

INTRODUCTION

The landscape of the PreK-12 instructional environment has changed dramatically as advancements in technology have offered students new ways to engage in their learning. Considering the impact of the current pandemic (COVID-19) and beyond, it is even more important to consider best practices relating to the efficiency and safety of digital devices.

In January 2020, Virginia legislators passed House Bill 817 requiring the Department of Education, in collaboration with the Department of Health and medical professional societies, to develop and distribute health and safety best practice guidelines for the use of digital devices in public schools.

EXAMPLES OF DEVICES



Computers



Projector Screens



Laptops



Smartboards



Tablets



Smartphones



e-Readers



Virtual Reality



Smart Devices



Response Systems

DEVICES & EDUCATIONAL USE

RECOMMENDED GUIDELINES

DEVELOPMENTAL STAGES AND EDUCATIONAL USE OF DIGITAL DEVICES:	STUDENT AND PARENT USE OF DIGITAL DEVICES AT HOME:
<ol style="list-style-type: none"> 1. Use various types of digital devices, and transfer knowledge to explore emerging technologies. 2. Balance the effective and responsible use of digital devices and media developmentally from pre-school through high school. 3. Use digital devices as a classroom tool to promote critical thinking, creativity, communication, research, modeling, and data analysis. 4. Foster online safety in the use of digital devices and media to promote digital citizenship. 5. Encourage positive behavior that does not intimidate, bully, harass, or embarrass others. 6. Maintain individual privacy and do not reveal personal information. 	<ol style="list-style-type: none"> 1. Set clear, consistent, and realistic expectations for your children related to digital device and media use. 2. Monitor the use of digital devices, including how much time to spend on websites and social media. 3. Use reputable educational websites for videos, games, and apps that are developmentally appropriate to support learning at home. 4. Set up a learning workspace for learning and eliminate distractions. 5. Create rules for sharing Internet connection, bandwidth, and digital devices if parents are working from home and students learning from home. 6. Foster online safety in the use of digital devices, media, and social media considering the benefits and risks.

CONNECTING TO
LEARNING SAFELY
with
DIGITAL DEVICES!



DIGITAL DEVICES IN THE CLASSROOM: HEALTH AND SAFETY GUIDELINES

SCREEN TIME & BREAK FREQUENCY

RECOMMENDED GUIDELINES

1. Preserve offline experiences, make a daily plan, and structure the learning day.
2. Take breaks from the screen every 20-30 minutes as research suggests. Rest eyes for 15 minutes for every two hours of screen time
3. Be cognizant of text size and the sizes of devices used to access materials to reduce eye strain.
4. Consider monitor positioning - 18-24 inches away and at a height looking straight ahead or slightly down to reduce glare.
5. Encourage complete and frequent blinking to reduce discomfort and blurriness.
6. Monitor sleep patterns to ensure screen time is not interfering with children's attainment of adequate sleep.
7. Stop using digital devices 60-90 minutes prior to bedtime.
8. Encourage students to spend at least an hour outside every day to take advantage of natural light and multi-distance focal points.
9. Become educated about potential negative effects of excessive screen time in terms of social, emotional, and neurobiological effects and methods to mitigate them.
10. Be aware of potential signs of eye strain tied to screen time such as frequent eye rubbing, squinting, closing one eye to see better.

ERGONOMICS & POSTURE

RECOMMENDED GUIDELINES

POSTURE AND POSITIONING:

1. Maintain good posture when working at the keyboard. Utilize a chair with back support.
2. Keep feet supported on the floor or on a footrest when working to reduce pressure on the lower back.
3. Avoid twisting or bending the upper body or neck to prevent injury from twisting or overreaching.
4. Keep shoulders relaxed with elbows close to your side.
5. Avoid resting your elbows on the hard surface or edge of a desk or table.
6. Position elbows at 100 to 110 degrees when working to keep a relaxed position at the keyboard.
7. Position wrists in a neutral or straight position when keying or using a pointing device or calculator.
8. Avoid routine use of non-prescribed medications or the use of a wrist brace without advice from a medical professional.

ENVIRONMENT:

1. Work in well-lit spaces using screen filters to reduce glare as needed.
2. Avoid excessive reaching for keyboard and other school materials.
3. Position the digital device monitor so that the viewed part of the screen allows you to keep your neck in a neutral or straight position.
4. Adjust the font size, contrast, or color to maximize comfort and efficiency.

MOVEMENT AND ACTIVITY:

1. Take breaks and include physical movement (take a one- or two-minute break every 15 to 20 minutes, or a five-minute break every hour).
2. Participate in intermittent movement or activity to promote blood flow and improve alertness and student engagement.
3. Utilize brain breaks to mobilize different networks of the brain, to restore focus and improve cognitive processes such as memory, attention, and motivation.