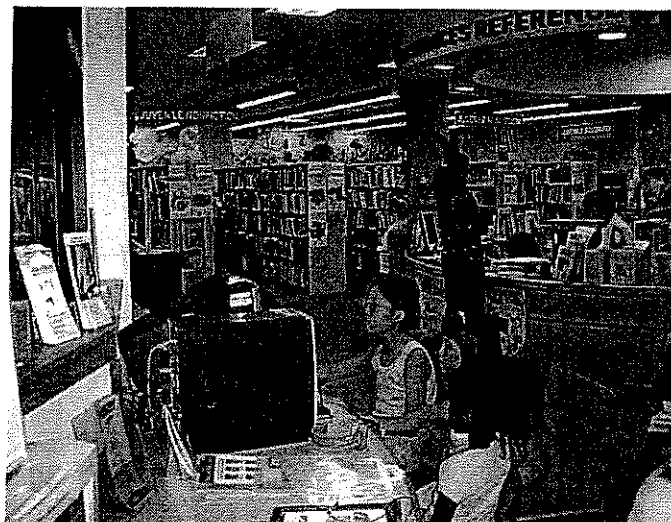


Technology and the Developing Child

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Technology and the Developing Child

- What do children need to grow and thrive?
- How do children perceive and understand today's technology?
- Where does modern technology "fit in" to healthy development?
- What are the dangers and how can we avoid them?

What do children need?

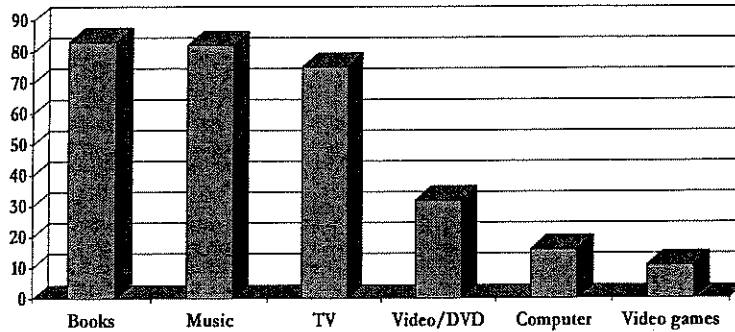
- Preschoolers' developmental tasks
 - Constructing knowledge of the physical world
 - Learning language
 - Learning to read minds
 - Learning self-regulation – attention, emotions, behavior
 - Understanding symbol systems: written words, numbers
- The role of adults
 - Warmth
 - Control
 - Scaffolding
- The role of play
 - exploring and pretending



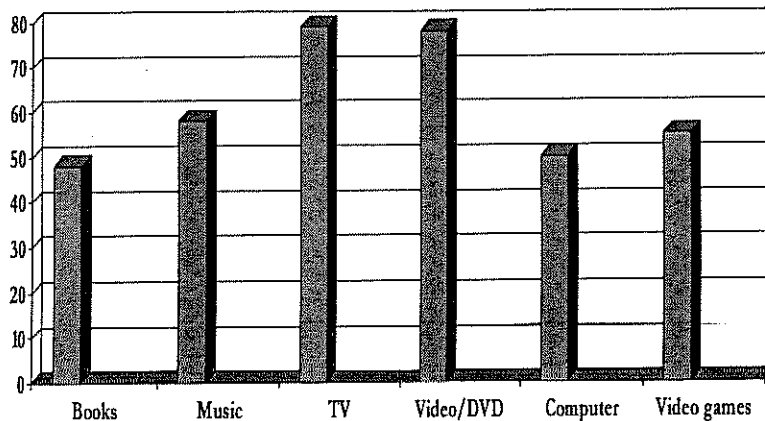
Preschoolers and Technology

Kaiser Family Foundation Survey, May 2006

Percentage of preschoolers (0 to 6) who interact with these media...



For preschoolers (0 to 6) who use these media, number of minutes per day they spend with...



How do children change? Middle Childhood

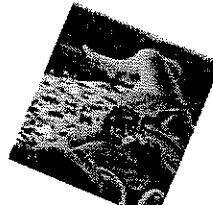
- Increasing domain specific knowledge and expertise
- Increasing mental workspace “working memory”
- Increasing logic
- Building peer skills
sharpening perspective taking,
building self knowledge



