# Impact of Digitization in Education at the present time

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### ABSTRACT

The article discusses the concepts and principles of digitization of education at the present stage of development of the information society, the use of digital technologies in education, integration into the educational process, professional competencies. Higher education leaders are uniquely positioned to move beyond the emergency adoption of on-line learning towards inclusive long-term visions for digital education which emphasis collaboration over individual gain. Igitization of the education sector helps to improve the skills of the teachers and students. They have a common goal to engage and have an active learning process. The traditional model of learning has a uniform approach, with digital education and elearning, there are different customized tools. It helps in molding each student in terms of his or her understanding, interest, and capability. Digitization has revolutionized the education system but has not lowered the value of education. It has upgraded the system and combined both on-line learning and classroom learning. It offers a support system for modern students.

# Keywords: Competence, ICT, Technology, Integration, Digital generation, on-line, Virtual, Pedagogical, Informatics, Computer, Interdisciplinary Communication

#### **Introduction:**

The term 'Digitalization' refers to the conversion of paper mode or typewritten information into the digital form. It shows all about the replacement of the 'old school system' with the 'new school system'. Education is a basic need for every learner and digital education is the current trend. Digital education helps one learn. The present, the demand for specialists with competency, who have professional mobility of the economy, who can work in changing economic conditions, is increasing in India. Actions for the further development of the Indian people the task of improving the quality of training of modern specialists, determined by the requirements of the labour market, employers, in general, the entire digital economy is becoming more important. Educational institutions in all parts of the country are equipped with computer equipment, educators have gone through the process of training and retraining on the use of ICT in the educational process. A new stage in the development of society in present time can be called "digitization", including the priority direction of modernization of the educational system of India, which is replaced by modern trends and

information. The process of digitization manifests the deep convergence of digital technologies with material and socio-humanitarian, including educational technologies and practices. It is possible to see that digitization in education is aimed at ensuring its individualization on the basis of large volumes of data, virtual and filled reality, Cloud Computing of mobile technologies and others in the use of advanced learning technologies, including the continuity of the learning process. Qualitative use of digital technologies in education, involvement of educators in independent research, selection of information, participation in design activities in the formation of 21st century compartments in future specialists, including ICT compartments.

#### Materials and Methods:

The creation of a digital educational process in educational institutions should be based on digital didactics, which is considered a new branch of pedagogical science—a scientific science—about the organization of the educational process in the digital educational environment. Being the subject of digital didactics is not the validity of digital educational tools, but the activity of a person. Digital didactics

can be viewed as a trans-integrative field of scientific knowledge, characterized by the mutual transfer of certain scientific ideas and approaches from one field to another and their integration into another. The subject of digital didactics in vocational education and training is "the acquisition of the entire educational process as a system for the organization of the educational process in the digital educational environment", which includes the objectives of teaching the content of teaching and the requirements for its formation the methods, it takes on the impact of teaching technology and techniques, teaching tools the digital learning process in vocational education and training on the development of society and the economy.

Also, as scientists have noted, the strategy of working with representatives of the digital generation should come from this, according to which "it is practically impossible to integrate them into the traditional educational process. Therefore, necessary to significantly transform the educational process depending on the capabilities of the digital generation, as a result of which a new digital learning process will be formed. Being the uniqueness of the structure of the digital educational process, the introduction and use of digital technologies are considered, and many of them will have the following didactic properties: the search for different information in the global network landkin; personality, interactivity, multiculturalism, hyper text, subjectivity.

In addition, in today's digital learning process, digital learning technologies, mobile learning, distance learning technologies, electronic (on-line) learning, etc. are also significant, which rely on the use of technology tools as well as specialized interactive devices as flip, laptop, tablet, robotics kits, interactive writing boards, electronic flipcharts, interactive panel, interactive Sandbox, Interactive threshold, interactive cubes, etc.

For the organization of the digital educational process, the potential of highly qualified, trained personnel of educational institutions will be necessary. The potential of personnel with the necessary compensation in the conditions of constantly growing digitization in all spheres of the economy

can become the main source of increasing competitiveness and labour productivity of the subjects of the Republic of India and the economy as a whole. In order to prepare it, will be necessary to significantly modernize the professional education system, make educational programs compatible with the needs of the digital economy, introduce a wide range of digital technologies into the educational processes in educational institutions, provide opportunities for citizens to receive education for the rest of their lives.

Teachers with a high level of professional competency, including ICT competency, in principle, the new educational tasks that the digital age puts before education, development of readiness for continuous changes that require the transformation of the system of ordinary values to a certain extent, training of social responsibility in the system of relations "human-digital means-society". It will be necessary to take into account the formation of internal boundaries between a virtual and a real being, the development of the ability to differentiate these entities and the types of responsiveness that corresponds to them; the ability to critically analyze information and filter out information noise, advertising and the like.

