Drawbacks of E-Learning for the Toddlers and their Possible Solutions: A Detailed Study

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Abstract

E-learning in the twenty-first century has transformed the way education for toddlers is perceived. The use of electronic gadgets, including mobiles, tablets and computers, is fast changing the landscape of education and learning. Parents, teachers and caregivers are endowed with the responsibility of inclusion of e-learning in their teaching practices. The drawbacks of certain elearning practices such as harms of mobile devices, reduce the use of computers, electronic access with internet facilities in the case of e-books use, the teachers' attitude, access andunderstanding towards e-learning and the feelings of being disconnected and isolated during online teaching and learning are discussed. The solutions to the problems form part of the discussionalso.

The drawbacks converge at a point where there are no possible alternatives to e-learning except the traditional mode of teaching and learning. The electronic knowledge for the age group of toddlers (1-3 years) is mediated with the responses of the parents, teachers and caregivers. Therefore, many factors both

internal and external (associated with the use of electronic gadgets, teachers' perception and experience of e-learning, and electronic access and screen time in the case of e-books use) are discussed. The literature review technique with the subsequent sections to discuss the research results and findings aided with discussion is the selected procedure. There are certain drawbacks for the use of e-learning for toddlers, and the possible solutions to the problems indicate that toddlers' education via e-learning is mediated through the interaction of multiple factors.

Keywords: E-learning, toddlers, drawbacks of online learning, education for toddlers.

Introduction

The learning process for toddlers (age 1-3 years) was always based on homeschooling methods involving the participation of the parents. The modes of learning were based on the children's sensuous perception, such as listening to poems and songs, watching cartoon movies, and playing with toys (educational toys). Today, the concept of e-learning has transformed the way parents and teachers approach thesubject of toddlers' education (Rimale et al., 2016). Despite the fact that

traditional modesof learning are evaded by the recent technological aid for educating pre-schoolers, there are still some drawbacks observed and discussed in the selectedliterature.

Kraleva et al. (2016) conducted a study on the integration of mobile learning in Bulgarian preschool education. The safety of the children while using mobile devices for learning is the concern raised by the researchers. Mobile learning is about the use of mobile applications installed on mobile devices, including smartphones or tablets (Gasah and Baharum, 2018). Shurukhina et al. (2020) placed their research in the context of Russian education facing the digital challenge. Their study presented both sides of the issue as it considered certain advantages of elearning. It also discussed some drawbacks of the application of remote technologies. The research included specific recommendations from "The Research Institute of Hygiene and Health of Children" and "The World Health Organization" (WHO). The guidance suggested that the use of computer equipment for educational purposes in the home environment be limited and minimised.

Additionally, the study by Yükçü et

al. (2019) considered the use of e-books as of particular advantage because they were low cost and most applications were for free. Still, the disadvantages of picture ebooks were electronic access and the time the children spent on the screen while reading books increased. There another significant drawback of incorporation of computers in early childhood education as it requires that teachers must be equipped with the latest technology, and their attitude and belief in the validity of the use of computers must be positive (Sak et al., 2016). Furthermore, Wasserman and Migdal (2019) listed some drawbacks of e-learning because a user feels isolated and disconnected in an online course, and the inability to use facial expressions or body language with teachers and peers may diminish students' confidence.

Literature Review

The first shortcoming of the use of mobile devices in toddlers learning and education is the safety concern. Tahir and Arif (2015) discussed the parents' attitudes towards the use of mobile phones and tablets for educating their pre-schoolers. The research included the range of issues associated with the help of technologies for

education at home. The parents were endowed with the contradictory roles of technology providers and technology regulators. It can be established without any doubt that the safety of toddlers while they learn on mobile devices and tablets, must be the concern of the parents.

The safety of the children was at riskbecause of internet access. The social networking sites such as Facebook increased the risk of harm, and even games, video and chat sites were also harmful to toddlers' use because of the content. The use of camera and video was fun but permeated with the risk of bullying and enabled misuse. GPS tracking helped indicate the phone's location and the child's but was not used carefully. Other people may be able to locate the phone and a child'spresence. The risk mentioned is present in the case of toddlers' use of mobile phones for learning. The role of parents becomes essential because the children cannot be left alone with mobile devices, and therefore, constant vigilance and check are required. The concept of e-learning, defined in terms of the use of technology, has a drawback in that it requires parents' continuous involvement in achild's learning process. Toddlers were very young to detect on their own the harms and potential misuse of the

technology. Therefore, their e-learning is strongly mediated by the responses of the parents towards technology use (Kraleva *et al.*, 2016). The possible solution to this problem is only present in parents' checks. Still, here theuse of technology, which aids independent and individual help, is minimised because of the age of the children. The misuse and risks of independent use of mobile devices for toddlers outweigh the risks involved in the possible harm that can be done to the children.

