METHODS OF USING DEVELOPING TECHNOLOGIES IN PRESCHOOL EDUCATION

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Abstract*: the rapid expansion of technology into the worlds of young people has created a new generation which can use computers, mobile devices and other digital technologies as easy as winking. Nevertheless, in the context of early childhood settings there are some influences that may differentiate the technology use behaviors of preschool children which are generally constructed at home or school environment. This study seeks to define the possible influences, effects and praxis of technology use in early childhood settings, and also intends to explore the current research trends about technology use in the field of early childhood education. Data were gathered from several scientific databases.*

Keywords: *Preschool education, early childhood education, technology use, preschool technologies.*

Technology plays a positive role in children's development and learning. Through the use of technology, teachers have access to more innovative and improved teaching methods that allow them to promote learning and create an active learning environment for children. A new survey examined how teachers use technology in their early childhood classrooms. The researchers found that a majority of teachers integrate technical devices in their everyday teaching but that there is a need for support to use the devices more effectively.

During the preschool years, young children are developing a sense of initiative and creativity. They are curious about the world around them and about learning. They are exploring their ability to create and communicate using a variety of media (crayons, felt-tip markers, paints and other art materials, blocks, dramatic play materials, miniature life figures) and through creative movement, singing, dancing, and using their bodies to represent ideas and experiences. Digital technologies provide one more outlet for them to demonstrate their creativity and learning

With the development and high availability of technology, the number of technology users is increased exponentially. The reports of Ofcom showed that the ownership and the use of touch screen technologies such as smartphones and tablets are rapidly increasing and the age of technology users is decreasing. Children have become technologically literate in early ages. In other words, children are accessing to variety of technologies and internet more at younger ages. For instance, in U.S in 2013, 38% of children at or under age 2 used mobile technological devices whereas 10% of them used in 2011. Similarly, a study showed that in 2014, 83% of the children aged between 2 and 10 used high speed internet, 76% played with game console, 71% used smartphones and 41% accessed educational gaming device. Children aged 5 and under use internet once a week if there is at their home and play games on variety of mobile devices such as laptops, smart phones and tablet PCs frequently.

Most of the parents of children between 4 and 7 years old gave their Iphones to their children and allowed them to play games on this device. The report of European Union in 2013 demonstrates that in worldwide children go online in younger ages. In US, 25% of 3 year old children and 50% of 5 year old children connect internet in daily basis and 70% of 3-4 year old children use internet sometimes in Sweden. In another study conducted by Ofcom showed that in U.K, 28% of the 3 and 4 years old children used tablet PCs at their home and 12% were allowed to access Internet via tablets. Additionally, 14% of their parents believed that their children knew Internet more than they do. The average age of Australian children who use internet first time is under 8.

The touch screen devices offers interaction to the young children since it is very easy to use them compared to computers. Unlike computers which requires mouse or keyboard skills, young children can use this device easily due to its touch screen. According to Radich by using tools that become user-friendly, kids are doing a variety of activities such as playing a game, making a picture, recording a story or taking a photo Additionally, mobile devices such as smartphones and tablets are more available to the children compared to computers in nearly 50% of which children are forbidden to use. Holloway et al. state that there is an increase in the availability of tablet computers for the young children age 6 and under by citing a report which demonstrates that in Sweeden 50% of the 3 and 4 age-year-old children use tablets and inv Norway, 23% of the children at 6 and under use them[1].

In 2011, 38% of the children under eight used mobile devices whereas in 2013 72% used it. This situation also takes the interest of the companies and inspired them to develop special technologies for the young children. They designed technology in order to develop specific skills such as literacy skills of the young children and encourage their parents to buy them in order to develop the skills of their children. As stated by Gutnick et al.point out, educators and media developers state that as prices drop, more families will use these devices. Further, they note that if İTunes is not a market for children, an essential proportion of the pre-eminent 100 educational apps on İTunes involved in children's content. But the ease of their use brings an important question about how and when these technologies should be served to the young children.

This issue poses a modern-day dilemma to the parents since their affordances and availability is increasing at homes of young children. Hence it calls researchers to investigate when and how these technologies should be used in early education context.

