

Use Of Technology Skills In The Education System And Development Of Digital Skills

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In the globalizing world, the need to benefit from digital technologies that have been integrated into the education field, like other fields, demands renewed technology skills from the educators. In order to improve the quality of the education system in recent years, a number of education reforms have been implemented, including: renewing the academic institutions, modernizing the activities of teachers, and improving the course process and school infrastructure. It is also passed. As a result of these reforms, achievements have been achieved in the field of education at the international level. The educational reforms that have been put forward will result in the preparation of the best educated students and those who are educated both in our country and in other developed countries. However, there is still a need to renew the existing high academic and social-economic strategies in school systems. (Babayeva, Z. 2023). As in all fields, discussions in this field lead to both good results and mixed and contradictory ideas. (Ivie, Pettitt, Moses, & Allen, 2020; Young, Kolubinski, & Frings, 2020). Because in some cases, contradictions arise between our disdain for numerical technologies and the opportunities we have. Sometimes positive or excessive use is encountered (Odgers, 2016; Orben & Przybylski, 2019; Przybylski & Weinstein, 2017; Young et al., 2020). This is about taking advantage of technologies, whether in education or in business. Studies show that the increasing use of the Internet, technologies, and virtual games by children and young people is often associated with social discomfort and a number of risks (Gross, Juvonen, & Gable, 2002; Halpern, Piña, & Vásquez, 2017). For example, cyberbullying (Craig et al., 2020; Devine & Lloyd, 2012; Viner et al., 2019), dangerous sexual behavior (McBride, 2011; Vannucci, Simpson, Gagnon, & Ohannessian, 2020) and psychological pathologies (Borzekowski, 2006; McBride, 2011) to show. The impact of all these on children's academic performance has been confirmed by various factors (Wells, 2006). For this, importance should be given to family and school cooperation and the teaching of spiritual values (Babayeva, Z. 2023 AEM meq). In this way, it is possible to benefit from various training methods, creative learning and teaching methods. By using the principles of the Montessori method and the STEAM education format at the desired age, freedom of discovery, self-confidence, independence, creativity, the ability to dream and order are developed in students, can know. Children are at the center of attention of Montessori education. Montessori education allows children to learn at their own pace and style (10). In our opinion, using the main principle of this method as a strategy in higher grades and higher education can increase the level of education. In addition, the comprehensive use of technologies is beneficial to social integration, to the productive use of both free time, free learning and self-development (Hatlevik & Christophersen, 2013; Hollingworth; Mansaray, Allen, & Rose, 2011; van Deursen & van Dijk, 2014).

Experience shows that sometimes it is their goal to benefit from a large number of technologies for children and young people (Babayeva, Z. 2023) and to be exposed to them and benefit from them. It depends on the location and approach style (Clifton, Goodhall, Ban, & Birks, 2013). Some scholars (McBride, 2011) emphasize the benefits of children's use of the internet, such as expanding familiarity and social relations, gaining technical skills, and increasing respect for themselves. The latter confirms with facts the increase of social capital, social support, risk-free personal experience and opportunities (Best, Manktelow, & Taylor, 2014). Creating a favorable educational environment among the general public and students is one of the important factors. (Babayeva, Z. 2023) It is known that the innovative use of numerical technologies is also useful in the field of education and finance, and in meeting social-economic needs (Stephens-Reicher, Metcalf, Blanchard, Mangan, & Burn p., 2011). Time will be spent and schools will be able to explain the dynamics and scope of technologies in order to meet the need to learn and teach by incorporating educational technologies into the education system. It is still necessary to have a clear numerical framework. Thus, as the school approaches numerical development