Shurukhina et al. (2020) studied minimising the use of digital technology in the home environment. Again the issue of digital safety was pertinent here because the pre-schoolers using video formats (specifical zoom) faced the problem of the inclusion of third parties registered at chats and video conferences. Further, learning through technology such as smartphones, tablets, and computers seems to be pressing onthe child because of the demand posed on thetoddler of involvement in the world of elearning. The disadvantages of e-learning which calls for limited and minimised use oftechnology, include vivid disputes and discussions accompanying direct communications (Shurukhina et al., 2020).

The requirement of limiting the use

ofdigital literacy and computers at home is valid because, at the very early stage of development, the continued use technology may deprive the child of the emotional warmth of the people as most of his learning would be through digital tools. The social skills of toddlers in the process of developing and advancing will be restricted even more if the child reacts to the e-learning idea positively (Al-Fraihat et al., 2020). The child'sacceptance of digital technology is dependent on the parents' views about the use of technology for education and learning. Suppose parents incorporate the use of computers and tablets in toddlers' life forknowledge. In that case, it is decided that they would maintain and keep the check on devices, ensuring children's safety. The habits of the child are in the process of developing, and the inclusion of technology in education may pose certain features not conducive to the natural flow of life. For example: spending time in front of a computerscreen may put a limit on the concentration span of the child, and he will be deprived of the strength of his mental capacity to concentrate for a more extended period.

The period of preschool in the life of a child is significant because this time is conducive to multiple factors, including both extrinsic and intrinsic. The innate potential of the child is enhanced by the warmth of parents and their encouragement. Further environmental factors contributed a lot to the development of toddlers. For example, the younger kid of the family may feel attracted to the older sibling's use of technology for his studies. The e-book accessat this early stage for the pre-schooler has its benefits as it is a compiled version of many activities, songs and images providing the experience of a stimulus-rich environment for children (Gros and García-Peñalvo, 2016).

The drawback of e-book learning is that it requires electronic access. Though downloading is an option still to remain intact with the latest educational material, it is requisite to have internet access all the time. With older downloads, the objective of e-learning becomes stagnant, and it would be the same as printed books.

Apart from that, e-book reading demands an increased time spent on screen. Itis helpful to understand with the help of the pictures and any idea not only would screen time be required, but a concentration span must be prolonged. This perspective reveals that toddlers' life will face increased connectivity with digital technology and internet access. The drawback of e-book

acquisition is based on the fact that while other children may respond towards physical activity and playing outdoors, ebook readers may feel isolated and alienated. Therefore, it hampers the connection of the pre-schooler with the outside world (Bozna, 2017). At this stage of his life, the demand for balanced behaviour neatly regulating daily life tasks is exaggerated, and he may spend more time on screen with his e-book, irrespective of the consequences.

The possible solution to this problem is present in the role and responsibilities of the parents because it becomes their responsibility to set a daily timetable for their child so that he would have time for outdoor and not or play and elearning also. Furthermore, the screen time, in this case, would be minimised and limited. Another solution for this problem is replacing the e-book with the printed book, but then the aim of integrating elearning into a toddler's life would not be accomplished.

As per the study of Sak *et al*. (2016), there are disadvantages of computer use in early childhood education, and the discussionin the research includes teachers' perceptions about incorporating computers for online learning children.

According to the study, four teachers are of the view that it supports permanent education, and two of the teachers support the fact use of computer increases selfconfidence and support memory development. As reported in the study, elearning, including age-appropriate games and materials, enhances children's selfconfidence, and they can achieve various goals (Sak et al., 2016). However, some of the teachers are not responsive to the use of computers as they reported occasional use, and one of the teachers used it only five times a year. It is also mentioned in the research that children were not allowed to use the internet.

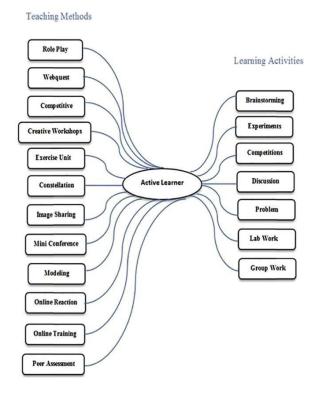


Figure 1. The suitable teachingmethods and learning activities according to the preferred learner's learning style.

