

THE ROLE OF INNOVATIVE TECHNOLOGIES IN THE DEVELOPMENT OF THE MODERN EDUCATION SYSTEM

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ABOUT ARTICLE Key words: modern technology, Abstract: This article discusses the education, role, innovative, technologies, educational system of innovative technologies. Discussions on mastering education with modern teaching, process, non-standard, integration, people, electronic textbooks, innovative technologies will be conducted. educational. institutions. Technologies are mentioned not only in electronic education, but also in the field of medicine. boards. harm. People's connection and satisfaction with Received: 01.05.24 technology. About the teaching process with Accepted: 03.05.24 modern technologies in the educational Published: 05.05.24 institutions of our country. Lessons should be non-standard. The students' adaptation of lessons with modern technologies has given significant benefits. Working with electronic boards, computers, preparing projects is now easier. The harm of modern technology. People being made lazy by technology.

INTRODUCTION

Technologies are important and influence in education. Technologies are necessary to learning, to understanding, to teaching the knowledge. With technologies, it is easier to learn, to increase the knowledge in education. Currently, science, economy, medicine is developing because of technologies in every world. Nowadays, all schools, colleges and universities are giving electronic boards, books and computers in Uzbekistan. Now all students, pupils have own modern phones or notebooks. So, they can use them to learn languages or to know news and maybe to read different from e-books. Teachers use technology to teach students information quickly, accurately, efficiently. So, with technologies children learn easily and they are making success quickly in education.

Technology is currently considered as something in the form of machines or things related to machines, but actually technology in education has a broad meaning, because in education the technology used is a combination of management, machines, humans, and ideas. Real technology is insight into performing tasks efficiently and implementing knowledge management systematically. The existence of technology means that it is a way to increase the usefulness and efficiency of knowledge. Technology exists and develops to solve problems faced by humans efficiently. On the other hand, educational technology is seen as an implementation and a knowledge procedure. Examples of the implementation of this educational technology are more tangible and easy to understand, such as the presence of radios, projectors, televisions, and smartphones. Information Technology emphasizes the implementation and processing of data such as capturing, transmitting, storing, retrieving, manipulating or displaying data using electronic technology devices, especially computers. The meaning of information technology does not describe directly its relation to communication systems, but rather on data and information processing. The methods and technologies created are partially usable and meaningful for education, especially for subsequent learning methods and effects. The manufacture of technologies such as microtechnology, biotechnology, and materials are finally used as teaching media. Technologies directly relevant to learning have been aligned with the learning objectives themselves, such as the use of gamification in learning. Communication of reciprocal negotiations between students and other students or students and teachers and the learning environment to obtain learning directions is a form of learning. From this understanding of learning, there is a basic understanding of learning that must contain information and communication elements. At present, the manufacturing and technology methods used must be unique so that they motivate student learning. The communication and information technology used will be directly related to learning and students in several semesters.

MATERIALS AND METHOD

Technology in education is abstract because science will develop continuously. Educational technology can be understood as a complex and integrated process involving various people, ideas, procedures, tools, and problem analyzers such as an organization to solve problems, implement, assess, and manage issues that cover all aspects of education

and learning. In line with this, educational technology was born from various problems that arise in education. Academic problems that exist at this time include improving the quality, relevance, and efficiency of education and equal distribution of opportunities to obtain instruction in various countries. A severe problem in education, from primary education to higher education, is a quality problem, these problems can be solved if you take an educational technology approach to overcome existing problems.

The extent to which e-learning assists or replaces other learning and teaching approaches is variable, ranging on a continuum from none to fully online distance learning. A variety of descriptive terms have been employed (somewhat inconsistently) to categorize the extent to which technology is used. For example, "hybrid learning" or "blended learning" may refer to classroom aids and laptops, or may refer to approaches in which traditional classroom time is reduced but not eliminated, and is replaced with some online learning. "Distributed learning" may describe either the e-learning component of a hybrid approach, or fully online distance learning environments.

Educational media and tools can be used for:

- task structuring support: help with how to do a task (procedures and processes),
- access to knowledge bases (help user find information needed)

alternate forms of knowledge representation (multiple representations of knowledge,
e.g. video, audio, text, image, data)

Numerous types of physical technology are currently used: digital cameras, video cameras, interactive whiteboard tools, document cameras, electronic media, and LCD projectors. Combinations of these techniques include blogs, collaborative software, ePortfolios, and virtual classrooms.

The current design of this type of application includes the evaluation through tools of cognitive analysis that allow one to identify which elements optimize the use of these platforms.

In simple terms the term media can be defined as an intermediary or introduction. While the term learning is a condition to make someone do learning activities. By referring to this definition, learning media is a vehicle for distributing messages or learning information so as to condition a person to learn or various types of resources that can be used in the learning process, based on the scope of the learning resources above, the learning media is part of learning resources that emphasize software or software and hardware or hardware. The level of learning outcomes, some of the media's functions include:

• Capturing a certain object or event. Important events or rare objects can be captured with a photo film or recorded via radio then the event can be conveyed and can be used when needed. The teacher / lecturer can explain the process of the occurrence of a rare solar eclipse through video recording. Or how the process of the development of a caterpillar into a butterfly is the process of a baby's development in the womb from the start

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of a fertilized egg to an embryo and developing into a baby. Likewise, explaining how a tool or organ of the human body such as the heart works, so that through a film loop that moves continuously, the way it works can be better understood by students.

