DAP With Apps and Other Tech Tools: Making Choices that Make Sense for Preschoolers

Resources / Publications / Teaching Young Children / Summer 2021 / DAP With Apps and Other Tech Tools: Making Choices that Make Sense for Preschoolers

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Griffin and Holly, 4-year-olds in a multiage preschool classroom, approach their teacher, Melissa, to ask if they can use the classroom tablet. Melissa asks, "What would you like to use the tablet for?" and they respond, "You said it would be cleanup time in five minutes. If we take a picture of the town we built with the Magna-Tiles, then tomorrow we can look at the picture and make it again."

Griffin and Holly understand that the camera application on the class tablet can be a useful tool for helping them achieve their goal: preserving their play beyond the designated play time. By giving children access to technology for a purpose such as this, Melissa demonstrates her understanding of developmentally appropriate practice (DAP) and how technology can be used to facilitate play and to encourage creative thinking, collaboration, and communication.

As a preschool teacher, you have many teaching tools at your disposal. Tablets, apps, and other digital technology can help children learn—as long as you are intentional in their use, carefully plan the content, and monitor how children interact with them.

While digital technology should be limited, research suggests that it can add value to children's investigations and learning, especially when it's used in ways that increase access to high-quality content and encourage peer interaction. Developing relationships, fostering curiosity, and providing opportunities for unstructured play and hands-on

experiments are at the core of preschool education; technology can support many of these endeavors. Read on for ideas for using apps and other digital technology in your classroom!

How Can Technology be Used in the Classroom?

Videos

If a picture is worth a thousand words, what might a video be worth? When children are learning about animals they have never seen, videos can give them a better understanding of what that animal looks, sounds, and acts like: they can hear a lion's roar, see a horse's gallop, and watch a giraffe eat from a tall tree. Videos should be brief and should connect to the current topic, providing ample opportunities to dramatize, illustrate, and discuss key vocabulary. Educational media developers who understand developmentally appropriate practice are our first sources for video clips in our classrooms: PBS Kids, Fred Rogers Productions, and Sesame Workshop have historically been great resources, but nonfiction content such as live-streamed video from zoos, aquariums, and wildlife sanctuaries or even videos that children capture themselves are also incredibly useful additions to preschool curriculum.

E-Books



Using e-books shows children that digital technology is not only for playing games or watching movies. E-books give preschoolers opportunities to experience stories in new and different ways. They can help children learn the alphabet, develop their phonological awareness, support their vocabulary learning, expand their knowledge, and encourage print awareness. High-quality e-books may have a function that highlights the text as it's read, as well as other features such as "Read to Me" or "Read It Myself" to support children as their reading abilities develop. (However, some e-books have too many clickable features that are not related to the content of the book. These can become distractions that inhibit learning.) E-books could be a choice during center time, a lap reading experience for one child or a small group of children, or a whole-class shared reading experience (especially if you have a Smartboard to display the e-book). Be available to talk about e-books with children to increase their learning and further develop their language around books.

Reflection

Self-awareness and empathy are two social and emotional skills that are developing in preschool. One way to help children better recognize their own and others' emotions is to video record an interaction between children at the discovery center (let them know in advance you will be video recording them). View the recording with the children and prompt them for reflection: "Sometimes we can remember things that people say. Can you tell me more about . . .? Can you tell me about what you were feeling in the video?"

Foundational Academic Skills

Counting, ABC recognition, and handwriting apps abound. Outside of the long-standing history of apps developed in collaboration with children's television programming, there are several developers who are making a splash in this area: Originator, L'Escapadou, and Duck Duck Moose are just a few. By being selective, you can choose apps that align with your educational goals to support the children's learning. As you test apps, think about how the children will interact with them. Is there a story? Will children understand it? Limit children's time using apps and monitor what they are doing, focusing on skills being used and storylines in the games to drive learning tasks: "What is that character trying to do? Why does she have to do that? What happens when . . .?"

Creativity

There are many apps that give children opportunities for practicing skills in open-ended ways, just as a blank canvas would allow for composing, for example, a menu or a shopping list with a combination of drawings and emergent spellings. Collage, puppet theater, music, and even coding apps are excellent tools for prompting children to actively develop their ideas and also enhance communication, vocabulary, and comprehension skills. After some open-ended exploration of the app features, you could ask, for instance, "How might we use this tool to retell the story of *The Little Red Hen*?" When it comes to encouraging creativity, *Felt Board* by Software Smoothie is among the simplest interfaces we've encountered for creating stories. We have also seen some fabulous creations as a result of app smashing (using multiple apps to complete tasks) by using simple creations and photos to build more complex constructions, with the help of apps such as *Green Screen, ChatterPix, Scratch Jr.*, and *Book Creator*.

Home-School Connections

Many technology tools can be used to connect home and school settings: email, text messages, weekly newsletters, and child assessment portfolio systems are just a few examples. Parents and caregivers want to know what is happening in the classroom,

and technology is a powerful way to keep them engaged and informed. For example, you can share children's play, ask for materials for class activities, and send suggestions for making connections (such as "Today we used a microscope to look at insects in some dirt we dug up outside. Ask your child to tell you about it!").

If you use any social media platforms or group shared sites, be sure they fit with your setting's privacy guidelines and that parents and caregivers have given their approval for their child's work or image to be included.

Becoming Authors

Once children have experienced e-books and engaged in some creative projects with digital tools, consider facilitating a project in which the class writes its own e-book. We've often created e-books after field trips, for example. We take photos of the activities, and later children dictate text to go along with the images. Some children even become narrators and have their voices recorded by the e-book app! Families love receiving these e-books and often use them to extend discussions at home.



Video Chats

Video chats support social and emotional connections and language development. To incorporate them into the classroom, you could invite experts (robotics developer, zookeeper, farmer, author) to talk to the children about what their jobs involve, ask guest readers (such as family members) to read a story to the class, or connect with a group of children in another part of the country or world. These chats provide opportunities for deeper understanding of the world and other cultures.

Conclusion

Technology tools are among the many tools teachers can intentionally choose from to support children's learning. You can offer children new and interesting ways to explore stories and content, document their explorations and learning, and be creative in a collaborative classroom environment. For additional suggestions on resources, we recommend the lists published by these librarians: Notable Digital Children's Media, the Excellence in Early Learning Digital Media Award, and the Best Digital Tools for Teaching and Learning.



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