Bytes & Brains:
Supporting Families in a Growing Digital World
2020

Key Points on Brain Development:
- 80% of a child's brain is developed by the age of 3
- The Prefrontal Cortex plays a key role in a child's cognitive and emotional development during their preschool and kindergarten years
- The Prefrontal Cortex controls language development, short term memory, attention span, the ability to recall memories, and the ability to learn self control
- This part of the brain is most affected by exposure to screen time

How Screen Time Affects a Healthy Brain:
- Too much screen time interferes with the Prefrontal Cortex of the brain and causes too much dopamine to be produced (creating an addicting effect)
- Children who show technology addiction can:
  - be easily agitated
  - have trouble sleeping
  - lose interest in communicating with others
  - have wandering attention spans
- Too much screen time can actually rewire the brain at these critical times and create behaviors that are difficult to manage.

Children's Windows of Opportunities:
- The Language Center: being developed from Birth – 5 Years
- Vision Center: being developed from Birth – 2 Years
- Motor Skills: being developed from Birth – 5 Years
- Emotional Responses: being developed from Birth – 3 Years

How Parents Can Help Children Learn Best
- Provide face to face interaction
- Offer reassurance: through physical touch and emotional response
- Provide sensory experiences: sight, sound, smell, touch, and taste
- Integrate activities to help the brain process and make permanent connections
- Provide good nutrition and exercise
- Establish healthy sleep habits

Recommendations for Screen Time from the American Academy of Pediatrics:
- <u>From Birth – 18 months</u>: No Television or Screen Time
- <u>From 18 months – 5 years</u>: Around 1 hour of television or screen time (per day)
- <u>From 6 years and older</u>: Limited Screen Time based on parental discretion
  - Pediatricians recommend time (approx. 8 to 12 hours) for: school work/learning, socializing with family/friends, sleeping, and at least 1 hour of active play. Anything left can be used for screen time.
- Pediatricians agree that technology can be used to communicate and for entertainment when explored together.
- If parents choose to use technology with their children, encourage them to choose educational programs. Make sure the child can participate in the show or game. Parents should view the show with their child and talk about the content of the show – What can we learn from what we watched?
- FaceTime and Skype can be helpful in creating connections with extended family.
- Encourage families to visit websites to find out about ratings for television programming and games their children. Not all sites or TV shows are safe for children to view. (Websites are listed on the Resource list).

Family Media Plan:

HealthyChildren.org offers suggestions to create media use plans for your family and offers tips for healthy choices regarding technology and other family topics. Click on the Family Life tab, click Media and scroll down to Make a Family Media Use Plan.

Apps for Screen Time Limit Setting:

<u>Android apps</u>**:**

<u>iPhone apps</u>**:**

BreakFree

OurPact

Dinner Time Plus

Pumpic

FamiSafe

Moment

Unglue

FamilyTime

ScreenTime

Dinner Mode

Ways to Be Media Role Models:
- Encourage parents to be aware of their own time watching TV or using social media
- Set rules about where phones or other screens will be viewed
- Make mealtimes screen free
- Create Media Free times during the day

Bytes & Brains:
Supporting Families in a Growing Digital World

RESOURCE LIST--

<u>Books</u>:
- <u>Failure to Connect: How Computers Affect Our Children's Minds and What We Can Do About It</u>   by Jane M. Healy, Ph.D.
- <u>Parenting Well in a Media Age</u>   by Gloria DeGaetano
- <u>Glow Kids: How Screen Addiction is Hijacking Our Kids-and How to Break the Trance</u> by Dr. Nicholas Kardaras
- <u>Using an iPad with Your Preschooler</u> by Gayle Berthiaume and Gail Lovely
- <u>Changing Channels (Preschoolers, TV and Media Violence)</u> by William Kreidler
- <u>Preschool Clues: Raising Smart, Inspired, and Engaged in a Screen-Filled World</u> by Angela C. Santomero, M.A.

<u>Websites</u>:
- American Academy of Pediatrics: <u>healthychildren.org</u>
- Current research on screen time: <u>https://kathyhirshpasek.com/media-technology/</u>
- Help with researching appropriate programming for children:
    - <u>Commonsensemedia.org</u>
    - <u>Pluggedin.com</u>
    - <u>Kids-In-Mind.com</u>
- <u>Zero to Three.org/screensense</u>: Additional handouts to share with parents

<u>PAT Curriculum Handouts</u>:
- Babies and TV: A Healthy Start on Screen Time (*from Foundational*)
- Toddlers Need a TV Guide- YOU! (*from Foundational*)
- Tracking Our Family's Screen Time (*from Foundational*)
- Balancing Play Time and Screen Time (*from Foundational* 2)
- Dealing with Distractions (*from Foundational* 2)
- Making the Most of Digital Play (*from Foundational* 2)
- Your Plugged-In Child (*from Foundational* 2)