Interactive Ways of Using Digital Technologies

Islamova Madina | The Teacher of the Department of Practical German, University of World Languages

ABSTRACT

One of the fundamental components of the United Nations' sustainable development 2023 agenda is quality education. It aims to ensure inclusive and equitable quality education for all. Digital technologies have emerged as an essential tool to achieve this goal. These technologies are simple to detect emissions sources, prevent additional damage through improved energy efficiency and lower-carbon alternatives to fossil fuels, and even remove surplus greenhouse gases from the environment. Digital technologies strive to decrease or eliminate pollution and waste while increasing production and efficiency. These technologies have shown a powerful impact on the education system.

Keywords: | Digital technologies, Digital classroom, Education, Students, Teaching .

Interactive Whiteboards are used by teachers in order to support teaching in front of a class. These interactive whiteboards are multifunctional devices. They display output on the screen but also take input as a teacher can use it as a touchscreen to write notes and input commands. This is beneficial over using a traditional whiteboard as any notes taken on the board can be saved to a central location that can be accessed by students to use outside of the classroom. You can also more easily & neatly edit the notes taken and bring in content from other software applications.
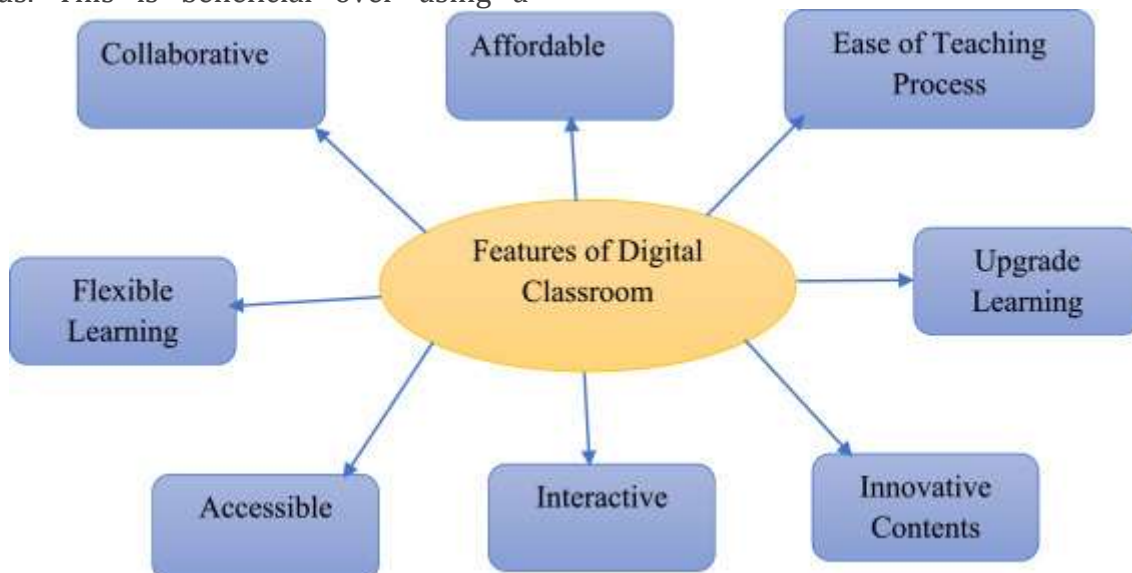
Virtual Learning Environments are also used in schools. This is like a website that allows teachers to upload resources to the site, such as presentations & worksheets so that they can share them with students. This allows students to access their learning at home so they can prepare for lessons and exams. It also allows the students to submit work to their teacher for

assessment, instant message teachers for help and take part in discussion forums with fellow students. Other than uploading work to share with students, teachers can then mark any work submitted by students on the VLE so the students can access their feedback wherever they are. In 186 countries across the world, the COVID-19 pandemic deprived 1.2 billion children of the traditional school experience. This unexpected upheaval has forced teachers and parents to come up with reasonable, safe, and educational alternatives to brick-and-mortar schools. This is especially challenging for younger kids who can't learn on their own. Educators are turning to online learning to substitute the classroom experience. The concept of educational technology was gaining popularity even before COVID-19.

