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**PECULIARITIES OF THE USE OF INFORMATION AND  
COMMUNICATION TECHNOLOGIES IN THE TEACHING OF SPECIAL  
SUBJECTS IN HIGHER EDUCATION**

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**ABSTRACT**

*This article is an analysis of the introduction and use of information and communication technologies in the disciplines of higher education, increase the effectiveness of education, increase students' knowledge and skills through the use of modern information and communication technologies in the training of designers, issues of interest in the learning process and the development of skills to apply their knowledge in practice are discussed. The focus is on developing appropriate strategies for the new educational role and in addition, the need to increase the role of students in the introduction of information and communication technologies in the educational process. The role and perspectives of teachers are very important and they are highlighted as key participants in the process. The results of the study show that the use of information and communication technologies in the educational process helps to increase the effectiveness of education and the organization of the educational process. In particular, it shows that the contribution of information and communication technologies to the improvement of the educational process in educational institutions, where information and communication technologies are an innovative factor. Achieving this high level means that the educational institution must not only modernize the technological tools, but also change the teaching models.*

**KEYWORDS:** *Modern Information And Communication Technologies, Multimedia, Computer Programs, Textiles And Fashion, Software.*

## INTRODUCTION

In the Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis, as the wise men of the East said, "The greatest wealth is intelligence and knowledge, the greatest heritage is a good upbringing, the greatest poverty is ignorance!"

Therefore, the acquisition of modern knowledge, true enlightenment and high culture should become a vital need for all of us. Therefore, the active transition to the digital economy will be one of our priorities for the next 5 years said he. "The present and future of our country are in the hands of our highly spiritual and enlightened youth. [1]

Today's process of rapid development and globalization places a number of demands on higher education. It is important not only to equip students with knowledge, but also to develop their professional skills and abilities, to use the opportunities of modern information technology, to teach them to apply in the educational process, in the field of specialization. The prospective professional must be able to think critically, analyze social problems, develop solutions, and be socially responsible. The training of specialists who meet such requirements requires the use of non-traditional teaching methods in the higher education system and the development of new effective teaching methods.

It is no secret that in today's market economy, the development of our society requires new technologies, including new information and communication technologies. In particular, the widespread introduction of multimedia and web technologies, the intensive study of computer-generated graphics, animation and video technologies require computer literacy. In recent years, Uzbekistan has taken a number of measures to develop computerization and information and communication technologies. [3]

The advanced countries and regions, which are working effectively to introduce digital technologies in education and create a digital learning environment, are showing high quality results in education. Therefore, Uzbekistan continues to study the best practices of foreign countries and move forward on its path of development. In particular, the Presidential Decree No. PF-5847 noted that the introduction of digital technologies in the educational process is one of the priorities in the development of the higher education system. It requires us to master digital knowledge and modern information technology to make progress, and it allows us to take the shortest path to growth. After all, IT is penetrating deep into all areas of the world today. [2]

A number of studies and reports in recent years have highlighted the potential and benefits of information and communication technology (ICT) in improving the quality of education. ICT is seen as a "key tool for building a knowledge society" and, in particular, as a mechanism for reviewing and changing education systems and processes, leading to an increase in the quality of education for all. [12]

The current stage of social development is increasingly being described as a period of formation of the information society. Informatization of education plays an important role in informing society. The problems of effective use of computer technology for teaching in the educational process are already widely covered in educational sciences and practice. The first attempts to develop a coherent system of computer training were made abroad by A.Bork, R.Williams, J.Merred, B.Hunter.

The use of computer technology in the training of specialists in the field of sewing production L.Vedmich, E.Zaroshchina, E.Koblyakova, V.Petrova, V.Romanova and E. Considered in the works of Tikhonova. [5].

In our Republic conducted researches on implementing ICT in education process by A.Abduqodirov, A.Abdullaev, M.Aripov, B.Begalov, U.Begimqulov, F.Zakirova, Q.Olimov, N.Taylakov, L.Shibarshova, S.Gulomov, U.Yuldashev. According to V.Blinov, achieving high efficiency in educational work requires the assignment of differentiated tasks, taking into account the individual abilities and capacity of students.

