Digital decisions: Educators, Caregivers and Parents must be Well Informed when Making Decisions about Children's Use of Technology and Media

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Abstract

Increasingly, technology plays an important role in the daily lives of children, both at home and at school. Making informed decisions about the wise application and frequency of technology and media use can be both challenging and overwhelming for parents, caregivers and educators. Many issues surround the unwise use of technology and media by children. Programming containing violence and sexual content, as well as programming produced solely for marketing commercial products, is not appropriate for children. Additionally, children's engagement with technology should not stand in competition with valuable time that could be spent in active and creative pursuits outdoors. The amount of time spent passively engaged with television and other devices has been associated with childhood obesity and other negative outcomes. Understanding that economic and political powers control the media, parents and educators should be aware that children are vulnerable targets and may be exploited for financial or personal reasons. Thus, media-educated individuals must be prepared to make wise choices regarding its use. Emphasis should be placed on using technology as a tool for learning and active engagement.

Introduction

Technology's role in daily life is pervasive - providing for our needs from morning to night. We rely on it for everything from storm tracking to child tracking. Undeniably increased exposure to media has changed the fabric of daily life for everyone in developed countries, and especially the young. Children are a vulnerable population who must be protected; they are easily influenced and need guidance to make wise choices. They lack the life experiences to have the knowledge of "caveat emptor" or buyer beware (West 2013) which is a warning that alerts the buyer, or in this case the consumer, that the product may be inappropriate for her needs.

The increased importance given to media impacts communication and the social development of children. However, according to Gullo and Hughes (2011), the basic developmental characteristics of young children have not changed. Parents, caregivers, and educators today face the challenge to stimulate and unlock the learning potential and creativity of children when competing with tablets, smart phones, texting, social media, videos, gaming devices, TV and the Internet. The preference of portable devices, as opposed to desktop computer use, has made it easier to multitask – using the computer while watching television. Media multitasking may involve various combinations of devices (Christensen, Bickham, Ross, & Rich 2015) and as individuals and families acquire more and more devices, children are becoming quite adept at media multitasking (Brasel and Gips 2011) In fact, at ever-younger ages children acquire personal devices and successfully use them (Wallis 2006). Are educators, like many families, abandoning the time-honored methods of hands-on, active learning for screen time? This paper attempts to challenge parents, caregivers, and educators to evaluate their own perceptions of the influence of the media and technology on children and thereby be better prepared to adopt a balanced approach to daily activities which promote active learning.

Conceptual Framework

The basic needs of children have not changed, though daily life continues to see phenomenal change due to technological advances. This paper is based upon the conceptual framework of developmentally appropriate practice (DAP) which promotes active learning with the use of concrete materials. The National

Association for the Education of Young Children (NAEYC) issued its first position statement (Bredekamp, 1987) regarding DAP which provided principles of child development and learning that could inform decisions about young children's educational needs. This position statement has been twice revised, yet, continues to provide guidelines for professionals who work with children from birth to age eight. This approach upholds the value of play and social interaction. Copple and Bredekamp (2009, p. 14) note that, "young children construct their knowledge and understanding of the world in the course of their own experiences, as well as from teachers, family members, peers and older children, and from books and other media. They learn from the concrete (e.g., manipulatives)." Children need many experiences working with three-dimensional objects before they view the two-dimensional world of screens where many objects are being represented as three-dimensional when, in fact, they are only two.

Children need to work with concrete materials that relate to their daily lives. Any activity in which they engage, that is a worthy part of their daily lives, is preferable to watching an activity being performed on a screen, whether it is children's programming, videos posted to Facebook, or reality TV. A young child needs to hold, possess, and work with three-dimensional objects in order to begin to develop spatial understanding of the world around him.