(Labbé, Matamala and Donoso, 2010), in addition to the creation of the conceptual and analytical framework, there is also a difference in the various contexts observed in the first place. It was accepted as a perspective that offers sound methodology. In theoretical terms, the components of the numerical strategy have undergone a series of changes through the planning and programming of the developers, becoming larger and more competent, developed or perfected. It may rise. In fact, the school's approach to numerical development has gone through many levels and has been the result of the synthesis of various strategies (ITU, 2009, 2017; Minges, 2005; van Deursen et al., 2017). The desirable or undesirable consequences of non-uniform exit to OIC are called the "first generation numerical gap" (Selwyn, 2004, 2010; Talae & Noroozi, 2019). The second direction in this field is towards the effective inclusion of the OIC in the training process and the identification of approaches and tested experiences (Chauhan, 2017; Claro et al., 2018; Fullan, 2007; Huberman & Miles, 1984; Kozma, 2003; Petko, 2012; Scherer, Siddiq, & Teo, 2015). Examples of these can be given: the relationship between contexts and education transformation (Kozma, 2003; Kozma & Vota, 2014; Wagner et al., 2005) and the development and innovation of teacher experience (Hepp), Prats, & Holgado, 2015; Law, Pelgrum, & Plomp, 2008; Nakagaki, 2014; OECD, 2010). The third field of study is both schools (Huberman & Miles, 1984; Krumsvik, 2014; Sandholtz; Ringstaff, & Dwyer, 1997) and education system levels (Claro & Jara, 2020; Scheuermann; Pedro, 2020). 009; Severin, 2010, 2016; YUNESKO) was passed from the exam. To benefit from the numerical skills in education - to pay special attention to the education-training component, to support and enrich the education process, special teachers and staff are employed. Members are considered to benefit from the OIC (Laugasson, Quaicoe, Jeladze, & Jesmin, 2016).

The purpose, physical location and fruitful use of technology in education institutions should also be taken into account, as well as the relevance of its various agents to its potential use and benefits (Drossel, Eickelmann, & Vennemann, 2020). Among the modern educational technologies used in the field of education, OIC tools, VR glasses, etc. Learning the most biological sciences helps the development of the fields of biology, medicine, physics and chemistry. For example, computer technology is used to demonstrate some objects and events that are not possible to observe due to various causes in Biology courses. Their voices play a role without a bark. For **example:**

- if they are not big (structure of the core)
- *tezötürüändirsə* (process of transmission of nerve impulse from nerve impulse to neuron)
- if it is not possible to observe (development of the embryo)
- to explain, or rather to think about, *inkkæbbdirə* (zula syntezi)
- If it is not possible to demonstrate (deep water animals, alpine gardens) etc.

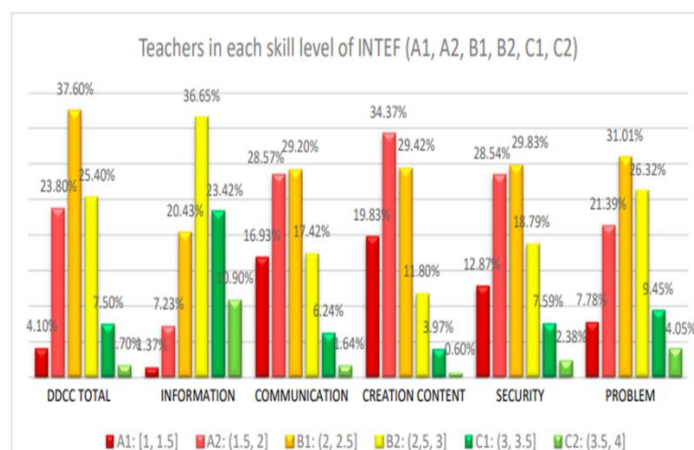
For this reason, more importance should be given to strengthening the conditions for the use of ICT in education institutions (9). Because after finding comparative results, the mere presence of technology in the school system does not ensure its effective use (Hinostroza et al. ., 2009; Sánchez & Salinas, 2008). In order to improve the management of IT in all schools, the specialization of the ICT coordinator or persons in charge of the computer center has helped to create a digital environment. These technologies, which have been integrated into the field of education, have created revolutionary changes in the development of biological science and medicine. In general, ICT infrastructure refers to all the technological equipment that provides fixed or mobile connectivity, networking, computing and IT solutions or services available on school premises. IT management consists of all the actions a school undertakes to manage, use and benefit from its technological resources in order to efficiently allocate them and support the necessary administrative and educational work within the institution. Therefore, in order to determine the level of development of these different dimensions, it is very important to consider aspects related to the quantity, scope, availability and operational status of the technology available in the school (M. Claro et al. (2018).

