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Digital Development of Education and Universities: Global Challenges of the Digital Economy

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The article deals with the main aspects of the digital technology impact on education. The aim of the research is to collect and analyze most of digital technologies that have been implemented into educational system of Uzbekistan recently and to find out how they have influenced upon the development of the modern educational methods. The paper presents an assessment of the quality of education on the basis of system performance indicators, which makes it possible to evaluate education in the framework of management criteria based on the results of the participants' preparedness for practical activities. Analysing the foreign and domestic experience, the solution was found out to manage the educational system of the higher education organizations. At the same time, the work stipulates that such an approach should not violate the existing academic traditions and prevent commercial orientation of university management.

Keywords: digital technology, digital economy, training, education, digital competence, information system

INTRODUCTION

The relevance of the study

The relevance of the current work is determined by the fact that the modern technologies are developed quickly and they are involved into many spheres of the society life including the educational issues. To implement these technologies correctly and to make them work properly in the education system the technologies should be carefully selected and integrated with the existing teaching methods. Digital technology enriches learning in various ways and offers learning opportunities that should be accessible to all. This provides an access to a great amount of information and resources. Digital technology has a huge, largely untapped potential for improving education. The key part

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of digital education is to ensure equality and the quality of access and infrastructure. The improvement of access to technology and connectivity for everyone in education should be a starting point for reducing inequalities and moving to a digital economy.

The most important change in education is a critical view of education and the destruction of all traditional tools that make education stagnant and unable to cope with the latest technological advances. The government, business sector and leading specialists in various fields of human activity should be responsible for guiding and controlling the transition to the digitalization process, which has become an important component of social life and development.

Prospects for single educational environment in the CIS (Commonwealth of Independent States) countries

Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Russia, Turkmenistan, Tajikistan, Ukraine, Uzbekistan are connected by the coming away from the Soviet Union heritage and driving the way to the European notions and values in the economy, society development and educational issue (Sidorenko & Zaidi, 2013).

Education and training are the best investments in the future of any state. They play a vital role in stimulating economic growth, innovation and job creation. It would be expedient to create a single educational environment in the CIS (Commonwealth of Independent States) countries considering the ongoing large-scale reforms and planned strategic events aimed at developing and strengthening our state. Education and learning also play an important role in creating a common identity based on common values and cultures.

Nowadays there are some single attempts to create the common educational environment in the CIS countries but still each of the country has the approach to develop its educational system on the basis of the European standards of evaluation, the Bologna educational system and the diploma matching system. Nevertheless, there can be found some common elements in the educational system of CIS countries. It concerns the system of entering the universities: The External Independent Evaluation in Ukraine and the Unified State Exam in the Russian Federation for example. Being named in the different way these systems are very common processes and represent the test exams in the different subjects with the help of which the knowledge of the pupils is evaluated and give them the possibilities to enter the universities.

LITERATURE REVIEW

Concept of education

Education is not just a concept, but a life trajectory that is considered valuable to all of us, our time and interaction. Education should help young people formulate their ideology and do what they like best, participate in and shape the future of our state characterized by democracy and solidarity. Education in the period of transformation of economic environment is determined by the fact that digitalization affects not only education, but related spheres. Accordingly, under the influence of the digital economy the learning environment is gradually changing towards acceleration and formation of

competent specialists in a shorter time. A large number of traditional specialties are becoming increasingly redundant leaving the sector of education with a following challenge: how to retrain people, how to reorient them to new professions. The digital economy already exists today affecting the educational needs.

Digital economy concept

The digital economy is described as an economic activity that is realized every day due to billions of online connections among people, companies, data and devices. Although the digital economy is frequently viewed from a business point of view, it also has a direct and profound impact on education. We should think deeply about the concept of the digital economy and how our education will prepare our graduates for the digital economy so that they can make the most of the provided opportunities. When it comes to education and the digital economy, students' chances of success will largely depend on the skills in the field of information and communication technologies (ICT) that were developed during their academic activities both as part of the curriculum and as part of their own initiative on acquiring the necessary skills (Abdikeev, 2004).

