen use. In 2017, the Canadian Paediatric Society recommended no screen time for children under 2 years of age, and less than 1 hour per day for children aged 2- to 5-years. Citing the negative impacts of excessive television, medical professionals were concerned about children's weight, sleep, and school readiness. This debate is even more relevant today during the ongoing COVID-19 pandemic, as caregivers worry how much screen time is allowable for young children while staying at home. Children are using more types of screens, for more purposes, and for longer durations than ever before. With the rise in screen time, it is reasonable for parents to wonder how much is "OK".

Here, we describe how screens can be used to support children's language and social development during the pandemic and beyond. We presage this with the notion that there are very distinct types of screen time – those that involve passive watching for entertainment, those that introduce or engage the infant/child with educational content, and those that are more interactive with another (online) person who is often a family member. It is that last type of screen time we focus on here. Of course, screens should not be taken as a substitute for face-to-face interaction with caring adults. But communicating through screens has been essential during the pandemic to keep families in touch even with little ones. Even post-pandemic, screen time is likely here to stay. So, we need to focus on ensuring quality screen time use. While the research is still ongoing, the evidence shows that children can learn from others through screens, particularly when on-screen communicators respond with direct feedback in real-time interaction.

Opportunities for Screen-Based Learning

Young children learn best when a caring adult responds to the child. It is the turn taking in back-and-forth communication, and joint attention to objects or events, that best enables a child to learn new words. Adults who respond to what children say and do help those children achieve faster language development, and retain the words they have learned, over the long term.

There are other helpful ways adults can respond to children through screens as well. Video chats can allow parents to connect their toddlers with caring adults living remotely during the pandemic. With the

help of a parent and the click of a button on a smartphone, children can have real-time, virtual conversations with loved ones. These conversations allow children to develop important social relationships and to practice many social skills that are used in in-person interactions. For example, they see the communicator's facial expressions and body language, establish eye contact, hear the tone of their spoken words, ask questions, and have back-and-forth exchanges. Video chats are not a replacement for in-person contact, but they still provide opportunity for social learning.

It is now well documented that toddlers can and do engage in rich, interpersonal exchanges during video chats. For example, young children can share attention between their parent sitting beside them and the grandparent on-screen. Toddlers can also direct attention to objects and talk about them during virtual conversation. The toddler might show grandpa their favourite toy and talk about it. Even more impressive, the toddler might point to grandma's dog on the other side of the screen and start a conversation about this new point of interest. Evidence that toddlers seek opportunities to share attention in video chats reveals that they understand they are connecting in real-time with loved ones, even though the other person is not physically present. Video chat may therefore provide a unique opportunity for children to practice early attention sharing abilities and hone their burgeoning communication skills.

Another way that young children learn language is by connecting words and actions. An adult might describe what the baby is doing (e.g., "you are waving your hand" while imitating the baby). A preschool teacher might ask children to perform certain actions ("Touch your toes. Now wiggle your elbows"). Learning about actions is possible through video chat technology as well. If the communication partner establishes eye-contact, greets the child by name, asks questions (e.g., "can you point to your eyes?"), and responds with direct feedback in real-time (e.g., "great job! You pointed to your eyes"), the child can learn to follow directions. Some applications are now available to help adults and children play together on-line with game cards and drawing tools. These apps provide opportunities for making plans, sharing attention, and coordinating actions through conversation.

During childhood, the most powerful context for learning language is shared storybook reading. Parents and children like to do this close, snuggled up together. Sometimes this is not possible and video chat technology enables shared reading at a distance. The child might miss the cuddle, but children can learn as much from hearing an e-book read over video chat as they do in a live interaction. Again, the crucial factor is immediate, "back-and-forth" responses to the young child during the reading exchange. Just like in a live reading interaction, it is necessary to have a routine that gives the child opportunities to get involved. Read the words on the page, pause for the child to talk about the story or the pictures, and respond to the child before moving on.

Back-and-forth social interaction is crucial for children's language learning and social learning. We encourage parents to think about different ways this can be incorporated into children's screen time.

Conclusion

As the pandemic continues, we find new and better ways to use technology to communicate. Now more than ever we need to understand how technology and screens can be used to support children's

development. Just like their parents, children must use screens—for working, for learning, for playing, for socializing. While distinct from in-person contact, and not a replacement for meaningful, in-person interaction, screen time can be used effectively to foster opportunities for language learning and social development. Toddlers need a mix of activities across the day, including free play, story/book time, art activities, and active play. If parents do allow screen time, they are encouraged to incorporate high quality interactions with others as this has been shown to be crucial for children's language learning.

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