The initial strategy consisted of equipping schools with ICT infrastructure and connecting to dedicated space. This place was a computer lab, later colloquially known as "Sala Enlaces" ("Enlaces Classroom"). For example, in Chile, the approach taken to conceptualize and measure school digital development consists of three dimensions related to the inclusion of technology in school: ICT infrastructure, IT management, and educational use (MINEDUC, 2013). Chile implemented the National Census of Education Computations on two separate occasions, in 2008 and 2012. This was mainly due to the implemented public policies (Donoso, 2010, Jara, 2007), but also due to the transfer effect of explosive and constant technological development from society in general. There is a growing concern about key aspects of students' subjective well-being in a school system that continues to be highly segregated and experiencing progressive digital development (Alfaro et al., 2016; López et al., 2017, López et al., 2014; OECD, 2017). increasing technologicalization in schools and society as a whole

can be positively or negatively affected (Cabello & Claro, 2017; Cabello, Claro, Rojas, & Trucco, 2020). No matter how important the use of technology is, attention should be paid to maintaining communication between the teacher and the student. The isolation of people in a virtualized society already creates an SOS situation. However, in order to examine the subjective well-being of schoolchildren from a socio-ecological point of view, it is essential to observe the immediate social context in which they operate and how two closely related concepts are expressed. The social well-being of school members is measured in that specific scenario, adapting the tools to the school context (López et al., 2017, López et al., 2014). School climate is defined as a multidimensional construct that includes the perceptions, thoughts, and values that members of the educational community place on it, as well as the social relationships that occur within it (López et al., 2014). School climate is a property derived from the perceptions of various agents that have variables related to the modality, type, frequency, and depth of social interaction and the individual behaviors of members of the educational community. Therefore, it can be expressed as spaces for the consistent application of norms and attitudes among peers, on the one hand at the classroom level, and on the other at the school level (López et al., 2018). students and teachers (López, Bilbao, & Rodríguez, 2012). A favorable or unfavorable perception of climate is, in turn, closely related to a school's ability to proactively and democratically manage environments conducive to learning and community well-being (Mena, Becerra, & Castro, 2011). All that being said, recent research in this area has focused mainly on children and adolescents' screen time and social media use (Büchi, Festic, & Latzer, 2019; George et al., 2020). Recent research (Beyens, Pouwels, van Driel, Keijsers, & Valkenburg, 2020) focuses on social media use at different times of the day, including during school hours. However, it does not control for the level of digital development of businesses, nor does the access to technology they provide affect how teenagers use technology every day. In other words, the evidence shows that the subjective well-being of secondary school students is closely related to the social well-being and school climate in their school, but it is not clear whether the digital development of the school is a relevant part of the phenomena. In other words, higher digital development may open opportunities for students' subjective and social well-being (Cabello et al., 2020) or reproduce inequalities that already exist in or stem from schools (Helsper, 2017; Helsper). & van Deursen, 2017; Helsper, van Deursen, & Eynon, 2015; Livingstone et al., 2017). One important point to consider is the digital skills of teachers. Because what kind of new lesson format can we talk about if the teacher does not have the knowledge and basic skills of new technology and programming. We can show several schemes (Scheme 1., Scheme 2.) obtained from the conducted studies as examples:

Scheme 1.

Teacher's digital skill level



A famous saying says: "The future has come a long time ago. It's just that it was not distributed properly." Meaning: for those who see the future in time, the future is built from today. New technical tools, specialists and students living and working in the Internet era are interested in the development of design and engineering skills with the integration of the knowledge they have received today. Interesting work done by peers, "ENACTUS", "Start-UP", "STEM Azerbaijan", etc. today's youth who welcome projects - Why didn't this come to my mind? - Can I do better than that? - by following their ideas, they set their sights on new projects and achieved great achievements. The most important requirements of today are: students who can give ideas should be trained,

conditions should be created for industrial-minded students, students should bring the idea to the class Babayeva, Z. (2023) Creating the simplest product is one of the main principles of XXI century education. In addition to all these, there are also requirements and skills expected from those who teach and learn (Scheme 2.)