According to the data of the Organization for Economic Cooperation and Development (OECD) "Skills for a Digital World", published in 2016 more and more employees need general and specialized ICT skills in order to properly perform their tasks in the workplace as the World Wide Web is becoming more "rooted" in work processes. The OECD report states that young people, people with secondary education and people working in skilled occupations are more likely to have ICT skills and computer experience than those who do not meet any of the three above-mentioned criteria. The report adds that it is important to integrate these types of technological skills into the curricula, rather than making them specific courses.

Digital technologies are increasingly penetrating our society and economy. Technology in its various forms is a significant part of our work environment and our way of life (Toffler, 2004). However, there is a difference between the use of digital technology in everyday life and in education. Digital technology has a huge, largely untapped potential for improving education. The fundamental points of the use of ICT (information and communication technology) in education and the impact of the digital economy on education are examined in the works of foreign and domestic scientists. The English scientist T. Stouner, who made a great contribution to the research of the information society, was the first to consider information and knowledge as important strategic resources identifying them with capital: "... information, like capital, can be accumulated and stored for future use" (Stouner, 2014). Stonier uses the term "information economy" considering it as a branch of the post-industrial economy. The author defines the latter as "an economy in which industry, in terms of employment and its share in the national product, gives way to the service sector, and the service sector is primarily information processing" (Stouner, 2014). He distinguishes such categories as "data", "information" and "knowledge" noting that such a distinction is rather arbitrary. On the whole, it can be concluded that Stonier identifies information economy with the knowledge economy considering it as a component of the more extensive category of "post-industrial economy".

Pidoymo and Buturlakina have a different point of view (2013). They make a distinction between information and knowledge. Information, considered as "formalized knowledge", is assessed as a leading factor compared to knowledge. Therefore, they speak specifically about the information economy, and not about the knowledge economy (Strelets, 2008).

Chumachenko, in the article "Information economy and the new economy: the general and specific, the conceptual apparatus and content", attempts to streamline and introduce the terms "information economy", "network economy" and "new economy" into a single concept. Assessing the dramatic changes in society and the economy caused by the wide spread of information technologies, Chumachenko concludes that these "definitions divide the ongoing processes into meaningful, instrumental and effective" (Chumachenko, 2014).

The improvement in the functioning of information systems is studied in the works of the domestic scientists – Hodiev B.Y. (2017) – believes that digital economy will be determined by the fact that each of the components of the economic system of the state will be provided with its own unique data set as well. Such a data set will correspond to each of the previously defined parameters of participation in the digital environment of the state.

Alimov R.N. (2007) defines the process of transition to a digital economy as a long process that will require significant investments and will correspond to current world trends. Each of the components should provide an institutional transition that also changes the sphere of labor as a whole.

Abdugaffarova A. (2003) sees the digital transition in the possibility of gradual development by attracting global economic resources and continuous cooperation with more developed countries and drawing experience from them. Bekmuratov T.F. (2019) determines that each of the participants in a transitive economy must consider the risks that arise in the course of operating activities.

Begalov B.A. (2013) agrees with this position and fully supports it with a proposal that we should also say that any digitization of the economy begins with innovations in industries. But she does not indicate which industries she sees as innovative. We believe that this issue in the market economy conditions is regulated by itself. Dadabayeva R.A. (2019) considers transport as such an industry. Zhukovskaya I.E. (2019) believes that this is the field of information technology. Abramov R.A. sees this through transformation of educational technologies. Musaliev A.A. (2007) believes that the effect should be synergistic.

METHOD

Systemic approach is used due to consideration of digital influence as an integral set of elements in the totality of relationships between educational processes. A descriptive research design was adopted to gather information from scientific bulletins, books and articles. The study also made meta-analyses and conducted a search of the websites of major European government agencies, international bodies and professional associations. The items in the research instrument were adapted from existing works

which included studies from Gibson, Stouner and many others. The data consisted of the digital education methods and their systematic analyze. The gender gap analyze was made using the Technovation statistic data. The implementation process of the digital education in Uzbekistan was showed on the sample of the Tashkent State Law Institute (TSLU). The research covers many different aspects of the implementation of digital technology in schools. The current work analyzes the educational methods with the usage of the modern technologies among the age group of the high school pupils and students (15-22 years old).