Therefore, it becomes an integral part of e-learning that teachers' perception and response towards computer-assisted learning must be assessed. In the case of toddlers who spend time in daycare because of the busy schedule of their parents, the caregiver's perception (of computer and internet-assisted activities) at the facility becomes an essential cornerstone of the toddler's dependence on digital technology and e-learning. The caregivers, teachers and parentsat daycare, school and home, respectively, must be trained in a way that they respond to the demands of e-learning positively. The study by Wasserman and Migdal, 2019 is about the advantages and disadvantages of online courses for teachers so purposeful use of technology can be integrated into their teaching practice. The resistance to online classes comes in many forms; while some teachers try to adopt traditional methods of teaching because they feel isolated and disconnected, others prefer face-to-face conversation because they feel a lack of immediate and effective responses to questions or tasks. Online courses demand a high level of selfdiscipline, and the digital text may be challenging to read (Wasserman and Migdal, 2019).

Resolving the issue of digital training of teachers before they initiate an online course with the pre-schoolers becomes an essential part of their teaching practice. Manyfactors are working together in the creation of this gap. While some teachers face internet connectivity issues to be troublesome, others consider their sense of identity as blurred because they feel disconnected from their peers. Therefore, a significant obstacle to implementing elearning in schools and homes is associated with the perception of teachers, students and parents. (Yilmaz, 2017)

As per the study of (Ouf *et al.*, 2017), there are methods of electronic teaching to address the active learners' needs, and it depends on how well the learner interprets the teaching method. Figure 1 shows specific modes of education as they align with the student's learning activities.

Methodology

The review of the available literature and published research journals dependent ontheir relevancy, authenticity, and credibility. The criteria opted for the

inclusion of research is that study should address the drawbacks of e-learning for toddlers and their possible solutions. Further, the research was analysed in detail, striving for accurate judgments. The study published in authentic international journals and databases such as Springer, Google Scholar, etc. is selected. Among the research available, those discussed in the literature review show a detailed analysis and relevant data.

Findings

The findings of the study by Kraleva, Kralev and Kostadinova (2016) reveal that improvement in design and quality applications for mobile learning becomes an essential part of the software technology future. There are some requirements stated in SER (State Educational Regulations) toimplement for pre-schoolers in Bulgaria are included. The issue related to children's safety while they use mobile devices is discussed. There is an identification of the criteria to assess mobile applications for mobile learning of young children. As a result of the study, two conceptual models for mobile learning are proposed.

Furthermore, the study of Shurukhina*et al.*, 2020 concludes that the

present situation is evident in the mass transfer to online learning, demonstrating the digital revolution in education. The findings indicate that the authors of the report "Global Education Futures" are of the view that student independence and self-management is an essential condition for becoming integrated into online learning. Furthermore, it should not be established at the expense of the teachers butin coordination with them.

The transference to e-learning with the use of remote technologies is indicative of the fact that digital literacy is not an innate characteristic and cannot be acquired by a person just because he lives in the digitalisation era. The report drafted by the secretariat of OECD reveals knowledge, skills and attitudes vital for digital society should be deliberate and manageable so that the objective of digitisation, that is, of increasing people's life quality, can be achieved (Bonk, 2016). Yükçü, Tok and Kangal, 2019 consider the central issue of the research is the quality of picture e-books. The criteria for the selection of e-books and the time consumed by the children in front of thescreen. The researchers are of the view that picture ebooks must be considered as analternative option as opposed to replacing printed books.

The findings of the study by Sak et al., 2016 indicate that most of the schools had no computers, a limited number of computers and no internet connection. The school teachers and participants of the study are of the view that they could use computers in the computer lab. Still, NAEYC integrates the recommendation computer technology must physically located in the classroom. It is reported in the research that young children/ pre-schoolers are not receiving the benefits of the use of computers in their education. The early childhood education teachers' opinions are consistent concerning beliefs and practices for the use of a computer. According to them, it is related to children's cognitive, social and physical development. With the aid of technology and training such as the FAITH project and increased computer skills training, the early education of children will be enhanced.

The findings of the study by Wasserman and Migdal, 2019 conclude that in online training courses, the feeling of personal connection between the instructor and student is present with the atmosphere of listening and openness. The instructor will answer students even though

physical presence is compromised in online learning.

Discussion

The increasing demand for the incorporation of digital technologies in toddlers' education is an essential factor in replacing the traditional mode of teaching and learning. Whether teachers, parents or caregivers, whoever the bears responsibility of toddlers' education must witness the rise indemand for e-learning. The research is an attempt to identify and assess five significant drawbacks of elearning for toddlers and their possible solutions discussed in the section of the literature review. The disadvantages briefly are:

- The use of mobile devices in elearning and concern for toddlers' safety (Idres *et al.*, 2019)
- The use of computers for educational purposes aided with parents' involvement.
- Picture e-books require internet access, and the length of screen time has increased
- Teachers/instructors must be equippedwith digital technology as opposed to the traditional mode of teaching.

