

# [Early childhood language development in the digital age: a review of research](https://assignbuster.com/early-childhood-language-development-in-the-digital-age-a-review-of-research/)

## Introduction

Early childhood language and literacy development for the children aged 0-8 years old is strongly influenced by the linguistic environment of the child. “ Many educators and researchers have attempted to address the literacy skills that children will need to succeed in the 21st century and, in doing so, have discovered something of a paradox. Technological learning plays an important role in imparting knowledge quickly and easily. Young children these days are so immersed into Ipads and smart phones, (which their little hands can easily hold and navigate by swiping) that they learn so much and so quickly which fully prepares them to interact in a preschool setting that imparts sophisticated technical and literacy skills than did previous generations. My twin niece and nephew who will turn 2 years this December, attend preschool, every day they learn different things in terms of activity and daily interactions with teachers and peers. They love to watch rhymes and children related videos on the Ipads and iPhone.

Parents, caregivers, teachers, and guardians are the chief resources in language development. Children also learn from each other, because learning from peers is an important part of language development. Activities involving a wide range of materials promotes social interaction and cognitive development. In this digital age fast learning abilities and technological learning language preferences make it difficult for children of this generation to excel academically using just the traditional teaching methods. Through this literature review I want to explore and analyze and bring forth some of the studies and perspectives form researchers who encourage the benefits of technological and digital learning especially in young children between the age of 0-8 years old. In this paper my curiosity and focus are on the risks and challenges of digital intake. Through this literature review I am curious to find; how much is too much and when to strike a balance?  Additionally, with the help of literature reviews, I want to understand and analyze how much of the existing technologies are helping children develop language.  I begin by setting out the main claims by researchers. Second, I want to explore and discover the assumptions underlying the claims and their challenges and drawbacks (if any) to digital age of language and literacy development. Lastly, I conclude the paper by specifying the importance of additional research on the impact of digital literacy on early childhood outcomes.

Early Childhood, Technology, Literacy: Perspectives from studies and research

We all are aware of how much technology has advanced and how quickly and easily young children absorb everything around them.  The purpose of this study is to further investigate and improve my understanding of the role of digital literacy in supporting children’s language and literacy development. In our day to day lives and experiences, we all have heard and read several positive outcomes that children benefit and learn immensely digitally. Famous author, Marc Prensky in his 2001 article entitled “ Digital Natives”, “ Digital Immigrants” or the “ Net generation”, (“ Digital native”, n. d.) refers to the young generation as “ native speakers” of the digital language of computers, videos, video games, social media and other sites on the internet.” (“ Digital native”, n. d.).  Young children of the 21 st century is already innate and programmed with an advanced set of technological and literacy skills. Prevailing influential theorist like Piaget and Vygotsky who have broadly researched on early childhood development suggest that children are extremely curious and are always trying to question and investigate the world around them.

A growing body of research shows that “ the literacy practices of young children are characterized by the use of digital technologies in their everyday lives depicted by their parents or guardians.” (Flewitt et al., 2015). Children’s exposure and use of technologies starts at their home through which they are exposed to new forms of literacy and often begin their literacy journey through their interactions with digital devices (Plowman et al., 2012). Another author states that “ children make meaning through colorful and attractive visual images, sounds and, symbols.” Technological learning is here to stay and will further evolve and bring major benefits to the way we learn and impart knowledge. Burnett (2010) stated that “ digital technologies interacting positively impact children’s language and vocabulary development, reading motivation.”  Studies have shown that digital technology in general had become an essential part of young children’s lives in motivating children to read, write and storytelling.

We are all witness to the ever-increasing importance of technology and virtually guaranteed to play an effective role in children’s learning and development.  From the above studies and findings many researchers and scholars suggest a positive relationship between children’s use of digital technology in their learning activities and their enjoyment in reading. This approach further develops positive attitudes and motivates children to engage in further reading activities. Further research suggests that “ interacting with digital technologies has the potential to positively impact children’s language development, vocabulary learning and reading motivation.” (Burnett, 2010). Regarding reading motivation, one study which looked at digital texts such as Kindle or educational apps found that digital texts were found to be an appealing medium for reading for children (Thoermer and Williams, 2012). In one study, Kostyrka-Allchorne et al. (2017) surveyed parents of 3–6-year-olds about what their perceptions of technology is and found that most believed in using digital technology which could have benefits for children’s cognitive development. In fact, with an increase in advancement and sale of educational toys and games, which includes various toys from Leap frog or ABC mouse, many products in the market are marketed for enhancing communication and cognitive skills in young children. I always wonder if we only come across benefits of digital intake in young children or is there a flip side attached. This is the purpose and the focus of this paper, which is to find out about the risks and challenged that is attached to excessive digital intake in young children.

