Integrating Technology into Early Learning

CHECKLIST
This checklist is designed to help early learning teachers of all experience levels make informed choices about educational technology for classroom use. It includes ideas to consider when setting up and using technology in the classroom, as well as research-based suggestions for choosing high-quality media resources to use in developmentally appropriate ways with your children. You don’t have to have a high-tech classroom to make use of this checklist. You can use this checklist even if you have only a few devices in your classroom that your children can use, such as desktop computers or tablets, or to help you as you prepare to start using devices in your classroom for the first time.

You can use this checklist to set up your classroom at the beginning of the year, or at any point during the year, before you begin using new resources, like apps, tablets and other digital media. Keep in mind that checklist items may not apply to every technology resource you might use. **Rely on your own knowledge of your classroom, your teaching goals, and your children to determine what technology is most relevant.** You also can review this checklist in collaboration with the other teachers in your classroom and center or school.
Before deciding which digital resource to use, you might first consider where and how to set up a classroom technology area or center. This area can be used to store devices and other hardware, as well as to provide a dedicated space where children can use technology by themselves. Think about the following:

- The types of devices you have access to, such as tablets or desktop computers.
- The number of devices you have.
- How children will be working on these devices. For example, if children might work in pairs, set up your area so children can sit side by side.

While different devices require different kinds of setup, here are some general suggestions to set up a Technology Learning Center in your classroom.

- Place computers and other digital devices on low tables that are child height, allowing easy access.
- Place computers and other digital devices in an area that is within a safe distance from water tables, sinks or a kitchen area to avoid accidental spills.
- Arrange desktop computers in a space that is large enough for children to use in pairs.
- Check to make sure you have enough chargers for each device and a power strip for charging multiple devices at the same time, if needed.
Store additional child-friendly and related hardware near the devices. This may include (a) headphones and splitters for allowing two children to listen to a resource at the same time, (b) a mouse to use with a desktop computer, and (c) a child-protective case for a handheld device, such as a smartphone or a tablet.

Designate a safe storage space, such as a locked drawer, for handheld devices when not in use.

Check to see if you have reliable Internet or Wi-Fi access, or choose resources that can be used offline. If you’re not sure, try your Wi-Fi access at different times throughout the day, with multiple devices.

Make sure that parental controls and firewalls for devices have been enabled or turned on. Keep unsupervised children from browsing the Internet (such as using YouTube or Google Image search).
Media resources best serve the needs of young children when they include age-appropriate content, encourage active play and social interaction, and include child and teacher supports.

**Must-have characteristics of a high-quality media resource:**

- The resource relates to the learning goals or children’s needs that you have identified
- The content of the app, game, or media addresses topics from your curriculum
- The app, game, or media is free of gender, racial/ethnic, and other stereotypes
- The resource does not require young children to read and includes audio, clear visuals, and slow and clear instructions

**A media resource will encourage active and engaged play if it:**

- Has a simple, yet engaging, design; overly “flashy” or overly busy designs can distract from learning
- Has an engaging story that links the children’s activity to a plot
- Allows children to use trial and error and other approaches when solving problems
- Provides feedback during game play that motivates children, such as unlocking new content or giving hints when selecting a wrong answer
- Helps children to connect what they are learning to their lives or to the real world, such as using a device’s camera to take photos or videos of real-life creations
Selecting Media Resources

- Can personalize content for children; for example, adjusts the difficulty level of a game based on how a child completes a set of activities or allows parents to record audio in home languages
- Supports diversity by providing options to select a different language so that children can engage in the game using their home language
- Features activities that enable children to be creative, such as drawing or making choices

A media resource will encourage social interactions if it:

- Allows for different types of interaction with others, such as options to engage face-to-face around the screen or to interact with families or teachers
- Features characters who have two-way interactions with users, such as animated characters who speak directly to children, respond to children’s actions, or intentionally model social interaction

A media resource will support learning if it:

- Provides ways for you to tailor the resource to individual children’s needs; for example, the program adjusts based on children’s progress, or teachers can assign specific content to children
- Presents content in various ways, such as providing directions both through audio and visual text and keywords
- Offers feedback or scaffolding based on a child’s correct and incorrect actions; for example, it offers hints, follow-ups, and specific praise
A media resource will support teaching if it:

- Provides associated materials to help extend the child’s learning, such as examples of related classroom activities
- Provides teachers with information about each child’s progress, which can be shared with parents

A media resource will integrate with existing classroom technology if it:

- Is compatible with the kinds of devices you have access to, as not all resources are available on all devices
- Is affordable and fits with your program or school technology budget
- Is accessible, and not blocked through school firewalls (check by testing the resource in your class first; if it is blocked, you might need permission from your principal or center director to unblock it)
Where to Learn More

» For a summary of recent research on technology integration in early childhood programs:
  Technology and Interactive Media in Early Childhood Programs: What We’ve Learned from Five Years of Research, Policy, and Practice

» To learn more about assessing educational technology tools:
  Evaluating Technology for Early Learners
  https://www.hatchearlylearning.com/pdfs/_ebooks/evaluating_technology_toolkit.pdf

» For another checklist you might want to use in your classroom:
  Checklist for Identifying Exemplary Uses of Technology and Interactive Media for Early Learning

» For information about what parents need to know about young children and technology:
  Ask Your Kid’s School These Essential Student Privacy and Safety Questions
  https://www.commonsensemedia.org/blog/ask-your-kids-school-these-essential-student-privacy-and-safety-questions

» For printable copies of this and other early learning resources, available in Chinese, Spanish, and English:
  Education Development Center
  edc.org/early-ed-tools

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