• More equitable learning opportunities. By using various media such as audio, video,

sound slides, and so on, it is possible for everyone to learn anywhere and anytime.

• Display objects that are too large to be carried into the classroom.

• Enlarge and clarify objects that are too small to be seen by the eye, such as blood cells/bacterial molecules and so on.

RESULT AND DISCUSSION

Analysis of the study problem showed that, in the modern period, innovative changes follow such directions, as: developing new content of education; developing and applying new learning technologies; applying the methods, techniques and tools of learning new programs; creating the conditions for personality self-definition during the learning process; changing the type of activity and style of thinking in both teachers and students, changing their relationships, creating and developing creative innovation teams (in the departments, faculties and in student groups). Innovative learning is a creative process; it is related to developing and applying exploratory, research, educational-playing, modelling and other types of activity in the educational process. Obviously, solution of the education problems starts from the professional training of the teachers. Because of this, it is highly important that the education of prospective school- and college teachers is based not only on fundamental knowledge in the selected field but also on the general culture, including informational one. Modern teacher has to be able not only to teach his "own" subject, but also be proficient in using innovation technologies and creatively apply them in a specific educational field. In these conditions there is a goal of training not just a teacher, who is able to use new technologies, but a researcher, innovator and experimenter, a personality capable of creative search, critical evaluation of historical pedagogic heritage and adaptation to the modern society and constant changes in the information technologies. It is necessary to prepare a teacher for innovative activity, which includes advanced training in the field of modern technologies, and to develop his readiness for innovative activity in the field of using innovation technologies and for learning in correspondence with the requirements of a modern society. Innovative learning is learning that stimulates innovative changes in a corresponding culture and social environment and acts as an active reaction to the problem situations, which appear in front of each single person and the society in general. Innovative learning can be defined as: 1) a specific type of mastering the knowledge, alternative to the

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traditional normative learning; 2) a process that provides personality development in teacher and students through democratization of the teacher's position and inclusion of everybody in the cooperative creative and productive activity; 3) a change in the nature of educational cooperation, which creates high level of readiness for a certain future and increases the level of intellectual-communicative activity development and creativity; 4) a specific type of mastering the knowledge, which implies the development of students' skills for cooperative actions in new situations.

Learning technology is an applied and practical continuation of the general didactics. Any interested teacher can master the scientific-methodic basis of the learning technology, choose an adequate model for it and construct a lesson project. Generalized model of the gradual approach to education with the use of a certain pedagogic technology includes the following stages:

1st stage: definition of the learning content, its further detailed distribution by the models and gradual planning; a teacher has to consider the logical model and study elements, which correspond with goals and tasks of each lesson;

2nd stage: calculation of study time necessary for acquiring the planned content, consideration of the load on a student and choice of optimal proportion of the load and study time;

3rd stage: choice of the organizational model of learning, its efficiency and intensity; creation of the list of technical and other learning tools, which has to be described and reflected in the general education process project;

4th stage: preparation of study materials has to be conducted such way that they correspond with the planned results of learning and were constructed in the motivational mode; study texts for various situations are different from each other;

5th stage: preparation of homework with consideration of mandatory (minimal) and basic (algorithmic, heuristic and creative) levels of academic progress;

6th stage: preparation of specific-correctional questions on the new topics of the learning content.

CONCLUSION

The role of technology in education post pandemic has become more important than ever. It has transformed the way we learn and has the potential to address various challenges in education. By leveraging technology, we can enhance accessibility, promote inclusivity, and provide personalized learning experiences that cater to individual needs. Technology equips students with future-ready skills, fosters engagement and motivation, and enables data-driven education for continuous improvement. While there are challenges to overcome, such as the digital divide and the need for digital literacy, the benefits of incorporating technology into education are undeniable.

Improving the quality of learning can be done using the Educational Technology approach, namely by finding and identifying the problems encountered in learning and then finding solutions through the application of educational technology. Efforts to solve educational problems, especially the problem of learning quality, can be pursued by using various learning resources and using learning media that function as tools and increase the level of student learning outcomes.

It is important to recognize and address difficulties as education shifts to technologyenabled learning. Technology in education has immense potential, but it also presents many challenges. Educators, politicians, and communities must collaborate to address the digital divide, literacy, equity, and security issues. We can improve education by aggressively addressing these issues.

Technology fosters engagement and motivation in learners by providing interactive learning tools, gamification, and multimedia resources. These elements make the learning process more enjoyable and engaging, leading to increased knowledge retention and the development of critical thinking skills. Technology also facilitates personalized feedback and assessment, allowing students to track their progress and receive immediate guidance for improvement.

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