Electronic Technology and Screen Time:
Expectations for Bright Horizons Centers and Schools

Digital media has become an integrated part of our lives with many potential benefits when used *appropriately*. We must continue to use the decades of theory and research on child development as a yardstick to evaluate technology and its use in early childhood care and learning environments.

NAEYC states, "Technology does not replace activities that are important for children's development like creative play, real life exploration, physical activity, conversation and social interaction. Technology should be another tool to support learning." (*Technology and Interactive Media as Tools in Early Childhood Programs*, 2012*)* Therefore, the questions early childhood educators must consider are:

- What forms of digital technology support the goals of early childhood education and either promote or extend learning in the various developmental domains?
- What amount and types of digital technology and screen time are developmentally appropriate?

This is a careful balancing act. To meet our overall objective, we maintain that:

- Like all other potential equipment or materials that are considered for a classroom, it is imperative to make technology choices that will contribute to healthy lifelong development.

As stated earlier, technology is embedded into our daily lives. Becoming fluent and comfortable users of technology through meaningful integration and interaction that nurture and expand children's skills and knowledge is the goal**.** Below are some potential advantages and disadvantages of technology to be aware of:

Advantages of Technology Use in Early Childhood Classrooms

School Readiness and Engagement in Learning Technology has immense potential in helping children conduct research, represent thoughts, and synthesize information, and present information in new ways. Rather than merely giving children the skills to consume technology, we can teach them to use technology in new and creative ways. This approach ensures that children have not only the functional skills they need for later school tasks, but also the "thinking" skills that contribute to school readiness and engagement in learning.

Social Skills Development and Executive Function Interaction with high quality applications and digital technology have the potential to increase motivation and enhance cognitive and social skills.

Support children with Developmental or Learning Challenges There are a number of assistive technologies that can support the development and learning needs of children with specific developmental or learning challenges. Assistive technologies can help equalize experiences and expand the learning and development potential for some children. All accessible assistive technologies should be carefully considered for children that may benefit from them. Programs aren't responsible for identifying these technologies, but should be receptive to the use of tools suggested or provided by parents, early childhood intervention or special education professionals.

Technology for Teachers Technology use can be advantageous for the overall program as well. Teachers can quickly and efficiently capture and document children's learning with digital technology. This documentation can impact the collaboration and relationship between teachers and families, as well as help teachers measure children's progress and plan for further development. Additionally, technology can provide opportunities for parents to stay connected to their child's center or school in unique ways

Concerns about technology use in early childhood:

Concerns about electronic technology use and screen time typically center on the following areas:

Attention – Some studies have shown a correlation between screen time and children's lack of ability to focus or sustain attention (this does not mean a child will develop ADHD). This connection is most critical for younger children, under age three, whose brains are still developing.

Physical health – Electronic technology activities are typically sedentary. This is of significant concern as we, as a society, are faced with a childhood obesity epidemic. Physical activity must never be sacrificed for screen-time or engagement with other passive media (AAP, 2000).

Media violence – Much of the concern about screen-time comes from the type and quality of the programs children are viewing. Whether the television program, movie, video or computer game is intended for child viewing or is on in the background, media violence can have undesirable impact on children. These effects have been found to be long-lasting.

Language development – Some research indicates that when young children are exposed to a significant amount of screen time, they have less interaction, leading to less opportunity to develop language skills. Studies indicate that, in the short-term, children under age two that watch a lot of television demonstrate delays in expressive language development (American Academy of Pediatrics Council on Media Communications, 2011). The long-term impact on language development is unknown.

Inappropriate use – Many are concerned that the use of electronic technology in early childhood programs only reinforces the trends toward making early childhood programs more academic. This can easily happen if technology applications/software isn't developmentally-appropriate, and usage isn't integrated and thoughtfully monitored and supported, or teachers don't how to make technology meaningful.

The trade-off – In some cases, technology use is neither harmful to children, nor is it advantageous. If electronic media is being used simply to occupy a child and/or is not relevant or meaningful, it is important to consider what the trade-off is. What activities or experiences is the child potentially missing out on while they are otherwise engaged with technology? What skill practice or developmental scaffolding opportunities is being replaced by computer or screen time? Most experiences are better with real-life materials and face-to-face interactions.

According to NAEYC, "early childhood educators should provide a balance of activities in programs for young children. Technology should be recognized as valuable tools to be used intentionally with children to extend and support active, hands-on, creative, and authentic engagement with those around them and with their world."

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It is the goal to identify ways in which children in Bright Horizons programs can have access to and interactions with high-quality technology that will enrich their learning opportunities and experiences, while at the same time ensuring technology is used in developmentally appropriate ways.

First, it is important to distinguish between passive and interactive technology**. Interactive technology** requires a user to interact and in some cases allows the user to influence the direction of the technology such as a Wii/gaming system, computer game, or electronic whiteboard. **Passive technology** only requires the user to observe and does not engage the user in any way. Television is a prime example of passive technology.

In most cases, interactive technology is preferable to passive technology. When children have the opportunity to interact, engage with, and influence the direction or pace of the technology, it becomes much more meaningful and effective. When technology is passive, such as television, there is little value or positive impact on a child's growth and development.

Safety:

- Bright Horizons computers/mobile devices are installed with security to prevent children and adults from inadvertently downloading an inappropriate applications and websites.
- As in other learning centers, children are regularly monitored while on technology devices to observe and facilitate the learning experience and help children learn appropriate behavior.