Scheme 2.

21st century skills



It is believed that the professions of the future will be shaped by the STEAM method and its achievements. Because the world we live in now has entered development with the products of innovation, difference, creative and quick thinking. Thanks to modern training methods and tools, cheaper, faster and less costly thought products are being made available to the society. For example, 3D printers and the creation of recycled and other items that are the product of imagination, planning and design thinking are gratifying:

- Prosthetic hands for children cost thousands of dollars and have a short lifespan. Thanks to 3D printing, it is possible to make a prosthesis for less than \$40! Organizations like www.enablingthefuture.org make and distribute prostheses for free.
- Microsoft created a special joystick for X-Box so that children with different types of disabilities can play at the same level as other children. Makers Making Change is an international volunteer organization that develops special devices for people with disabilities.
- Most of the props used in movies like Star Wars and Avengers are 3D printed.
- 3D Systems, in cooperation with the Culinary Institute of America, participated in the development of the ChefJet Pro 3D printer, which prints sweets and food in 3D.

Design thinking is at the heart of design-based learning. The concept of design thinking was first developed by the American economist Herbert Simon in the second half of the 20th century. Design thinking is currently widespread as a fairly effective methodology used in solving various problems and issues. Design thinking is a methodology that requires the use of creative tools in addition to analytical and technical tools when searching for the optimum. Since all areas of our life have become digitized, no activity has become impossible without modern technological skills. The fact that teaching needs such an online mode requires the improvement of digital activity. However, considering the problems happening in the world, we should know that societies do not need "knowledgeable monsters"!!! People should not be discriminated against, and efforts should be made to raise generations that are just and try to save the world. But equality may not always be fair. For this, those who work in the field of education should be more sensitive, fair, knowledgeable, compatible with the modern world, look at the future with love, and have a rich outlook. Because if the teacher misses learning, he turns into an ordinary blackboard (9) and it does not benefit anyone.

REFERENCES

1. Babayeva, Z.Y., (2023) Concept of digital education in biology teaching. Azerbaijan Science Center. "Ancient Land" International online scientific journal. 2023 / Volume: 5 Issue: 12 /18-24 DOI: <https://doi.org/10.36719/2706-6185/30/18-24> <https://aem.az/index.php?newsid=3461>

2. Babayeva, Z.Y. (2023) Perspectives of using 3D technologies in teaching biology. *Revista Universidad y Sociedad/Universidad @cienfuegos/ VOS – Havana, Kuba*, <https://rus.ucf.edu.cu/index.php/rus/article/view/4155>
3. Babayeva, Z.Y. (2023) Determination of teaching strategies considered necessary in teaching biology. *Dergi Park Akademik. Tübitak -Ulakbim. International Journal of Educational Spectrum* <https://dergipark.org.tr/tr/journal/3734/article/1273211/author/files;> <https://dergipark.org.tr/tr/download/article-file/3044384>
4. Babayeva, Z.Y., (2023) Creating suitable learning environments for the effective organization of STEM method in biology lessons. *SIS journal. Slovak International Scientific Journal. Slovakiya*, 2023, No71, s. 33-38 <http://sis-journal.com/wp-content/uploads/2023/05/Slovak-international-scientific-journal-%E2%84%9671-2023.pdf>
5. M. Claro *et al.* (2018) Teaching in a Digital Environment (TIDE): Defining and measuring teachers' capacity to develop students' digital information and communication skills. *Computers and Education*
6. Digital technology use, technological self-efficacy, and subjective well-being among North Korean migrants during the COVID-19 pandemic: Moderated moderation 2023, *Digital Health*
7. The Policy of Inclusion of Digital Technologies in the Chilean School System. A Systematic Review 2023, *Pensamiento Educativo* The term well-being in Technology-Enhanced Learning: A systematic literature review
8. Mediation of Problematic Use in the Relationship Between Types of Internet Use and Subjective Well-Being in Schoolchildren
9. Zərövşən Babayeva | WWW.YAZARLAR.AZ
10. <https://bebezade.com/blogs/news/montessori-metodu-nedir>