Risks and challenges of over indulgence of digital intake in young children

Children benefit and learn immensely digitally, it is well understood through numerous studies and researches, however there is always two sides of the same coin. Chaudron et al.’s (2015) study showed that some parents’ seldom associated the use of digital technology with learning and argued that its use could be problematic and should be carefully controlled and restricted by the number of digital devices available in their home. Another recent study by Ozturk & Ohi (2018) about “ parental views about the use of technology in their children’s digital literacy was conducted on children and their parents, from two primary schools in Istanbul. Parents were given questionnaire to record their perceptions about technology and their children’s experiences on the digital literacy.  The findings suggest that parents can support children’s learning and enjoyment by engaging them in both digital and non-digital print experiences with their children.”  This basically means that the parent’s presence and parent’s co-viewing along with their children while using digital media is a great way to engage in conversation with the children.

Many researchers and practitioners recognized the “ potential of new technologies for learning, yet many also voiced concerns about their potential harm.” (Flewitt et al., 2015). There may be a smaller number of challenges or relatively few children might experience drawbacks resulting from over engaging digitally compared to positive outcomes.  However, these challenges or negative impact can be very significant on children’s overall development and quality of life. Some were wary of the addictive and ‘ over-stimulating’ impact of digital leaning and argued that children were spending not enough time playing outside with friends and neighborhood children but were sitting at home and spending too much time on technology. These parents are also concerned about their children who spend increased amount of time indoors which negatively effects their overall social interactions. I believe that nothing can replace the place of direct face to face interaction and real-world experiences such as outdoor activities, sports and interactive reading and activities. The importance of human support and verbal interactions and the power of talk cannot be supplied by technology. For example, our brains are designed to be efficient and effective when there is a socially interactive environment, this environment triggers curiosity and a sense to explore further with interactions. Some researchers also highlighted concerns about children being slow to acquire early language learning opportunities. One other research suggests that too much exposure to digital technology can also impact children’s attention span such as being hyperactive and difficulty in concentration on anything they are engaged in. The American Association of Pediatrics recommendation states that “ pediatricians should discourage television-viewing for children younger than 2 years and encourage more interactive activities that will promote proper brain development, such as talking, playing, singing, and reading together.” (Vandewater et al., 2006).

From screen time to smart toys, Dorothy Singer, a Yale University psychologist who studies imaginative play refers to a smart toy called Hello Barbie , this doll already comes with a voice and personality. Singer argues that “ if a toy already comes with a voice and personality then there will be no room for a child to imagine, play, interact and make up their own stories.” (The Guardian, 2016).  It takes away from the child’s contribution and their creative imagination.  Similarly, there are other smart toys in the market that already comes in with a built-in personality and other technologically advanced settings which instead of helping a child to interact takes away from the child’s unique and creative contributions. Swapping screen time with smart toys (in some cases) may not necessarily mean better experience for young children. Young children need real time experience or authentic play, which helps children interact and contribute to their play.  Activities that are done for the sake of outcome does not benefit a child’s cognitive skills and social interaction. It is the experience that enriches their curiosity and imagination.

Without maintaining a balance and over exposure to digital technology can impact children’s brain development and may have an overall negative impact. Reading and playing are two of the activities in addition to a healthy interaction with parents are generally deemed to be developmentally crucial for healthy development in childhood. Jenkins (2006) notes that play ‘ is key in shaping children’s relationship to their bodies, tools, communities, surroundings, and knowledge’ (p. 22). From their earliest learning experiences onward, ‘ children try on roles, experiment with culturally central processes, manipulate core resources, and explore their immediate environments’ (Jenkins, 2006).  Striking a balance and building digital resilience is important for children, because lack of proper balance can take away from these critical aspects of healthy development.

Discussion

In line with a growing body of research studies into digital technology and early literacy, research suggest that “ incorporating technology into children’s everyday activities offers promising opportunities for their reading development.” (Flewitt et al., 2015).  Jenkins (2006, p. 60) writes: “ The first five or six years of a child’s life are formative for literacy and social skills, and parents can play an important role in helping children acquire the most basic versions of the skills.” For children growing up in today’s world, digital technologies are ‘ as remarkable and ubiquitous as electricity was for our generation, becoming visible only in their absence’ (Carrington, 2007). I believe that technology has positively changed the way children speak and interact today. Basic literacy in children is developed through talking and listening, eventually language is learned through its use. Parents talking to children and engaging them in meaningful conversations and storytelling is critical and a great way to absorb them into having conversations. In addition, parents co-viewing and engaging in interaction with children while using digital media is a great way to engage their children in oral conversations, which will most likely have a positive effect in their learning outcomes.

Further Research and Conclusion

The outcome of digital literacy practice in young children is a growing area of debate and research today. Many studies have examined the trends, and some have found opportunities and risks of over intake of digital technologies among children, however there are still areas of uncertainties.  At this point, there are more “ unknowns” than what we already know in terms of the impact of exposure to technology on very young children’s language and literacy development. With the massively growing technological learning and new opportunities implemented in technologies, a generation of young children are coming across new dynamics of digital learning and literacy in ways that was impossible in the past. There is clearly much more to be discovered. First, more research on younger children between the age of 0-8 years old is needed. I have come across majority of the studies focused on older children and adolescents. There is clearly not enough of the right kind of research done in this area and it certainly is an area that needs to be addressed. Without robust research based finding it is difficult to understand the effect of technology on younger children. It simultaneously pinpoints areas where new research is needed to fill important gaps.

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