FINDINGS

Top digital world enterprises

The countries of the different development level use the modern technologies in all the spheres and use a part of their budgets for the digital technologies' development and implementation into the society life. Judging by the statistical data of 2017 seven digital world enterprises came into top list of the companies: Apple, Google, Microsoft, Facebook, Amazon, Berkshire Hathaway, Alibaba, Tencent, Johnson and Johnson and Exxon Mobil (Zhu, X., 2019). Therefore, in order to make education competitive in the 21st century, educational institutions should use the latest technological developments and e-learning tools. In addition, the use of information and communication technologies will have a major impact on all educational activities, while the use of digital technologies will make the access to and storage of information easier and cheaper (Lodder, 2006). Students only need a computer, an internet connection and basic IT skills.

Effective ways of technology use in education

CIOs, CTOs and executives from Forbes Technology Council (`Forbes, 2019) offered their insights on the most effective ways educators can use technology and what trends will dominate education in the near future. We will describe the advantages of these technologies, based on the given insights and other ways of technology use.

1) *Interactive classrooms* — virtual lessons in a full 360-degree environment, live history in 3D. The interactive classrooms are a sample of the virtual reality in which the teenagers like to spend their time. This technology can be used as a mean of attracting the students and creating the image of being preset at a real lesson. The modern means of the internet coaction help the teachers and students to cooperate with each other and to work on the different projects. Also, they help the distant and home students to take part in the conferences and classes (Brussels, 2018).

2) *Improved collaboration* — easy access to interactive digital whiteboards, video conferencing, online meetings and lectures.

3) *Preparation for a tech-based economy* — incorporating practical methods of coding and engineering in the curriculum.

4) *More personalized instruction* — an infinite number of lessons' plans available; the teaching methods can be adapted on the fly to give each child precisely what they need and when they need it.

5) Universal access to high-quality content — equal opportunity to those of all economic backgrounds. A key part of digital education is in ensuring equality and the quality of access and infrastructure (Bardashevich, 2017). The improvement of access to technology and connectivity for everyone in education should be a starting point for reducing inequalities and moving to a digital economy. Control systems should be introduced into the developing economy (Silva, Neander, Bridges, & Lima, 2010). High quality offers more innovative and comprehensive learning experience (Abduvakhidov, Mannopova, 2018b).

6) *Digitized grading systems* — digitizing exam papers makes them immediately available to reviewers, allows removal of bias by neutralizing the responses, and enables automation of the assessment of multiple-choice answers. The process of the digitalizing the entering and grading exams makes it be more transparent and easier to evaluate by the teachers. For the home students it gives the opportunity to pass the exams online at home.

7) *Gamified lessons* — not only to provide engagement but grasp the material better because students are invested in the game. The digitalized lessons make the teaching material be perceived better and simplify it by using games and slide show materials, etc.

8) *Advanced learning at home* — apps can provide complex mathematical modeling and advanced analysis capabilities. The companies that are involved into the producing the high technology products and software try to make the access to the teaching programs free of charge because they understand that sooner or later the professionally taught students may work for these companies one day. Using the smartphones and lap tops makes the studies to be advanced even at home by using the different applications in learning and making the home assignment and the other paper work.

9) *Introduction of entrepreneurial skills* — to gain experience in starting and managing their own business idea, pushing the status quo, and graduating feeling motivated and ready to add value to our society.

10) Online courses for higher education acquisition or passing vocational training. (Erasmus + and others).

11) Empowerment of teachers. Innovations in education and training are largely dependent on the empowerment of teachers (Abduvakhidov, Mannopova, 2018a). It is necessary to organize educational platforms or funds involved in the support and financing of advanced training for teachers who wish to study and improve their qualifications abroad. Today in Uzbekistan there are no such organizations engaged in this kind of activity. There is no centralized organized structure capable of controlling and promoting activities and ensuring the further advancement of teachers who have improved their qualifications abroad. For example, Erasmus + achieves this through peer-to-peer training (Mannopova, 2018a).