Making Informed Decisions Concerning Media Use

Media for Infants

In an effort to help their children be prepared for a competitive environment where children are expected to perform at increasing levels of achievement, parents began to seek help in commercially available products such as Baby Einstein. Also, they began to place younger and younger children, even babies, in front of screens with hopes of getting an early start with fundamental knowledge such as colors, shapes and animals. However, many educators, policy makers, and parents began to dispute the educational claims found on the packaging and in the promotion of these and other commercial products. The Campaign for a Commercial-Free Childhood (CCFC) filed a petition with the Federal Trade Commission (FTC) concerning the claims on Baby Einstein products. The owner of these products, Disney, agreed to remove the claims that the products were educational (Lewin 2009).

Fenstermacher, et. al (2010) examined the educational claims made by the producers of television programs designed for infants across five domains – physical development and motor skills, social and emotional development, language and literacy development, cognitive development, and general knowledge (p. 559). These researchers found that there was often little connection between the claims and the content of the programming. Much of the content on these products that were marketed as educational went beyond the ability of infants and therefore was not developmentally appropriate. Vaala and Lapierre (2014) examined parents' views of the learning outcomes listed on the package of infant/toddler educational DVDs. They were interested to know if the parents in the study viewed the media products more favorably if the language of the educational claims was stated ambiguously or more specifically. Additionally, they examined which parents were more persuaded than others to believe the educational claims. Zimmerman, Christakis, & Meltzoff (2007) found a negative relationship between language development and the viewing of video programs targeting infants and toddlers.

The American Academy of Pediatrics (AAP) reissued the policy statement in October 2011 which discourages screen media use with children younger than two years (AAP, 2011). In 1999 the AAP issued its first position statement discouraging TV viewing for children younger than two years of age and encouraged all parents to engage in more collaborative activities such as talking, singing, and reading. Parents were also advised that children above two view screens no more than 1 to 2 hours per day, and that of quality programming (AAP, 2011). One has only to visit a grocery store, mall, or indeed, any public place in the United States to see parents who use electronic devices to pacify infants and young children.

Handing over a smart phone to a crying youngster usually produces the desired result – cessation of the tears. Young children have no fear of electronic devices and soon experiment enough to access something entertaining. The power that it brings a child is seen in the look on his face when a little maneuvering on the device, a slide or a push, produces a colorful, exciting game. However, Dorman (2000) reported that parents and caregivers are warned against the negative implications of using any electronic baby sitter. Influential economic and political forces control the media. Thus, it behooves anyone who has a child under her care to become a media-educated person, one who can make wise choices, often seeking other options for learning or entertainment. Considering the amount of hours spent by most American children each week viewing television alone, 21 hours, parents are advised to monitor the content which often contains undesirable images depicting violence, sex, and tobacco and alcohol use. Children who spent time playing video games, surf the Internet, and do homework on a computer increase their daily screen time. NAEYC does not support substituting media for play (Copple and Bredekamp, 2009). Thus, the media-educated parents or caregivers must be ready to help children make wise choices regarding the powerful influence of the media.

Violence, Sexuality, and Consumerism

With its potential for good, commercial media has the potential to promote violence, sexuality, and the sale of commercial products aimed at younger and younger audiences. Bragg, Buckingham, Russell, and Willett (2011) analyzed the issue of childhood sexuality. They examined the way that sexuality has been defined and framed in recent literature and in the view of the public in general. While some parents reported that they would like backup in coping with commercial exploitation, they expressed concern about the overreach of government in trying to manage the situation. The study was part of "The Impact of the Commercial World on Children's Wellbeing' carried out for the UK government. Their findings revealed that the subject is complex, yet they endorse education in consumer and media literacy. A cultural lag results as technology moves ahead of the moral and ethical norms of a society (Goodale, 1996). Besides the push to encourage children to grow up too quickly, media is often seen as a vehicle for violence. Exposure to media violence desensitizes children and can lead to imitation. Still another possible negative influence of too much television viewing is the tendency to snack, often on unhealthy snack foods. Children are encouraged through ads to eat empty-calorie foods which can lead to obesity, yet studies show that weight loss and lower body mass index can be achieved with less TV viewing (AAP 2011).