One of the main areas we use digital devices to access education & training is through online learning websites, like KnowItAll Ninja. We can access these sites through the use of personal computers, or through mobile devices. This allows you to access visual content like videos & animation, as well as audio explanations of topics and terms. We use entertainment systems as well as personal computers and tablets to watch film & TV, listen to music & play video games. In particular, internet streaming has changed the way we access tv, film & music, as we often no longer store the files on our own computer and instead play them straight off the internet. This has made accessing this media content cheaper and saves us on hard disk space. Digital media players are now often used to access streaming content on our television set.

Video game consoles are also a very popular home entertainment digital device that we use in our personal lives. This allows us to play games online with our friends without needing to be in the same location. We also play video games on mobile devices and personal computers too. A drawback though is that this growth of digital content has also seen a rise of piracy, where tv, films, music & games are illegally transferred over the internet for free. Another major way we use digital technology is using personal computers & tablets for online shopping & online banking. Online retail websites, like Amazon, allow us to purchase pretty much anything we can think of, often even being able to have the products delivered the same day. This is so popular that most high street shops also have an online retail website. You can even buy your groceries from the supermarket online.

Online banking allows us to manage our finances, including checking our bank statements and transferring money. We can do all this from our own home without ever needing to visit the bank. Mobile online banking has become so popular that most banks have a dedicated mobile app. Online shopping and banking save us the time and money involved with travelling to the shops and our bank. It's also extremely helpful for people who live in remote locations and for people with disabilities who would have difficulty in getting to the high street. We use personal computers and mobile devices all the time to access social networking sites like Facebook in order to socialise with our friends and family.

These sites allow us to create 'Networks of Friends' where the important people in our lives are able to see our views, opinions, life events & photos when we share them on these sites. We can even message people directly as most social networking sites have instant messaging features built in. Social networking sites also allow you to create or join groups to talk to people with similar shared interests, such as a tv programme or a football team. There are some drawbacks to social networking though. They can be seen as very distracting and time-consuming which can affect productivity in the workplace. Some believe it has reduced the amount of face-to-face interaction we have on a daily basis too. Instant messaging software allows us to hold real-time text-based conversations with others. In many cases, this has replaced the older SMS text messaging we use on phones, with people using instant messaging apps like Whatsapp instead.

This is because these apps make messaging much cheaper as they are normally completely free to use. They also allow us to send group messages, such as holding a conversation with all our family members or a group of friends. Finally, it also allows us to

attach files, such images, and hyperlinks to web pages. Instant messaging is proprietary, meaning you need the person you are messaging with to have the same IM app as you.

This can lock you into a type of device if the app isn't available on other devices. Apple iMessage, for example, can only be used on Apple devices.