The little empirical evidence available suggests that teachers are increasingly incorporating technology and media into the classroom. Vanderloo (2014) conducted

[1] Aubrey, C., & Dahl, S. (2014). The confidence and competence in information and communication technologies of practitioners, parents and young children in the early years foundation stage. Early Years, 34(1), 94-108. Doi:10.1080/09575146.2013.792789

a systematic review of eight international studies that reported daily screen-viewing in early childcare settings. Results showed relatively high levels of daily screen time, with studies of center-based childcare reporting rates of up to 1.3 h of screen time per day. However, this report may significantly underestimate current technology and media use, as many of the included studies focused solely on TV before the rise of mobile devices. A 2015 report found that over half of United States preschool teachers reported using tablets in class at least once a week (Northwestern University, 2015), and in a 2019 report, preschool teachers' access to technology in the classroom was rising, such that, most had access to the internet (89%), computers (81%), and tablets in the classroom (71%; Pila et al., 2019). A 2016 study from New Zealand shows that over 60% of public kindergartens reported using tablets and computers in the classroom at least weekly (Gerritsen et al., 2016).

In sum, technology and media use is increasingly prevalent during the early childhood years, yet little is known about its use in preschool classrooms, The current study is unique in that it goes beyond prevalence to examine the purposes and contexts of preschool classroom technology and media use, as well as the extent to which the characteristics of teachers, classrooms, and programs may be related to technology and media use. Most prior studies have focused solely on prevalence without examining the extent to which teachers use technology and media for instructional purposes and in teacher-supported contexts. It is vital to fill this gap because technology and media use may be either detrimental or beneficial to children's learning, depending on how it is used. Furthermore, many prior studies are from 2015 and earlier, whereas the availability and accessibility of technology has changed drastically in the last 5 years, potentially increasing technology and media use in preschool classrooms and leading to shifts in the characteristics of teachers, classrooms, and programs that may predict use. Thus, the current study addresses three exploratory aims:

1.Establish the frequency, purposes (instructional or non-instructional), and contexts (teacher-supported or not teacher-supported) for which preschool teachers report using technology and media.

2. Identify whether and to what extent preschool teachers' classroom technology and media use can be represented by distinct classes, and

3. Examine demographic and classroom predictors of teachers' technology and media use.

REFERENCES

1. MARASULOVA, D. (2022). NIGMATULLAEVNA Interactive and Problem-Situational Methods of Teaching English to Children of Senior Preschool Age. Spanish Journal of Society and Sustainability.—Published February, 8, 12-15.

2. Barno, E. (2023). O'ZBEKISTONDA MAKTABGACHA TALIM MUASSASALARINING ZAMONAVIY TIZIMI. Research Focus International Scientific Journal, 2(3), 103-105.

3. Махмудова, Д. А. (2023). ПРОБЛЕМЫ ЦИФРОВОЙ ПЕДАГОГИКИ И РАЗВИТИЕ ЦИФРОВОЙ КОМПЕТЕНТНОСТИ ОБУЧАЮЩИХСЯ. *Лучшие интеллектуальные исследования*, *8*(1), 143-147.

4. Yakubova, Z. Z. (2023). MILLIY TARBIYA ASOSIDA BOLA SHAXSINI RIVOJLANTIRISHDA OILA, MAXALLA VA MAKTABGACHA TA'LIM TASHKILOTLAR HAMKORLIGI. *GOLDEN BRAIN*, *1*(15), 141-147.

5. Ergasheva, B. (2022). TALABALARINING PEDAGOGIK MODERINIZATSIYA SHAROITIDA KASBIY TAYYORGARLIGINI TAKOMILLASHTIRISH. Science and innovation, 1(B7), 401-405.

6. Yakubova, Z. Z. (2023). NATIONAL VALUES OF PRESCHOOL CHILDREN BASICALLY FORMING EDUCATIONAL AND MORAL QUALITIES. *European International Journal of Pedagogics*, *3*(01), 51-55.

7. Ким, И. Н. (2022, October). РАЗВИТИЕ ЭКОЛОГИЧЕСКОЙ КУЛЬТУРЫ СТУДЕНТОВ В СИСТЕМЕ ПРОФЕССИОНАЛЬНОЙ ПОДГОТОВКИ. In *INTERNATIONAL CONFERENCES* (Vol. 1, No. 8, pp. 180-183).

8. Ким, И. Н. (2022). СУЩНОСТЬ И СОДЕРЖАНИЕ ЭКОЛОГИЧЕСКОГО ОБРАЗОВАНИЯ ДЕТЕЙ ДОШКОЛЬНОГО ВОЗРАСТА. In *Информационные технологии и цифровое образование: приоритетные направления развития и практика реализации* (pp. 25-28).

9. Sadriddinovna, R. B. (2022). FUNDAMENTALS OF DEVELOPMENT OF STUDENTS'LEARNING COMPETENCIES IN THE COURSE OF PEDAGOGICAL PRACTICE. Thematics Journal of Education, 7(4).

10. Sadriddinovna, R. B. (2022, October). SIGNIFICANCE OF DEVELOPING STUDENTS'LEARNING COMPETENCIES IN THE PRACTICE. In Archive of Conferences (pp. 35-37).