12) Localization in the certain country. Digital readiness in education requires know-how and involves adaptation and changes. Innovations in the economy can be

implemented only if the development centers are located directly in the country that implements development programs. The authors believe that it is advisable to say that development should be more intensive in the digital environment than in traditional sectors (Innovations in the Digital Economy, 2008). There are funds for innovations in digital education all over Europe. The basis for the transformation into the digital economy is seen primarily in the idea that the processes of transformation itself should be affected as little as possible. That is, it is believed that the digital economy should be investigated and applied only after the traditional development stage of the historical evolution of society has been completed. In particular, it is assumed that digital evolution is a society of total freedom. Consequently, economic transformation and digitalization of society are possible only with a free model of economic development (Johnston, Sheila, & Keith Smyth, 2018). However, innovation policies and practices require support that needs to be expanded.

13) Preparation of curricula and study materials that are suitable for digit-supported models. To implement innovations and technologies in a classroom, teachers need the right environment, infrastructure, devices and leadership support (Mannopova, 2018b). The use of digital technologies for students and staff requires an approach that combines the training of teachers, the preparation of curricula and study materials that are suitable for digit-supported models. As well as developing only certain spheres (Zhu, 2019). This system-wide approach to implementing digital technologies for teaching and education is reflected in the SELFIE self-assessment tool, which was tested in schools in 14 countries.

14) Acquisition of digital skills throughout life. The digital revolution will continue to change dramatically. Although it provides tremendous opportunities, there are also significant risks if digital competencies are not developed. One big threat is that we can lose the most competitive advantage — a highly skilled and educated workforce — if we cannot teach digital competencies to fellow citizens of all ages. The acquisition of digital skills must begin at an early age and continue throughout life. This can occur as part of the curriculum or after school. It is also proposed to integrate these indicators into the learning processes. In particular, the aspect of technical education in a regional context is considered (Khalin, Yurkov, & Kosov, 2017). Young people are active users of the Internet, applications and games. They also have to learn about the basic structures and algorithms becoming digital creators and leaders.

15) Online security and cyber hygiene. More attention should be paid to effective solutions of problems created by digital transformations for online security and cyber hygiene. We have to strengthen the critical thinking and media literacy of young people so that they can judge and overcome the ever-emerging threats of fake news, cyber bullying, radicalization, threats to cybersecurity and fraud. Even the youngest children communicate with digital technologies every day, but they don't understand the risks, and parents worry about inappropriate content and risks, but don't know how to solve them. Europol reports an increase in the number of cyberattacks, data breaches and other illegal online operations. It is necessary to include cybersecurity in academic and vocational education curricula.

16) Overcoming a gender gap. The development of the digital economy provides great advantages in bridging the gender gap in education, since this is still a sensitive issue in the lives of many people. This will allow determining the development processes of digital economy based on the integration of human capital models. The article attempts to present integration of human capital under the transformation of the digital economy. We believe that such a transformation can be realized not artificially, but only in an organic way (Cukier, Fox, & Rahnama, 2012). While girls and boys have the same level of interest and competence in digital technologies, fewer girls continue to develop this interest in learning or in their careers. The main value is determined in order to reveal the possibilities of transformation of educational processes in the developing countries. Although these countries constitute up to 30% of the world economy, there is no clear certainty that these processes can be easily integrated without reaching the level of development as in countries that now form the basis of the EU and the USA (Huang, Jie, & Huang, 2018).

European digital educational projects

Mobility is an important part of education and digital technology is the key to its further improvement. *Erasmus + projects*, such as *European Student eCard* and *Erasmus without Papers* are prime examples of the fusion of the digital economy and education. This will continue to affect the labor market. Namely, it will be quite problematic to find a job if the main issues of globalization and transformation of the economy were not covered during the learning process (Liebenau, 2018).