- THE ROLE of ADULTS: Warmth, control, scaffolding

How do children change? Adolescence

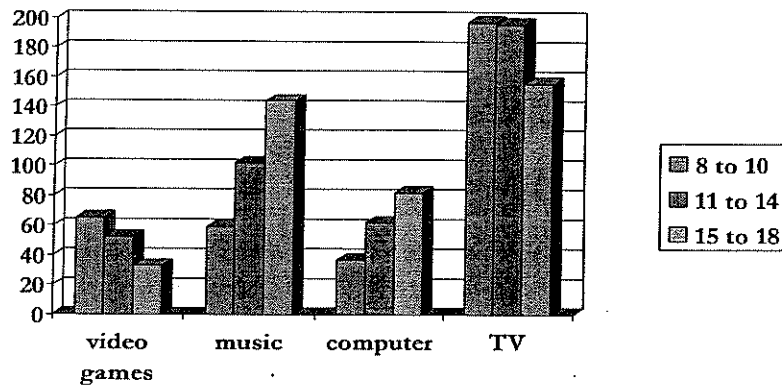
- Logical thinking: From the possible to the probable
- The stress of change: exploring new identities
- Needing to fit in – the importance of peers
- Risk taking



THE ROLE of ADULTS: Warmth, control, scaffolding

Media use from ages 8 to 18 in minutes per day...

Kaufman Foundation, 2005



The older child and technology

On the positive side:

- Children are cognitively ready
 - Can keep multiple pieces of information in mind
 - Better control of attention
 - Clearer distinctions between reality/fantasy
 - Knowledge base & logic can support media literacy***
- Potential benefits
 - Supports some cognitive advances
 - Educational and informational uses
 - Establishing technological schemas or “scripts” early
 - Social/communicative uses

On the negative side

- Too much of a good thing
- Exposure to violence,
inappropriate sexual content,
spreading prejudice & hate
- Revealing personal information
- Victimization by predators
- Victimization by commercial interests

Media (technological) Literacy for Children *and* Adults

Parents need to play, talk, and read with children.

Limit children's consumption.

No television before age 2.

Monitor children's use: Keep technology in shared spaces.

Provide a lifestyle that engages children, outside of technology.

*Plan and discuss media choices *with* children.

*Analyze media *with* children.

*Provide appropriate program and game options - be picky!

Avoid repetitive drill

Seek opportunities for creative problem solving, logical analysis

*Help children to evaluate information sources.



Selected Sources and Suggested Reading

- Buckingham, D., & Willett, R. (Eds.) (2006). *Digital generations: Children, young people, and new media*. Mahwah, NJ: Erlbaum.
- Healy, J. M. (1998). *Failure to connect: How computers affect our children's minds – for better or worse*. New York, NY: Simon & Schuster
- Olfman, S. (Ed.) (2005). *Childhood lost: How American culture is failing our kids*. Westport, CT: Praeger Publishers.
- Olfman, S. (Ed.) (2003). *Cybertots: Technology and the preschool child*. Westport, CT: Praeger Publishers.
- Strasburger, V.C., & Wilson, B. J. (2002). *Children, adolescents, and the media*. Thousand Oaks, CA: Sage Publications.

Selected Websites

- For parents and other caregivers
 - U.S. Department of Education
www.ed.gov/pubs/parents/internet
 - The Children's Partnership
www.childrenpartnership.org
 - Children Now
www.childrennow.org
 - Entertainment Software Ratings Board
www.esrb.org/rating.html
 - New Mexico Media Literacy Project
www.nmmlp.org
 - Center for Media Literacy
www.medialit.org

- Research on technology use and availability
 - Kaiser Family Foundation
www.KFF.org
 - Annenberg Foundation
www.whannenberg.org

Criteria to Consider When Creating New Media Content for Children

DIVERSITY

- Is the content relevant to children from different racial groups?
- Does the content provide strong female role models?
- Does the content create or exploit stereotypes—ethnic, racial, or gender?

ACCESSIBILITY

- Does the technology take into account accessibility for children with special needs?

INTERACTIVITY

- Is the best medium used for this content (or would it be better used in a different way—as a book, magazine, radio or television show, CD-ROM, Web site)?
- Does it use its interactive potential to the best effect?
- Does it help to create a community of young people?
- Does it give children unique access to information, ideas, or people?
- Does the interactivity give children real choices, integral to the content and with real results or consequences?
- Does the child have an opportunity to create something?

EDUCATION

- Is the content educational or informational?
- Do the providers of this content seem to know their target audience and offer content appropriate for children of that age?

VALUE

- Is it fun?
- Is it engaging to children, so they will want to explore further?
- Does the content have something to tell, instead of just something to sell?

ARTISTRY

- Is the content's art design of the high quality that adults would expect?
- Do the design elements support the information or play value (as opposed to distracting or overwhelming it)?
- (For Web sites) Is the interface quickly understandable, so children can navigate it alone?

SAFETY

- (For Web sites) Are children asked for personal information, other than what is integral to use of the site? Is the site self-contained? If not, does it offer links only to carefully chosen, child-safe sites?
- Does the content employ gratuitous violence or sexual content?