Children Need Balance

Environment

Essential to the well-being of children is the opportunity to have positive experiences in a safe, secure environment. The short attention spans of young children demand active involvement with much variety in the day's activities (Bredekamp, 2011). Educators are challenged with the goal of keeping students engaged throughout an eight-hour day at school or child care and this takes many materials and much planning. The NAEYC promotes learning spaces which develop children's self-esteem, individual strengths, and independence while supporting cultural identity (Copple and Bredekamp, 2009).

Educators have long supported a child-centered approach, especially for young children. However, the pressures of accountability, the pushdown curriculum, and the changing views of the public in general of a judgmental attitude toward educators, all have played a role in urging teachers to shift away from a play-based approach to a more academic approach with an emphasis on test scores. Many schools have reduced the minutes formerly devoted to physical activity in order to allow more time for test preparation. Jang (2008) found that teachers can promote students' motivation by stressing the value of a certain task. Truly, educators are challenged in today's schools to balance a challenging curriculum with engaging students who have become accustomed to the fast-paced world of screens. The training of teacher candidates is vital

to prepare educators who can implement methods which lead students in activities which encourage valuable learning.

The Value of Play

As children interact with each other in a play-based environment, language is enriched in the activities as children are involved in various tasks. Language emerges as the need to communicate with each other arises throughout the activities, as opposed to a prescribed curriculum in an adult-driven environment (Van Oers & Duijkers, 2013). In a play-based environment, more advanced peers and adults scaffold the learner and more advanced learning takes place with the development of new vocabulary and new understanding.

In contrast to the need to be active and explore their environments, both indoors and outdoors, children engage in a passive activity when they watch television. Klesges (1992) reported research findings from a study at Memphis State University that described a level of passivity that is like a trance where metabolic rates dropped and children burned fewer calories while watching television. Often media draws children into sedentary activities which take precedence over the physical activities which are needed to help them stay healthy. Interaction that comes from participating in group activities such as sandlot ballgames, sports, and simply playing outside is invaluable in a child's life. Outdoor play is a need and a right of childhood and is of primary importance to children themselves (Kernan and Devine, 2010). Consider a 24 hour day where eight hours are spent sleeping and eight hours are spent in school. The remaining time to do everything else is eight hours. What if children are spending four to seven of those hours with media? They are missing out on so many other fruitful activities and tasks, and may even be missing out on their needed sleep, in order to engage with media. Children need sleep and physical exercise to develop strong bodies.

Conclusion

According to Craft (2012) we stand at an intersection of embracing the changes brought by digital technologies or resisting the intrusion they bring into our daily lives, particularly as regards children and their best interests. Parents, caregivers, and educators all share the same goal of making wise choices. Do children need the ability to be connected around the clock? Are children best served by maintaining a parallel existence in cyberspace? Do children need continual exposure to the highly commercialized, market-driven world of the media? Prensky (2001) has called the Net Generation, those who have grown up with technology, Digital Natives. These children operate at "twitch speed" and possess characteristics that are the result of their exposure to technology from birth (Berk, 2011). Educators have the duty to investigate how these children think and how they use technology.

Craft (2012, p. 183) has identified the advantages of technology for the Net Generation and notes, "learning beyond boundaries, across age phases, harnessing motivation, enabling high participation and nurturing creative possibility thinking, are all possible" if we are willing to accept the possible risks associated with the wide exposure to cyberspace. Educators seek to employ the benefits of technology in order to individualize instruction and seek to promote a balance of learning activities which promote active engagement.

In conclusion, when considering what is developmentally appropriate for children, educators, parents, and caregivers should promote play and active learning, seek to help children achieve a healthy balance regarding the use of technology, and minimize the effects of commercialism in the media (Levin 2013). Adults can evaluate all technology use on the basis of whether it promotes active involvement, possesses wholesome content and educational value, and respects the life of the child at her present stage in life. Truly, we should all regard childhood as a sacred time as stated in the aboriginal language of Australia, Ampe akelyernemane meke mekarle which means "Little children are sacred" (Wild and Anderson, 2007). The challenge to stay informed as technology evolves is a worthy goal for all media-educated individuals.

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