The goal is to:

- allow students to idntify themselves in accordance with a certain principle;
- provide digital connection of information systems of higher educational institutions;
- ensure a safe exchange and verification of student data and academic reports;
- reduce administrative procedures;
- allow student the access to services during the entire period of their educational activities.

The European Student eCard initiative aims to improve the quality of student mobility in Europe. By 2025 all students taking part in the program Erasmus + mobility should be able to automatically determine their national identity and student status in EU member states, including the access to campus services when abroad (for example, course materials, registration services, libraries). 20000 students and 4000 teachers will receive support for school exchanges that will complement and develop the ongoing activities and collaboration with digital projects (Lodder, 2006).

Development of digital society

The development of the relevant digital skills and competencies for digital transformation is of particular importance in a digital society. In order to function and

thrive in a digital society and overcome digital risks, citizens need competencies that help them solve problems and use the possibilities of digital transformation. The questions of transformation of the development strategy directly in the economic environment are widely studied. It is proposed to reduce the possibilities of digitization of the environment in exchange for an increase in the targeting strategy, that is, not a holistic, but a *targeted economy development* (Rihab, Belkhir, 2018). Digital skills are basic skills along with literacy and numeracy, which are necessary in all spheres of life, but too many citizens have limited or outdated digital competencies. In the digital economy, employment will not decline due to the fact that the importance of work algorithmization of certain territories will increase (Noam, 2018). It is necessary to "widely expand" these skills, because all citizens need to understand different aspects of digital competencies on different levels, and to "deepen" them for more specialized computer applications required in the ICT profession.

Digital competence is part of the revised European core competencies reference system for lifelong learning, which all citizens should have. Particular attention is paid to how the learning process is implemented. Namely, whether the issues of productivity and privatization are considered, or whether only the issue of compliance with pro-standard is considered. In this regard, we think it expedient to completely restructure the learning process in order to fit the innovative economy transformation process (Meyer, 2004). Digital competence means a confident and critical use of digital technologies, which includes the knowledge, skills and attitudes that all citizens need in a rapidly growing digital society.

The European Digital Competence Framework for Citizens describes digital competencies in five areas:

- information and information literacy;
- communication and cooperation;
- digital content and its creation;
- safety and well-being; problem solving.

The recently published European digital competence for teachers offers guidance for teachers in the development of digital competence models. In particular, as a result of globalization of education, a number of courses will be taken beyond the frames of traditional learning processes. We determine that provision of educational services can be implemented on the basis of an open society and an economic basis in competition (Peters, 2017). Collectively, this framework offers an in-depth useful reference model for systematically promoting digital competences.

Development and implementation of digital education in Uzbekistan

Even considering that the computers have started to be used in the schools since 1970 only now the schools have become to be more or less digitalized. Nowadays the modern technologies influence upon the education process more and more. (Selwyn, N., 2019). In 2013 by the Decree of the President of the Republic of Uzbekistan PP-1990 of 28

June the Tashkent State Law Institute was transformed into the Tashkent State Law University. The university was given important tasks in transforming the existing system of legal training. It was necessary to create and implement a completely new system of legal training that meets the requirements of the time and international standards.

The university was faced with a number of problems that require *fundamental changes*:

- elimination of corruption;
- creation of a system that differs from the existing one and meets the requirements of the modern world ensuring the system's transparency;
- radical transformation of the educational system that does not meet the needs of the market economy.

The solution of these problems, in turn, required a systematic approach for solving these problems and making the necessary decisions. The importance of creation of a new system at the TSLU was due to the creation and implementation of the information system for the monitoring of student performance at the university and structural changes in the management structure of the university. The system for submitting documents to the university has been changed, which is the first steps to the integration of the digital economy into education (See Figure 1).

