You just returned from another workshop talking about developmentally appropriate practices in your classroom—this time with technology. But you honestly don’t know how you can use it appropriately. The other teachers are not sure either. Your state, just like most states and educational organizations today, has competencies for young children you must address that include technology. Where do you find the information?

You know NAEYC has a position statement on technology and young children, but you’re not sure how it applies to you. What can you do?

First and most important, read Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8, a position statement developed by the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children’s Media at Saint Vincent College (2012). You can find it at www.naeyc.org/content/technology-and-young-children. It offers principles and guidelines for effectively integrating technology with young children. You will see video examples of teachers who are using technology on their websites and many resources. That helps, but what then? It still seems overwhelming.

Skiing and technology?
I went skiing for the first time several years ago. Integrating technology in your class is a lot like the experience I had!

I did not have a clue how to ski and I was nervous. I had watched other people and I had skated. I knew I had to have certain equipment, and I had the instructors show me how to put on my boots and skis and hold my poles. We often begin our journey with technology in this way. You have a smartphone with a camera and Internet and use Facebook, but how do you use those in class? “Will I do it right?” “Will it work when I need it?” “Will it be OK with my director and the parents?” All are legitimate concerns.

I decided to ski without an instructor, so I went to the bunny slopes with the other beginners. I knew I could do a lot better with instruction, but I was embarrassed at how little I knew and afraid they would roll their eyes when they saw me try. My husband had been skiing once before and he began on the intermediate slopes. New technology users often begin learning basics by using word processing software and basic communication tools, such as e-mail. But some have more experience, dive in, and begin to use technology in the classroom assessing children, finding activities, or creating stronger partnerships with parents.

I was a disaster on skis! I almost ran over a small child! Right then I decided that my skiing would consist of
warm cocoa in the overlook and watching others. Many who begin using technology in the classroom feel the same. They may use e-mail and simple word processing but do not wish to go further. A friend of mine who teaches kindergarten has a deal with another teacher—she translates materials for parents into Spanish for her friend, while the friend takes care of my friend’s technology needs.

Technology can increase children’s learning and abilities when used appropriately.

My husband decided that he enjoyed the skiing while we were there, but he too was satisfied and would go no further. Many teachers are comfortable with the level of technology they now use and wish to go no further. They create newsletters and send out occasional e-mails as well as find activities online. Sometimes they bring out a digital camera and let the children take pictures for an activity. But that’s enough for them.

My daughter had different ideas. She took lessons and began to ski quite a bit. She said that she often fell but just kept trying. She now takes regular ski trips and skis high mountain slopes. Many teachers become determined to master technology integration. Often they are young, but many older teachers also make the commitment. They attend workshops, read and look for tutorials online, and ask peers to help them learn more. They become flexible in their use of technology and forgiving of mistakes. They plan activities that include technology, use the Internet to find information for planning, keep digital portfolios on children, and create blogs and Facebook pages to keep parents aware of what the class is doing.

It may be more comfortable to limit technology learning. But when I hear my daughter describe the joy she gets when she skis, I know if I were willing to put in the effort to learn, I could find that joy as well. Teachers who are risk-takers and integrate technology effectively help children grow and develop in ways that will outdistance those children who do not have the same supportive environment.

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Why technology in the classroom?

What does the research show? While too much technology use and inappropriate technology can be damaging to young children, there are many positives associated with its appropriate use in the classroom (Donahue 2015).


2. Technology can build social skills. Children’s appropriate use of digital tools such as iPads or cameras with partners or in small groups can increase positive and more elaborate dramatic play, as well as social interactions, especially when teachers are involved with the children (Brooker and Siraj-Blatchford 2002; Clements and Sarama 2007; Lomangino, Nicholson, and Sulzby 1999; Plowman and Stephen 2007; Wood 2001).

3. Preschoolers who use appropriate software and apps show an increase in school readiness (Xiaoming Li, Atkins, and Stanton 2006).

Technology can benefit children in all areas of development if it is used appropriately in the classroom.

What is developmentally appropriate use of technology?

Jenna is planning a unit on farm animals. Her classroom of 4-year-olds is located in the middle of a large city, and few of her children have been outside it, much less on the farm. She would like to use a video to show her children a farm, but most videos seem too long. What is appropriate? What is the best way to integrate the technology into her curriculum? Answering yes to the questions in the following checklist will help make sure you’re using technology in a developmentally appropriate manner.

Checklist for developmentally appropriate technology

☐ 1. Will using it influence more than one area of development (social, emotional, cognitive, or physical)?
2. Does it allow for varying levels of understanding and abilities in children?

3. Will its use build upon children’s previous knowledge and enhance future growth and development?

4. Does the technology enhance other activities in the classroom and allow you to build on it to create greater understanding and growth?

