



# THE NEED TO DEVELOP THE DIGITAL TECHNOLOGY SKILLS OF FUTURE COMPUTER SCIENCE TEACHERS IN UZBEKISTAN

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<b>Received:</b> April 6 <sup>th</sup> 2023 <b>Accepted:</b> May 6 <sup>th</sup> 2023 <b>Published:</b> June 11 <sup>th</sup> 2023	Modern professions offered to students place high demands on the intellectual skills of employees. Information technologies, especially multimedia, provide an opportunity to develop the intellectual skills of students. With high requirements for the intellectual development of students, they occupy one of the leading positions in the international labor market. A delay in the development of intellectual skills means a delay in life. Therefore, in the professional preparation of students for the modern digital society, it is necessary, first of all, to develop their intellectual skills and teach them how to apply them in practice.

**Keywords:** program , intellectual skills , digital society, digitalization of education, media literacy .

## INTRODUCTION

The era of the digital economy dictates new requirements for the system of education and vocational training. One of the priorities of the Decree of the President of the Republic of Uzbekistan No. UP - 6079 "On approval of the strategy "Digital Uzbekistan – 2030" and measures for its effective implementation" is the progressive development of the existing education system, which should provide the economy with competent personnel. In addition, this program declares the need to create a motivation system for mastering the necessary competencies and participation of personnel in the development of the digital economy of Uzbekistan .

To work as a person with high potential in digital economy, students should possess the knowledge, skills and competencies related to information technologies. The actions of people depend on what extent they are exposed to the information environment and how effectively they can use this information. To to function freely in information flows, each student must receive, process and apply data using computers.

Working in the digital economy has become a prerequisite for success in public life. Speaking about the process of digitalization of the economy and society, in First of all, it is necessary to clarify its meaning. In the broadest sense the process of digitalization usually refers to socio-economic changes that began with an initiative to widely adopt and development of digital technologies. The digitalization of education involves technologies for creating, processing, exchanging and

transmitting information. One of the urgent tasks is the introduction of digital technologies in all stages of the education system and increasing the level of digital knowledge, necessary for a modern economy, improving educational infrastructure, as well as the opening of digital learning centers in all regions of the country by 2022.

## METHODS

The analysis of the problems of modern practice of preparing students for the development of intellectual skills , the analysis of information sources determined the subject of the article - the need to develop the digital skills of future teachers in informatics in Uzbekistan. Additional research methods were: selective interviewing of students; feedback in the format of reviews on implemented training programs for specialists; analysis of the results of internal evaluation during the accreditation procedures, study of the needs of society and employers.

## DISCUSSION

Development of digital skills in all segments of the population, especially among young people, the introduction and development of distance, online and virtual learning technologies in digital technologies, development platforms for online courses, generation generation highly qualified personnel in digital technologies, training talented IT professionals, development of mechanisms for assessing the ability use digital technologies, taking into account the following aspects:



- information literacy (the ability to find the information needed for decision making);
- computer literacy (ability to work with digital devices)
- media literacy (the ability to critically study the media)
- communication literacy (ability to use modern digital means of communication).

In the digital economy, developing the skills to use digital technologies should be carried out mainly in the education system, especially in the vocational education system, with the introduction of these skills into practice.

In the process of further reforming the digital economy in the country, the goal of higher education is to train qualified specialists and personnel with practical skills in applying modern digital, in particular multimedia technologies in the workplace, along with education. Actively support innovative forms, technologies and developments in the educational process, ensuring the interaction of vocational education and production, meeting the individual needs of the individual in intellectual development through vocational education and the development of creative activity.

For the introduction of digital technologies in the system of higher education, the following tasks have been set:

- create opportunities for students to acquire digital skills through the introduction of digital technologies at the initial stage of education, develop analytical and critical thinking, give young people knowledge and skills in the context of large-scale digital transformation;
- introduction of highly effective international practices into the education system aimed at organizing training in the field of technological professions and innovation;
- to increase the number of graduates of higher educational institutions studying in the field of information and communication technologies, graduates of secondary specialized professional educational institutions with an average qualification in the field of information technologies;
- digitalization of educational materials by ensuring the development and maintenance of a unified state requirement for the use of digitalization formats for paper materials;
- development and promotion of research in the field of digital technologies, improvement of their organizational mechanisms;
- conducting research on software development for the implementation of various models of "cloud" services;

-further improvement of e-learning resources for the system of preschool, secondary and higher education, as well as ensuring the use of domestic and world educational resources [2].

When performing the above tasks, students must be professionally trained personnel who own modern pedagogical and digital technologies, intellectually developed, creative, and have a personal style. Given this, in the digital economy, it is important to develop the intellectual skills of students by increasing their digital literacy.

In the digital economy, the quality of social groups is improving in terms of education and intellectual level. N.A. Muslimov [8, p. 45] and K.M. Abdullayeva [3] in their research developed an individual structure of a creative teacher in the process of preparing future teachers in the field of vocational education. In this structure, intellectual, motivational, emotional, self-governing, practical subject and volitional factors influencing the formation of the professional competence of a future teacher in the field of vocational education were identified. These include the acquisition of skills in problem-based learning, creativity and systematic thinking as an intellectual factor.

When analyzing the authors, we found several definitions of the content of intellectual skills, many of which used the concept of "intellectual skills" without a definition. V.A. Gusev defines intellectual skills as "mastering the operations of thinking" [6]. T.I. Shamova, on the contrary, considers intellectual skills primarily "mastery of mental operations and independent thinking" [9]. M.V. Zueva [7, p. 24 - 28] under the intellectual abilities understands the ability to use the methods of logical thinking in the assimilation of certain educational material. I.S. Yakimanskaya [10] defines intellectual abilities as a link between knowledge and practical skills, providing real knowledge acquisition.

Analyzing various approaches to the content of the concept of "intellectual skills" in our study, we came to the following conclusion: intellectual skills is the ability of students to consciously master and apply mental operations in the process of independent creative activity [4, p. 12 - 14.].

## **CONCLUSIONS**

A voluntary approach to learning should have a decisive impact on mental development, since its purpose is to equip students variety of knowledge and skills. Mastering the learning material students learn to open connections and relationships, acquire the ability to form clear judgments and definitions of the concepts



being mastered, and their actions are based on mental operations. "Mastering Operations thinking allows you to determine the relationship between the objects of thought, which leads to the expansion of the subjective space of understanding the content concepts being learned.

The connection between theory and practice in the digital economy is, first of all, in total, analysis and theoretical generalization of the information received, determination of patterns in the process of solving problems by students.

Analyzing the above considerations, in the course of our research work, we came to the conclusion that students for successful professional activity must acquire intellectual skills.

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