27 Excellent Ways to #EdTech & Make Your Classroom Even More Awesome!
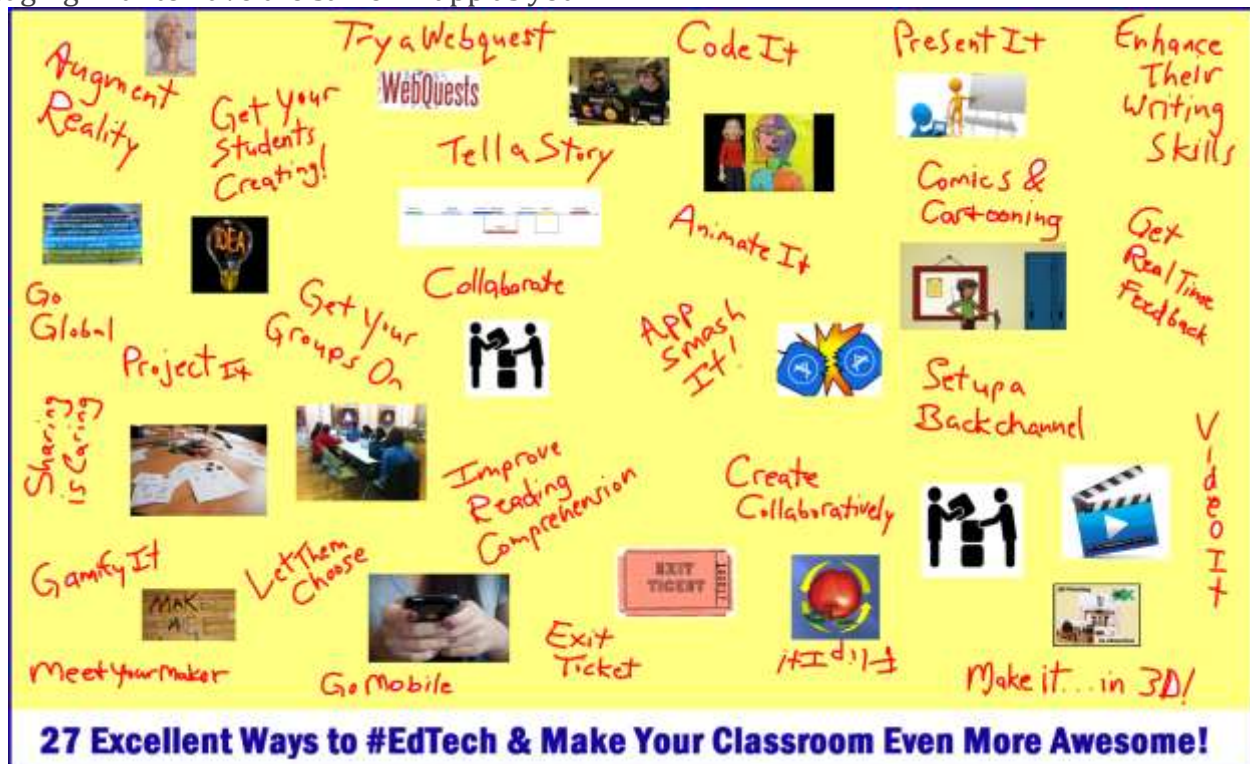
The idea of learning through play dates back to the mid-19th century. Game-based learning relies on games specifically designed to educate using highly interactive and engaging content that is aligned with the curriculum. Games have been used to learn a variety of subjects, including:

• Typing, with software like TypingClub: a game featuring different keyboard layouts and finger positions. The game stores a user's results and compares them to past performances.

• Math, with games such as Math Snacks: this game includes a series of activities that support math curriculum. It addresses aspects such as scale factor, ratio, measurement, etc.

• History, as exemplified in Mission US: an adventure-style game where players assume the role of people during various critical points of US history.

These games are popular as they offer a safe environment to attempt something new and fail. For some children, it can be frightening to fail in public settings like the classroom, while failing in a game has comparatively low stakes.

Interactive learning is a hands-on way of transferring knowledge as opposed to passively listening to a lecture or reading assigned material. Children might perceive passive learning as boring because their opportunity for involvement is minimal. This type of education also has limited options for assessing student comprehension. On the other hand, interactivity captures students' attention, involves them in discussions, and stimulates critical thinking. In a conventional school environment, educators generally alternate active and passive methods of teaching. As the pandemic is forcing us to rely on online education, many teachers feel it is important to simulate the familiar school atmosphere as much as possible. Kids who are struggling to understand a particular topic can be hesitant to ask for help. If they are studying online from their houses, the teacher cannot see their puzzled faces and will not be able to step in to help. Interactive technology presents a solution employing 3D cameras, which recognize facial cues and eye direction. After picking up signs of confusion or disinterest, the educational program can either slow down the lesson, repeat the explanation, switch to

another theme, or alert the teacher. Preschool-aged children and even toddlers who display curiosity toward learning do not need to wait for the first year of school. They can already use interactive technology to learn how to read, count, draw, etc. Furthermore, there are interactive programs, which use AR to help kids immerse themselves in the concepts they are trying to learn. Gamified learning has many benefits: it increases memory capacity, develops strategic thinking, and improves hand-eye coordination. Below are some examples of game-based educational platforms:

• Sumdog is an online learning platform that offers younger children (age four to eleven) challenging and fun games in math and other fields. Teachers can use this platform to monitor progress and assign homework.

• Kahoot! allows teachers to create interactive fun games for their students based on multiple-choice questions. Children can sign in and access the game on their personal devices.