Improvements in information technology are focused on solving more intellectual, scientific problems. Data visualization, image processing, and the creation of a virtual environment enable a person to achieve a goal through innovative approaches to solving complex problems, making it easier to prepare and make management decisions. [4]

A number of studies and reports in recent years have highlighted the opportunities and benefits of information and communication technologies (ICT) in improving the quality of education. ICTs have become an integral part of modern society, especially in the field of education. Multimedia combines text, graphics, audio and video information, animation, allows the use of different ways of presenting information and can contribute to the formation of interest in knowledge, which in turn affects the activation and involvement of students in the learning process.

As Irina Bokova noted, “technologies can serve as a powerful learning tool only if they are used correctly and competently in the learning process, as well as in combination with new learning models”. [6]

The need to develop the skills of future professionals to work with information technology, first of all, the introduction of new intellectual educational resources in the educational process in the system of vocational education, secondly, the ability of teachers to teach using them and independently develop e-learning resources in specific subjects, third, it is closely related to the full realization of the opportunities to increase the effectiveness of the teacher's professional activity.

The use of ICT allows the teacher to optimize the learning process. This is because technical support of lessons creates a more favorable psychological environment, removes psychological barriers, strengthens its role in choosing methods, forms and rates of learning different topics of the curriculum, improves the quality of education due to an individual approach to education. Selevko G.K. considers information and educational technologies as educational technologies that use special technical media (computer, audio, film, video) to achieve pedagogical goals. Zaxarova I.G. takes into account the need to understand information technology as the application of information technology in order to create new opportunities for information transmission (teaching activities), knowledge perception (student activities) and the complex development of students' personalities in the learning process.

Many researchers argue that educational media resources are human brain friendly and using them in teaching and learning process helps people to learn efficiently. [10] Media resources create a multi-sensory learning environment. Involvement of all senses leads to an exceptional increase in the degree of assimilation of the material in comparison with traditional methods.

Enriching the information with various examples such as infographics and animation will make it easier for the user to assimilate the information and gain interest. [11]

The use of information technology in the teaching of special subjects not only increases the effectiveness of education, but also allows students to develop knowledge, skills, abilities and professional competence; helps students to think independently and develop creative activities. [6]

The use of ICT at all stages of the educational process allows to instill in future specialists the skills of collective work within the framework of electronic network structures, to teach the promotion of their own knowledge and skills in the market of highly qualified personnel through the electronic space. [13]

For quality self-education, it is necessary to create appropriate conditions, and above all, accessible educational material and technical base, electronic libraries, accessible Internet, electronic and printed educational and scientific literature, audio, video visual materials, infographics and much more. In educational process the wide usage of such as various resources i.e. media resources lead to interactive formation of education. [9]

Multimedia technology is based on the complex representation of any type of data. Such technology allows symbols, texts, graphics, images, documents, sounds, and dots to be processed together. The image can be transmitted to the screen along with the text and audio. Multimedia technologies are effectively used in education systems. The main reason for this is that when the user is active in a multimedia environment, he remembers 75% of the information he sees and only 25% when he hears. [4] As Benjamin Franklin said, "Tell me and I forget, teach me and I may remember, involve me and I will understand".

The use of multimedia is especially relevant in the training of professionals in the field of clothing design, because in the learning process, the future designer-model must join the real creative process of creating new competitive developments and creating conditions for its implementation.

In order to develop students' design and modeling competence, higher education institutions have divided the software products that graduates need to master in order to form a competent bachelor's degree in ICT into two groups:

- 1) software products required to master basic user skills.
- 2) professional (or specialized) software products.

Thus, after graduation, if the university's curriculum is designed taking into account the capabilities of modern ICT tools, the bachelor's degree in vocational education will become a competitive force in the labor market.

The development of technical progress, the introduction of computer technology and new information technologies in all spheres of life and production determines the demand for specialists who meet the level of development of the information society, including design. Costume designers, like all designers, need to be familiar with computer technology and analytical processing methods of information, which will help the specialist to adapt to active creativity and a changing environment. Computer technology in clothing design is a universal

tool at all stages of project activities, from the creation of artistic and technical sketches, from the construction of a model structure to the development of corporate brands and brand advertising.[8]

Based on the analysis of the work and qualification requirements of scientists conducting research, the results of our research and observations have shown that by adding competence in the use of information and communication technologies in the qualification requirements for vocational education teachers, we can train professionals who can meet modern requirements.

In short, Vocational Education Costume design achieves educational effectiveness by enhancing students' creative thinking skills, independent decision-making and teamwork skills through the use of modern information and communication technologies in developing students' competencies in designing and modeling clothing.

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