Application/Software use:

- Approved Bright Horizons children's applications/software develops problem solving and informational skills and is selected to enhance a broad range of skills and knowledge: math, language, science, and social skills; apps and software are reviewed periodically.
- Selection of Bright Horizons' approved, appropriate applications/software is part of the planning process and, like other parts of the planning process, is based on the observed development, skills and interests of the children.
- Children are provided instruction by the teacher in using applications/software where needed.

The World Wide Web:

- It can be a place where teachers and children may go to research topics of interest, discover fascinating places for creativity and fantasy, and communicate with others even around the world.
- The use of the web can be a purposeful part of project work. **Only Bright Horizons approved websites are available to access on Bright Horizons devices.**
- **Using the Web to access any social media including YouTube or eBooks is not allowed.**

Teachers:

- Teachers should consider classroom technology similar to other learning materials in the classroom.

- Educational technology is integrated into the daily routines and small group classroom experiences to enhance project work.
- Independent child use of a mobile device is restricted and limited to one on one with a teacher.
- Teachers are responsible for ensuring their comfort with technology and their ability to integrate it into children's experience. If a teacher does not feel prepared to do so, it is important that they communicate with their supervisor so that a training plan can be implemented.

Family partnerships:

- How parents choose to use digital technology with children in their home is not something teachers or school personnel can or should try to dictate.
- Many families feel technology is an essential part of their world and think little of sharing it with their children, while other families adamantly limit all exposure to screens and technology until a child is older.
- Regardless of their personal choices we can, as always, offer information and resources to help parents make informed choices about their child's early experiences including those involving technology. Model best practices by strictly following the expectations in this document.
- Keep in mind; families rely on us for education, not to merely "keep children busy." Our technological practices must align with our educational philosophy.
- Communicate with families through discussion and daily tools such as What in the World Happened Today and Planning to highlight how technology is being appropriately implemented in the classroom.

Expectations in Action:

The following table, *Classroom Environment Technology Devices and Usage*, outlines the appropriate technology tools and use in each age group. Review with staff and print for each classroom.

Classroom Environment Technology Devices and Usage

Age Group	Not Appropriate	Appropriate	Usage
Infants /Toddlers	➢ Television ➢ Computers ➢ Tablets ➢ eBooks ➢ Smart Boards ➢ Gaming devices ➢ Robotics	➢ Approved Bright Horizons music devices ➢ Electronic or battery powered action-reaction toys	Introduce children to music and sounds for soothing and relaxation. Utilize electronic cause and affect toys with children. No screen time
Twos	➢ Television ➢ Computers ➢ Tablets ➢ eBooks ➢ Smart Boards ➢ Gaming devices ➢ Robotics	➢ Approved Bright Horizons music devices ➢ Electronic or battery powered action-reaction toys and musical instruments	Engage children in music and sounds for soothing and relaxation as well as dancing and singing. Utilize electronic cause and effect toys with children. No screen time

Preschool	➢ Television ➢ eBooks ➢ Gaming devices	➢ Approved Bright Horizons music devices ➢ Approved Bright Horizons computers and software ➢ Approved Bright Horizons tablets and applications/ interactive games ➢ Approved Websites for research. NO social media sites including YouTube, or eBooks. ➢ Camera/photo devices ➢ Approved beginning robotics	Engage children in explorative learning, encouraging topic research, and hands on experience with technology and applications to further their learning. Use devices as a tool to enhance project research with children. Devices are used to reinforce learning and foster creativity through interactive art, music, photography and engineering apps and games. Beginning engineering and coding is fostered through introduction to simple robotics. Digital media, computers and tablets limited to 15-20 minutes of individual use OR 20-30 minutes of class use for research, project work, photo editing, and publishing.
Prekindergarten	➢ Television ➢ eBooks ➢ Gaming devices	➢ Approved Bright Horizons music devices ➢ Approved Bright Horizons computers and software ➢ Approved Bright Horizons tablets and applications ➢ Approved Websites for research. NO social media sites including YouTube, or eBooks. ➢ Approved Bright Horizons Smart Boards ➢ Camera/photo devices ➢ Video devices ➢ Robotics ➢ Coding JR sets	Engage children in explorative learning, encouraging topic research, and hands on experience with technology and applications to further learning. Use devices as tools to enhance project research with children. Devices are used to reinforce learning and foster creativity through interactive art, music, photography and engineering apps and games. Beginning engineering and coding is fostered through introduction to simple robotics. Digital media, computers and tablets limited to 15-20 minutes of individual use OR 20-30 minutes of class use for research, project work, photo editing, and publishing.

School Age	➢ Television ➢ eBooks	➢ Approved Bright Horizons music devices ➢ Approved Bright Horizons computers and software ➢ Approved Bright Horizons tablets and applications ➢ Approved Websites for research. NO social media sites including YouTube, or eBooks. ➢ Approved Bright Horizons Smart Boards ➢ Camera/photo devices ➢ Video devices ➢ Robotics ➢ Coding/computer sets ➢ Circuit sets	Engage children in explorative learning, encouraging topic research, and hands on experience with technology and applications to further their learning. Use devices as tools for school-agers to create and enhance project their projects through research. Devices are used to reinforce learning and foster creativity through interactive art, music, photography and engineering apps and games. Beginning engineering and coding is fostered through introduction to simple robotics. Digital media, computers and tablets limited to 20-30 minutes of individual use OR 30-40 minutes of class use for research, project work, photo editing, and publishing, If media is required to complete homework, time may be needed to adjust to accommodate.