THE IMPORTANCE OF USING SMART TECHNOLOGIES IN THE EDUCATIONAL PROCESS

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Annotation: *This scientific article contains information about the changes taking place in the educational system today and the proper organization of the educational process.*

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The subject of educational technology includes technical and pedagogical methods and tools that increase the effectiveness of reading and teaching. This is the basis of the success of the e-learning revolution in recent years. Technology-based learning outperforms traditional classroom-based learning in terms of quality by providing a variety of opportunities and practices that stimulate motivation and lead to fun, effective, and meaningful learning.

Learning is characterized by stable and continuous changes in what a person or group of people know and can do. Tracking changes and learning progress is one of the things that educational technologists need to understand with teachers and students. If we look at the history of educational technology, technologies are constantly changing and updating.

What might some of the emerging technologies look like? In the devices and hardware category, 3D printers and wearable computing devices come to mind. 3D printers are already having an impact with the so-called makerspace movement, where students use a 3D printer to create and experiment with an object or artifact and engage in a design-based learning context. . Wearable devices such as smartwatches and Internet-connected head-mounted displays are available and of course being used in a variety of learning and teaching situations.

In the category of processes and applications of advanced technologies, learning analytics, customized learning systems and personalized learning in small-scale situations provide a robust and dynamic representation of the learner in terms of prior knowledge and performance, interests, motivation, preferences and even mood. are being tested as extensions of previous smart tutoring systems that take into account Technology-based learning, augmented and virtual realities are among emerging technologies that are slowly finding their way into learning and teaching situations.

How will new and emerging technologies affect educational content? Some envision a world where the accumulated knowledge and wisdom of humanity is accessible to all, along with automated learning, learning devices and mechanisms. Some even predict the loss of schools and teachers in such an environment. While we clearly recognize that formal learning environments and informal learning resources and environments are changing, we do not have a clear picture of the future. Changes in the educational context have led to the rapid growth of online education. Hybrid learning environments that combine online resources and activities with face-to-face contexts are now commonplace in many institutions of higher education, as well as in some continuing education settings. With the availability of online resources for learners, often free of charge, many educators are adopting the practice of earning a living through social media. This involves assigning readings and related discussions outside the classroom, sometimes in an Internet-based environment, and using class time to practice students applying what they have learned to problems outside of class, sometimes working in small groups. Includes Such a situation allows the teacher to move from the role of the primary provider of information to the role of providing constructive and meaningful feedback to improve the transfer and application of knowledge to solve meaningful problems.

Other global changes are taking place in educational technology. While literacy used to focus on reading, writing, and basic arithmetic, the concept of literacy has expanded significantly to include digital literacy, which encompasses multiple literacies (e.g., information literacy, technology literacy, visualization literacy). Took This means that the concept of basic skills, which are usually taught in primary and secondary schools, has been expanded, and supporting the development of digital literacy skills using technology has become one of the obvious approaches.

Pedagogical approaches are also changing. Since the introduction of interactive learning methods in the last quarter of the last century, there has been an increasing focus on learning in practice, sometimes it can be called real or situational learning. Enhanced and virtual animations, immersive environments have greatly increased the power of interactive simulation. As a result, such applications are expected to continue to influence the development of knowledge and experience.

In the field of educational technology, the activities of employees in various professional positions with various responsibilities are emerging. Here is a brief overview of the positions, roles and responsibilities associated with educational technology specialists:

An instructional designer is a person responsible for planning, analyzing, designing, developing, modifying, implementing, evaluating and managing various courses, learning systems and learning environments.

Educational Project Manager – an employee responsible for managing educational development projects, managing educational programs and managing efforts to create a learning environment.

Media specialist – person responsible for creating, finding, modifying and using various media artifacts in different formats.

Technology Coordinator – responsible for helping teachers and professionals find, modify, use or integrate various educational technology resources.

A system administrator is an employee responsible for managing and maintaining the educational system, content management system, learning management system, and network environment used to implement learning and teaching.

A developer/programmer is an employee responsible for coding educational software and developing objects and resources used and facilitated in the implementation of educational activities.

Evaluator – an employee responsible for formative and summative evaluation of lessons, courses, programs, educational systems and learning environments.

An instructor is a member of staff responsible for leading learning units, tutoring students and providing guidance and feedback on learning in a formal educational context.

In conclusion, the demand for educational technology is constantly increasing, as e-learning is a huge industry that is expanding worldwide. Various aspects of creating educational technologies (programming, graphic design, instructional design, task analysis, graphic engineering) in commercial e-learning companies, training departments in large companies and organizations, IT companies and educational institutions the demand for many specialists is increasing. However, these organizations often struggle to recruit appropriately qualified workers with knowledge outside of their subfields and disciplines.

It is no secret that there is a strong demand for pedagogues who understand educational theories, technologies, know foreign languages, and know how to effectively integrate technology into learning and teaching. The field of educational technology is also becoming a part of mainstream education programs in educational institutions around the world. The commercial training industry (start-up logistics, etc.) is experiencing a period of massive and still rapid and sustained growth, largely based on the integration of advanced digital technologies. The needs and demands of educational and commercial organizations and the labor market are very different in terms of the knowledge and skills needed to effectively implement educational technology solutions.

REFERENCES:

1. Hartley, R., Kinshuk, Koper, R., Okamoto, T., & Spector, J. M. (2010). The education and training of learning technologists: A competencies approach. Educational Technology & Society, 13(2). – P. 206–216.

2. Januszewski, A., & Molenda, M. (Eds.). (2008). Educational technology: A definition with commentary. New York, NY: Routledge.

3. Merrill, M. D. (2002). First principles of instruction. Educational Technology Research and Development, 50(3). – P. 43–59.

4. Ronghuai H., J. Michael S., Junfeng Y. (2019). Educational Technology, A Primer for the 21st Century. Lecture Notes. – 253 p.