In terms of the problem of formation of ICT competency in the training system, the training of future teachers will depend on the psychological and pedagogical, didactic, methodological and meaningful opportunities of the organization of the educational process on the many sides, the creation of a modern informational and educational environment in educational institutions. The legislation on the relevance and importance of the ATM in educational organizations, accordingly, is considered to be a "system that ensures the full adoption of electronic information resources, electronic educational resources, information, telecommunication technologies by the recipient of the technological means and educational recipients of the corresponding state, regardless of where they are located, educational programs.

The establishment of a digital learning environment is becoming increasingly important. Today, if the modern digital educational environment is fully

transferred to the digital format, the conditions for continuous education of citizens of all categories will be created on the account of the development of the digital education space of India.

Analysis of normative documents, recommendations, research in the field of digitization of education, giving an opportunity to distinguish the conditions for digitization of education, it is possible to include the following in them:

- 1. Digital generation of educators; To create a legislative framework for the digitization of Education.
- 2. Resource support of digitization of Education, which includes the digital educational environment of educational institutions
- 3. Training of personnel capable of digital education with ICT competency that receives digital literacy.
- 4. Digital pedagogical technologies and digital technologies of educational significance.

From the point of view of the emergence of the specified conditions for the digitization of education and the formation of ICT competency, we carry out the analysis of normative documents regulating the preparation of future teachers in the vocational education system.

In recent times, several measures are being taken by the state in the direction of improving the system of training future teachers. In addition to other trends in the training of future specialists and the processes of modernization of the entire educational system as a whole, actively developed and applied professional stations are increasingly affected. The mandatory requirement for the preparation of the future educator is the competence, ability and preparedness of ICT, demonstrating in his professional activity the skills, ability and readiness to solve professional tasks using ICT tools and digital technologies of educational importance.

The study of the content of the information course, which is regulated by the students 'science programs, is offered at an in-depth level within the framework of the "Informalities" general educational science. With this standard, the requirements for

the subject results of deepening the course Informalities are defined, which include the following:

\* To acquire a base knowledge system that reflects the contribution of Informatics in the formation of the scientific image of the modern world, Mastering the concept of algorithm complexity, knowledge of the basic algorithms for processing digital and text information;

The structure of modern computers, the formation of a picture of the trends in the development of computer technology. The formation of an idea of the general principles of the development and operation of internet applications, The formation of an image of computer networks and their role in the present tense.

The formation of an idea of the basic principles of the organization and operation of computer networks, the norms and rights of Information Ethics, the principles of ensuring information security, methods and means of ensuring the reliable operation of the means of ICT, etc. Thus, the subject of this study is directed to the acquisition of knowledge and skills in the field of Computer Science and the formation of computer literacy and a deeper study of the basics of Computer Science, the formation of foiling skills from ICT, taking into account the peculiarities of the future professional activity of teachers.

## **Informatics and Information Technologies:**

Information Technologies in education are the peculiarities of Educational Sciences and are not developed for specific specialities of the content of these Educational Sciences. "Informatics" as a general education science is aimed at studying the basic concepts in the field of Informatics and information tools, acquiring the necessary set of user skills. The formation of ICT competency in the study of the above-considered Educational Sciences is the main tool for the formation of ICT competency of future teachers, which arises only within the framework of laboratory-practical training of students and the implementation of independent work. Present time many researchers consider it necessary to take into account the integration of science-based on information and communication technologies for the systematic formation of their

ICT competency during the training of future teachers.

The basis for the need to integrate the content of educational materials in the educational disciplines aimed at the formation of ICT competency of future teachers in his doctoral dissertation with the integration of scientific preparation and the formation of structural interdisciplinary links. Also, this author emphasizes the need to integrate ICT and didactic units in the educational process in the future professional activity, and for the successful formation of ICT competency of the future educator, it is necessary that "a general training scheme should be drawn up, which can be presented in the form of a program on the basis of a training plan.

#### **Conclusion:**

Analysis of normative documents, recommendations, studies in the field of digitization of the economy, allowing to distinguish the conditions for digitization of education in general. It is possible to included the digital generation of Education recipients, the creation of legislative bases for digitization of education. The resource provision of digitization of Education, which includes the digital educational environment of educational institutions. Digital pedagogical technologies and digital technologies of educational importance. The data part of the training program of specialists of the middle year allows the provision of conditions for the formation of ICT competency, which is still relevant today. Using digital tools in education also facilitates a range of collateral benefits, from higher student attentiveness to better parent-teacher engagement. "Even in India's diverse educational system, digital education unlocks immense benefits, numerous use-cases and creative adaptation for both students and teachers. Digital education offers access to higher education. It helps the students who could not afford education expenses, such as students living in remote areas. Students will be able to access learning on-line when they want to learn at their own pace. It will boost digital equity, which means that students can access all the learning resources at an affordable cost. With digital transformation, students can access their laptops, tablet, and smartphone.

Students will be able to access all the contents in school and at home despite their economic status. It is not a requirement to visit the library to access books; you can access digital content, which is not expensive. Students have the chance to access customized experience, access to more data, and a better future. There are special programs where students can choose a course based on their past performance and aptitude. Customized learning makes education more productive. The future will likely hold new global challenges that rely on International collaboration across the global knowledge community.

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