- Instructors feel isolated and disconnected from their peers and lack immediate response, inability to use body language, internet connectivity and a sense of identity.
- All the mentioned drawbacks are discussed concerning the participation of toddlers, teachers, parents and caregivers in the process of e-learning. The relevant research supported the discussion of the disadvantages of e-learning with possible solutions to the problems.

Conclusion

The education for toddlers in the twenty-first century seeks some alternatives compared with the traditional model of teaching and learning. E-learning is an alternative possibility for toddlers. The literature selected for the discussion about toddlers' education was thoroughly assessed, and some of the significant points emerged related to e-learning that drawbacks for toddlers—the current research aimed at identifying those drawbacks and finding their possible solutions. The studies included adiscussion on the use of electronic gadgets such as tablets, smartphones, and computers for toddlers' education and learning. The studies indicated the harms of mobile devices for toddlers, and the recommendations for limited use of computers at home are discussed.

Additionally, the use of e-books was hampered by electronic access and increased screen time for toddlers. Another drawback is related to teachers' attitudes towards the use of digital technology and their ability or inability to use the latest technology. One of the selected research projects considered the drawback to be the instructor's feeling of isolation disconnectedness in an online course. The deficiencies listed are obtained from the research, and a detailed evaluation of the shortcomings with their possible solutions forms an integral part of thecurrent study. It is hence concluded that e-learning helps facilitate the learning process of toddlers. However, certain drawbacks are present, and the research aims at finding solutions to those problems.

References

 Al-Fraihat, D., Joy, M., & Sinclair, J. (2020). Evaluating E-learning systems success: An empirical study. Computers in Human Behavior, 102, 67-86.

- 2. Bonk, C. (2016). Keynote: What is the state of e-learning? Reflections on 30 ways learning are changing. Journal of Open, Flexible, and Distance Learning, 20(2), 6-20.
- 3. Bozna, H. (2017). Book Review Research on E-Learning and ICT in Education. Turkish Online Journal of Distance Education, 18(1), 224-227.
- Gasah, M., & Baharum, A. (2018).
 A Conceptual Framework for Emotional Connection towards Elearning Mobile Application Design for Children.
- Gros, B., & García-Peñalvo, F. J. (2016). Future trends in the design strategies and technological affordances of e-learning. Springer.
- Idres, A. N., Eltalhi, S., Imsallim, R., & Kutrani, H. (2019). Mobile Learning Application Development for Learning English to Preschool Students. International Journal of Science and Research, 8(12), 631-634.
- Kraleva, R., Kralev, V., & Kostadinova, D. (2016). A conceptual design of mobile learning applications for preschool children.

- arXiv preprintarXiv:1606.05753.
- 8. Kraleva, R., Stoimenovski, A., Kostadinova, D., & Kralev, V. (2016). Investigating the opportunities of using mobile learning by young children in Bulgaria. arXiv preprint arXiv:1605.03485.
- Ouf, S., Abd Ellatif, M., Salama, S.
 E., & Helmy, Y. (2017). A proposed paradigm for smart learning environment based on the semantic web. Computers in Human Behavior, 72, 796-818.
- 10. Rimale, Z., El Habib, B. L., & Tragha, A. (2016). A Brief Survey and Comparison of m-Learning and e-Learning. International Journal of ComputerNetworks and Communications Security, 4(4), 89.
- 11. Sak, R., Erden, F. T., Sak, I. T. S., & Esmeray, H. (2016). Early Childhood Teachers and Computers: Beliefs and Self-Reported Practices. Journal of Education and Future, (10), 19.
- Shurukhina, T. N., Berseneva, S. A., Belov, A. N., Maksimenko, S. I., & Belova, G. A. (2020, May).
 Russian Education Facing the Digital Challenge. In International

- Scientific Conference
 "Digitalization of Education:
 History, Trends and Prospects"
 (DETP 2020) (pp. 751- 754).
 Atlantis Press.
- 13. Tahir, R., & Arif, F. (2015, July).

 Mobile technology in children education: Analysing parents' attitudetowards mobile technology for children. In 2015 Science and Information Conference (SAI) (pp. 410-420). IEEE.
- 14. Wasserman, E., & Migdal, R. (2019). Professional Development:

 Teachers' Attitudes in Online and

 Traditional Training

 Courses. Online

 Learning, 23(1), 132-143.
- 15. Yilmaz, R. (2017). Exploring the role of e-learning readiness on student satisfaction and motivation in a flipped classroom. Computers in Human Behavior, 70, 251-260.
- Yükçü, Ş. B., Tok, A. İ., & Kangal,
 S.
- 17. B. (2019). The current situation of children's literature: A Developmental overview of the preschool picture e-books/Çocuk edebiyatının geldiği son nokta: Okulöncesi dönem resimli e-

kitaplara gelişimsel bir bakış. Erken ÇocuklukÇalışmaları Dergisi, 3(1), 139.