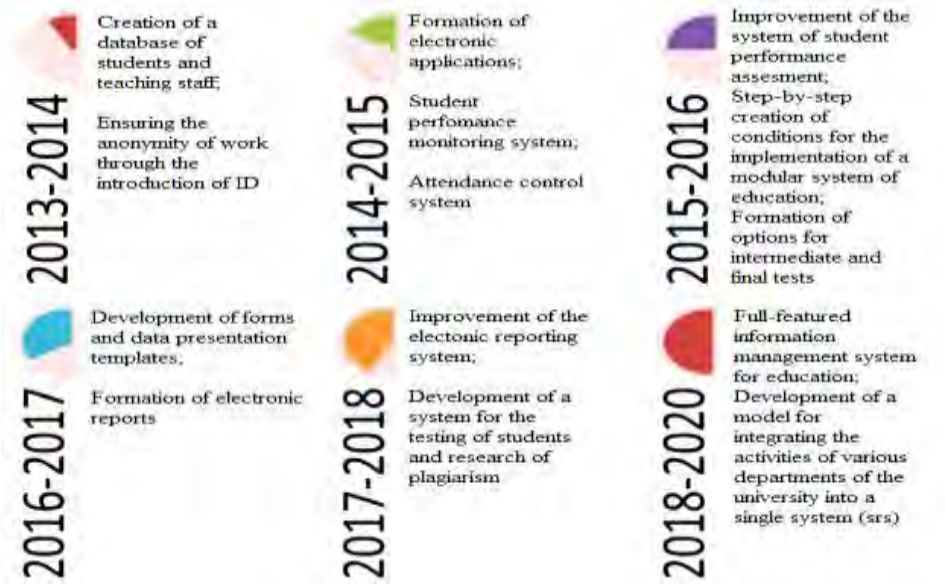

Figure 1
Stages of creation and implementation of intellectual information systems in the educational process of TSLU

To ensure effective management of the educational process it was necessary to create an information system, including recording and monitoring of students' progress, on the basis of a credit-module educational system. In particular, the problem of what is meant by development drivers is touched upon. Namely - a new way of development of the domestic and world economy should be not only the processes of re-industrialization and bias towards private consumption and industrial production, but also the fact that the main capital should be understood as processes of human investment. That is, innovations in the economy should be evaluated according to new parameters - the capacity of human capital (Bogoviz et al., 2018; 2019).

Adaptation to new conditions based on the use of ICT

Informatization, intellectualization and digitalization have significant influence on all aspects of life: how people live, communicate, learn and work. It is inevitable that ICT implementation in the management of the educational process will change the forms and styles of management and presentation of information. The adaptation to new conditions based on the use of ICT in different spheres lasts from 6 months to 1 year. But with lawyers, that is, in the legal sphere, this process, according to observations, lasts about 8 years. The same was true in our case: it was very difficult to accept new conditions with the use of ICT in obtaining legal education. But despite this, a lot of work was done. The TSLU implemented a new system of managing the educational process and in order to increase the effectiveness of decisions – a system for recording and monitoring students' academic progress – srs system – student rating system - that helped exponentially raise the effectiveness of the made decisions. In particular, the authors of the article state that development of business and especially of an ecosystem is primarily a possibility of stratification of all risks that concern consumers. In other words, digitalization of business is digitalization of attitude of consumer and customer. If we are talking about the need to determine how relationships in the consumer and business segments develop, then we need to ensure that business digitalization is absolute (Abdennebi, Debabi, 2017).

Srs system includes several *modules:*

- ID generation – identification of number by modules and type of control;
- automatic distribution of intermediate works among lecturers;
- evaluation and input of the reviewed and evaluated works by lecturers;
- collection and processing of information, analysis and preparation of data for decision-making.

Digital impact on the social aspects

Girls and young women need positive examples, role models and support to overcome stereotypes. They also have to realize that they also can start a successful career in the field of ICT. Today, the activities of projects such as Technnovation, DigiGirls in Uzbekistan show changes in attitudes regarding the place of females in ICT education (Fig. 2).

Figure 2
The quantity of the female IT projects that have taken part in Techhnovation from 2017 to 2019.

Increasing women's participation in this area will help develop the digital potential of our country and ensure that women occupy equal positions in the formation of the digital community (Fig. 3).