• GoNoodle is a platform for gamified physical exercise. It encourages kids to get up from their chairs and mimic the movements displayed on the screen. In addition to regular exercise, this game introduces children to the concepts of mindfulness and meditation.

When children are studying online, they do not have the chance to talk to their classmates during breaks. Therefore, it is vital to foster interactions through online platforms. Collaboration helps children brainstorm creative ideas, learn from each other, and boost their self-confidence.

• GoBoard is an online tool, which enables video chatting and offers an interactive canvas. Children can create a GoBoard on any educational site, send the link to a friend, and collaborate by writing notes.

• ven though online learning initiatives mostly focus on preschool and school-aged children, babies and toddlers can also benefit from baby tech learning solutions under the supervision of an adult. They are curious and drawn to exploring, pushing buttons, and switches. However, it is advisable to let them experiment with technology in the context of human interaction, such as video interaction with a remote relative.

• This interactive experience can be used to teach babies new vocabulary and show pictures that the baby will not encounter otherwise, such as photos of children from different countries.

• One example of such technology is Toddler Flashcards by iTot Apps. The app is designed for iPhones and iPads. With this app, parents can teach their babies numbers, the alphabet and words. Another example of baby-friendly technology is Webee's four-key keyboard designed to introduce toddlers to computers and let them play educational games.

• The key to these learning experiences is interactivity between the child and the technology. There is little proof that passively watching videos has a positive educational effect.

Augmenting online learning with interactive activities will result in a more fun and diverse way of receiving education. However, as with online learning in general, there are some pitfalls to consider.

• Technology-related issues Not all students have the technology and reliable internet connection needed to participate in digital learning. These resources vary significantly across countries. While in Switzerland and Norway, 95% of students have a dedicated computer for school, in Indonesia, this number is reduced to 34%.

• User Experience-related issues Some believe that moving to online education without training and sufficient bandwidth will result in poor User Experience. Developing platforms with intuitive User Interfaces and offering formal training can help partially resolve this concern.

• Environment-related issues Kids require a structured environment to maximize learning effectiveness. Therefore, parents will need to replicate the situation children had at school.

References

1. J. Keengwe, M. Bhargava, Mobile learning and integration of mobile technologies in

education, Education and Information Technologies 19 (4) (2014) 737–746.

2. S. Dreimane, R. Upenieks, Intersection of serious games and learning motivation for medical education: A literature review, in: Research Anthology on Developments in Gamification and Game-Based Learning, 2022, pp. 1938–1947.

3. P.L. Rogers, Barriers to adopting emerging technologies in education, Journal of educational computing research 22 (4) (2000) 455–472.

4. Haddad, W. D., & Draxler, A. (2002). The dynamics of technologies for education. Technologies for education potentials, parameters, and prospects, 1, 2-17.

5. Baratova, D. A., Khasanov, K. N., Musakhonzoda, I. S. O., Tukhtarova, M. Y. Q., & Uktamov, K. F. (2021). Econometric Assessment of Factors Affecting the Development of Life Insurance in Uzbekistan. REVISTA GEINTEC-GESTAO INOVACAO E TECNOLOGIAS, 11(2), 1123-1138.

6. Nazarova, S. A., Mirzarahimov, B. H., Narmanov, U. A., Ortikov, O. H., & Uktamov, K. F. (2021). The Role Of Uzbek Tourism Culture And Its Historical And Cultural Transformation Processes In Economic Development. Int. J. of Aquatic Science, 12(3), 2776-2785.

7. Nasrullayevich Khasanov, K., Alisherovna Baratova, D., Fakhriddinovich Uktamov, K., & Bokhodirovna Abdusattarova, D. (2021, December). Improving the Practice of Attracting Financial Resources from the International Capital Market to the Corporate Sector of the Economy. In The 5th International Conference on Future Networks & Distributed Systems (pp. 718-727).

8. Уктамов, Х. (2020). Способы обеспечения экономической безопасности промышленных предприятий. Общество и инновации, 1(1/S), 405-412. https://cyberleninka.ru/article/n/spos oby-obespecheniya-ekonomicheskoy-bezopasnosti-promyshlennyh-predpriyatiy