5. Can it encourage active and creative play?

6. Will it allow children to use it together in social contexts?

7. Can it be adapted for children with special needs or for dual language learners?

8. Is it culturally appropriate?

9. Is it flexible enough to meet the needs of individual children and different learning styles?

10. Does it support children’s independence, ability to complete tasks and confidence?

Integrating technology appropriately

Using technology in the classroom needs to be intentional. When you decide to use it, you can follow these steps:

1. Find out what is meant by developmentally appropriate use of technology—go to the interactive position statement at www.naeyc.org.

2. Think about how you will use the technology and whether it is appropriate for each child and the learning you want to take place. It is often wise to have alternate activities planned in case a child has difficulty or the technology doesn’t work properly.

3. Pick a few basic digital tools to learn and use in your classroom, such as an iPad with perhaps three or four apps or web tools. Learn those first, get comfortable with their use, and then move to others. Always try things out before you give them to children.

4. Integrate by including technology as only one of many activities you will use to explore the concepts you are teaching. A fun app or video clip will not encourage optimal development unless it is developmentally appropriate for the child and related to other activities such as art, science, blocks, and writing.

5. Evaluate your technology use and the effects on children in your classroom and adjust accordingly. Children often tire of an app just as they tire of the same puzzle. You may also see children frustrated by a new piece of technology, and it may not be appropriate for your classroom.

6. Consider your environment. Don’t make technology a center. Include it as a tool in other centers. You may keep a digital camera near the art and science center for pictures. Include an iPad with a drawing app open in the art center or an app for making books open in the writing center. Tablets can be configured so that only certain apps are available to children at a given time.

7. Develop a plan and PLN (Personal Learning Network) to help you learn more about technology.
   - Find people who can help you problem solve issues, such as another teacher, your director, or your local librarian (or your teenage son).
   - Explore places on the web to learn more about new technology and how to integrate it in your classroom (Google it).
   - Find people and places to keep you interested and moving forward. The Internet and social media can help.

8. Share what you learn. Help others in your program use what you have learned by setting an example and demonstrating for them the tools your class enjoys.

Problems? Solutions

Sounds easy? Maybe, but there will be problems. If you can face these head on, it will make technology integration more do-able.

My director thinks I am using my phone for personal reasons when I try to record the children, or let them take pictures with it. What can I do?

Change your phone setting to Do Not Disturb so that telephone and messaging are off. You may also want to turn off wi-fi and cellular service in your settings while at work. Show your phone to your director so she knows your intentions. You can also suggest to your director that iPods or other MP3 players that record video and audio that can be downloaded, could be kept for classrooms. Some sell for less than $50. Another option is to ask parents to donate their old smartphones. Most will allow you to use Internet, take pictures, and record sound without the telephone service.

Some of my parents are worried about the idea
of their children’s pictures and names being on social media, such as blogs and Facebook. How can I use these? I have seen wonderful blogs and Facebook pages created by teachers for their infant, toddler, and preschool classrooms. Most parents are excited to see what the children are doing in the classroom and to have easy access to reminders and lesson plans.

Facebook and blogs are easy to use, but it is important to go online and read about how to ensure privacy and security. Always have parents sign a statement allowing you to take pictures and video of the children and use them in the classroom and for specific media. Never post names of children—give each child a fake name (they love to choose animal names) and let the parents know what they are. If parents are still reluctant, look online for examples you can send them of what other teachers have done.

If they still refuse, you will need to be careful about your postings and do not include pictures with their child identifiable. You can often take pictures from the back or blur out the child’s face. Most parents will love what you are doing and often will help the reluctant ones have a change of heart.

I want to send e-mails and texts to parents during the day when their child does something special. But my director is concerned about them getting the wrong idea. Some parents also don’t want me to e-mail them. What can I do? Creating real partnerships with parents involves communication—the right kind of communication. Explain to your director the type of texts and e-mails you want to send. Assure the director and parents that you will not use it to report problems and issues you may be having (these should be covered in face-to-face visits).

Examples of great texts and e-mails might include a picture of a child’s block building or art, a funny story about something a child said, or a note about a new accomplishment. Make them short and positive—often a picture or audio recording is enough.

There are many services where parents can opt-in to receive your e-mails and texts, such as Remind 101—you give them the website and your information after you sign up, and they can go in and choose to receive your texts. You can also send out a permission slip asking parents to give their e-mail and text addresses if they are willing for you to send information in that way.

Don’t forget parents who speak different languages. Google Translate™ (https://translate.google.com/) and other free services can help you with simple translation of messages or picture captions. (Remember a picture is worth a thousand words.) If a message is more complex, have it reviewed by someone who speaks the language to be sure of correct context.

**Appropriate use increases learning**

When used in a developmentally appropriate way, technology really can make your classroom, children’s learning, and your parent partnerships better. Take time each day or each week to explore some of the resources available and consider how you can use them in your classroom.

**References**


About the author
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