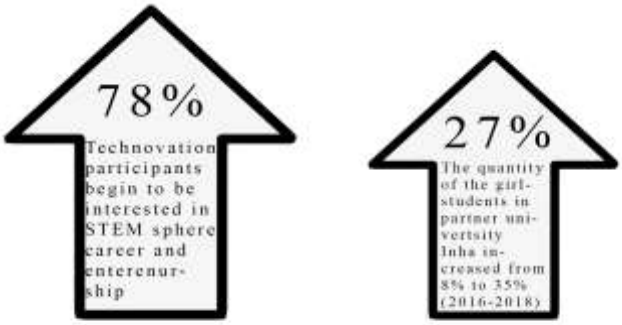

Figure 3
Increasing of women's participation in digital information and education area (Techhnovation data, 2019).

The development of qualified ICT specialists is crucial for competitiveness. Advanced digital skills are important for the next generation of analysts, researchers and innovators. An in-depth digital expertise is necessary for many professions, not just for those working in the ICT field. For example, the physicians, who analyze the trends in the spread of diseases, require both medical expertise and a wide range of advanced digital competencies.

Overall, today three out of four researchers do not have the skills in open access or open data management. Citizen-oriented and socially-oriented research and innovation should make greater use of open data, tools and methods for the use of digital technologies.

DISCUSSION

The digital technologies are available in some Uzbekistan universities but still they are not yet being used fully. The novelty of the study is to summarize some main and widely used means of digital education that can be implemented into Uzbekistan schools and universities, their influence upon the gender gap in the education and some positive example of the digital education usage.

Considering the direction of the modern society and economic spheres development the government of Uzbekistan should pay much attention to the educational system of the country because the intellectual potential and economic growth depends on the quality of the education and quantity of highly educated people living and working in the country for the state companies (Ruziev & Burkhanov, 2018). The education practice is complex, consisting of several participants, relations and bodies, who have roles different power and influence. In this process, teachers are main actors, who should adopt and use digital technologies. The authorities should develop and supply the program on providing the schools and universities with the modern techniques. Besides it there should be some training lessons for the teachers where they can teach the work of the equipment and new methodic of teaching using the devices (Hobbs & Jensen 2013). Creating the government program should involve many specialists such as teachers, psychologists, methodologists and professionals of the computer science and IT. Also, there should be some principles to follow.

Before starting to use the modern techniques in the educational institutions there should be set the goals and aim which should be achieved. Sometimes it may happen that these technologies are not needed at all. The digital technologies should give the best opportunities to both the teachers to teach their subjects and to the students to learn the material (Kozma, 2011). They should be the mean of the equal possibilities for all the students including the home student to get the education. The adoption of the technologies in the schools should be gradual. Otherwise they may not brig the positive results. Each educational institution is a unique complex system. So before implementing any hi-technology into a school the comfort of all the school members should be taken into the consideration.

The teachers should consider that they may not achieve the results that would like to have by using the modern technologies and as the different group of the students may differently react. The students who are not very familiar with the modern technics may not achieve good results. The digital technologies develop the students' minds but it should be remembered that with the development of the minds there should be the development of the using technics within the educational institution and substitution of the used technologies with the more modern ones (McConatha, 2013).

Taking into the consideration all the conditions of the implementation process and that the equipment can make the process of getting the knowledge easier and simpler it should be realized into the life gradually and in cooperation with the teachers (Dratwa, 2014). The implementation of Network Universities allows the students to

independently form a program of study based on the individual choice of competencies mastered by them.

CONCLUSION

The domestic education system differs from the European and other systems in that the educational process includes not only education itself, but also the upbringing, organizational and scientific activities. The variety of the types of activities of an educational institution complicates the process of management and making effective decisions.

Concluding all the advantages and disadvantages of the educational system of Uzbekistan and European countries and the perspectives of the society development there has been found out the strategic plan of managing the educational system of the higher education institutions that is represented below.

Strategic plans aimed at improving the management system of the educational institution:

- creation of an information system for scientific activities;
- creation of an information system for organizational activity;
- creation of an information system for spiritual and cultural activities;
- creation of a KPI system – Key Performance Indicators – motivation systems for the teaching staff;
- integration of all systems into a single information and intellectual system of management of an educational institution.

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