система информационной подготовки носит непрерывный и комплексный характер; если интеграция педагогических и инфортехнологий образовательного машионных является основой процесса; если преподавательский состав обладает высоким уровнем профессиональной подготовки в области информационных и компьютерных технологий; если содержание учебных планов и программ соответствует тенденциям развития информационных технологий в конкретных областях; если обеспечен опережающий характер содержания профессионального образования с учетом развития средств информационных перспективы технологий и средств автоматизации учебного процесса.

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Kaminskaya T., Platonava A. THE IMPORTANCE OF EDUCATIONAL TECHNOLOGY IN TEACHING AND LEARNING

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Abstract: Education technology is the new hype of the world, which is rapidly gaining worldwide popularity. Commonly known as EdTech, it may be defined as a combination of education and technology. This article covers the role and potential of educational technology at the higher education institutions, as well as key technologies that disrupt education in 2020.

Fast forward to the current day, the pandemic which forced lock downs around the world since March 2020, is still rampant, and the world is still in chaos. Nationwide closures forced educational institutions to temporarily close their doors, what affected nearly 1.6 billion learners in more than 190 countries and all continents (United Nations, 2020). This, in turn, has had a tremendous impact on the educational sphere, leading to a number of growing trends in the educational technology industry. For instance, countries that were the first to be heavily impacted by the virus, such as China, Italy and South Korea, have rapidly shifted to temporary home-schooling via online educational tools and platforms (Tam and El-Azar, 2020). A discussion about the top tech

trends that disrupt the education must first begin with the explanation of the phenomenon of the educational technology.

Definitions of modern-day educational technology has evolved over the years as a variation of ways of dealing with learning processes, a conceptual framework, theory and practice, and the latest study and ethical practices of dealing with technological processes and resources. The field of an educational technology as an academic domain is relatively new, and many debates exists as how to clearly define this sector. Simply speaking, EdTech can be described as a combined use of hardware and software, educational theory, and practice to facilitate learning and teaching processes. That includes online and mobile learning, learning theory and computer-based training. Educational technology has been described as a persisting initiative that seeks to bring learners, teacher, and technical means together in an effective way (Mangal, 2009). EdTech is based on theoretical knowledge that emerges from various disciplines such as psychology, sociology, education, communication, computer science and artificial intelligence.

Integrating educational technology such as augmented reality (AR) and virtual reality (VR) into learning and teaching process is essential to the advancement of educational sector in the digital age. Virtual reality provides users with an opportunity to completely immerse in a computer-generated reality often with headsets or gloves (primarily used in 3D movies and video games). VR allows students to be placed directly into a simulated learning environment that uses 3D graphics. San Diego State University has used virtual reality in teaching numerous disciplines since 2017, so to help them understand theoretical concepts more easily and keep them engaged in learning. Augmented reality on the other hand only adds to user's vision images or a content, such as characters on top of video or camera viewer. AR can deliver a unique experience to students, from the area of science and human anatomy. Augmented reality may be accessed using much more common devices, such as mobile phone, and does not require an expensive equipment. That makes AR more accessible for the students, as nowadays, 80 % of young people own smartphones (Kovach, 2020). In the last few years, both technologies have significantly evolved to impact real-world applications. Reports by Markets and Markets (2019) propose that the augmented and virtual reality in the education market is expected to grow from USD 9.3 billion in 2018 to USD 19.6 billion by 2023. Augmented and virtual

reality have a potential to create different opportunities for lecturers and students, make learning fun and exciting.

Over the past few years blockchain technology have received significant attention from the universities. The Gartner 2019 CIO Survey revealed that 2 % of higher education respondents have already deployed blockchain. Chances are, it will become an integral part of the educational institutions in the years to come. It like other technologies allows developing new directions and reaching new levels through greater transparency, enhanced security and easier traceability. Blockchain platform may be used as a safe file storage. Students and lecturers who write stories or novels, or create music, documentaries or other short films could publish their creations on the blockchain. This would not only bypass the hassle of finding a publisher, but also protect against piracy and improve rights management. Many blockchains are also smartcontract capable. That means that lessons and courses can be programmed into the blockchain and executed automatically when certain conditions are met. For example, a lecturer could set up tasks for students. The completion of each task could be automatically verified by the blockchain's smart contracts. Upon completion of all tasks, teachers could receive payment with crypto tokens and students could be awarded credits. Entire courses could be laid out this way. The most ambitious uses for blockchain in higher education include improvement of the record keeping of degrees, certificates and diplomas; increasing efficiency in existing business processes; creation of a new market for digital assets and creation of a disruptive business model. For example, The Massachusetts Institute of Technology started issuing graduate certificates on a blockchain app in 2017. It has successfully delivered over 2,000 blockchain-based credentials. The main aim behind this project is to prevent degree fraud and to keep university's standard of excellence.

EdTech is a big sector, which has a dramatic impact on how people obtain knowledge and prepare for professional lives. Therefore, it is very important for educational stakeholders to keep an eye on current technological trends and what they mean for teaching and learning practices.

LIST OF REFERENCES

1. Kovach, N. (2020). Augmented Reality in Education. Available: https://thinkmobiles.com/blog/augmented-reality-education/. Last accessed 10th Aug 2020.

2. Mangal, S.K.; Mangal, Uma (2009). Essentials of Educational Technology. New Delhi: PHI Learning Pvt. Ltd. p. 3..

3. Markets and Markets. (2020). Augmented Reality and Virtual Reality Market. Available: https://www.marketsandmarkets.com/ Market-Reports/augmented-reality-virtual-reality-market-1185.html. Last accessed 15th Oct 2020.

4. Moore, S. (2019). 4 Ways Blockchain Will Transform Higher Education. Available: https://www.gartner.com/smarterwithgartner/4-ways-blockchain-will-transform-higher-education/. Last accessed 21st Aug 2020.

5. Tam, G and El-Azar, D. (2020). 3 ways the coronavirus pandemic could reshape education. Available: https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/. Last accessed 20th Oct 2020.

6. United Nations (2020). Policy Brief: Education during COVID-19 and beyond. 10th ed. New York: United Nations. – P. 2–8.

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ФАКТОРЫ, ВЛИЯЮЩИЕ НА СОСТОЯНИЕ ПСИХОЛОГИЧЕСКОГО КЛИМАТА СТУДЕНЧЕСКОЙ ГРУППЫ

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Много столетий психологами, социологами и философами предпринимались усилия по изучению социально-психологического климата. Методологические и концептуальные подходы, оригинальные методы диагностики социально-психологического климата, конкретные пути регуляции социально-психологического климата, конкретные в работах и трудах Б.Д. Парыгина, А.В. Петровского, К.К. Платонова, А.Г. Ковалева, В.К. Панферова, Е.В. Шороховой, О.И. Зотовой и ряда других.

Социально-психологический климат – это достаточно устойчивое состояние коллектива, внутри которого лежат как взаимоотношения коллектива, так и отношение его к труду. Вследствие своей