

ICHEU 2021
International Conference «Humanity in the Era of Uncertainty»

**FORMATION OF INFORMATION AND COMMUNICATION
COMPETENCE AS A FACTOR OF SUCCESS**

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Abstract

The article analyzes the main socio-economic trends that are manifested in society in connection with the increasing influence of digital technologies on the life of an individual and society as a whole. Robotics and automation of production, the active use of artificial intelligence, the spread of the analysis of large amounts of data for making managerial decisions entail the release of a person from the production chain, the increase in social inequality, the aggravation of social conflicts. As a result, the education system assumes a fundamental role in ensuring the readiness of a person to respond adequately to any changes in life. In the process of getting education, an individual must form the necessary competencies for a future profession and develop an algorithm of actions in a situation of uncertainty. That will help a person overcome the reaction of the psyche to stress, analyze not only the state of the external environment, but also adjust their personality to the changed characteristics of life, taking into account personal preferences, opportunities, abilities. To this end, it was proposed to form information and communication competence. The work was carried out with students of a technical university. The results of the experiment are presented.

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Keywords: Digital economy, higher education, softskills



1. Introduction

The first two decades of the twenty-first century were a period of profound technological changes in the life of mankind. Digital technologies have penetrated almost all areas of human activity: the robotization of many production processes has led to job cuts, artificial intelligence generates articles in the media, companies are increasingly making strategic decisions based on the analysis of an array of data about actual or potential customers.

The tendency to simplify the physical activity of a person and concentrate on managerial and creative activities is becoming more and more clear (Anokhov, 2019). At the same time, the "withdrawal" of a person from the structure of the production of material values in terms of physical activity requires a structural restructuring of the person's personality: the formation of new personal qualities, a culture of being, and consumer behavior (Yakovleva, 2020).

In this situation, education begins to play a fundamental role, which is able to ensure that a person is ready to adapt to any socio-economic changes. At the same time, a special function is performed by professional education (secondary, higher), as well as the level of retraining or advanced training, because these are levels that often take place at a more mature age. And it is older people who most often fall into the risk group when the structural changes in the labor market occur. As a result, it is strategically important for the well-being of society to transform the educational system in such a way that it can respond in a timely manner to any changes in the economy and, in particular, in the structure of employment, ensuring the competitiveness of any member of society, almost regardless of its social level.

2. Problem Statement

In order to create an effective, flexible, and socially responsive education system, it is necessary first of all to analyze the main trends of socio-economic changes in the world. Such an analysis becomes difficult due to the fact that these changes are very often unpredictable, as well as rapid in historical terms. Only based on the results of the analysis, it is possible to formulate goals, tasks, methods, and ways of updating the educational system in accordance with modern socio-economic realities. And if the goals and objectives of changing modern education are often discussed, then specific ways to implement them remain a problem field for researchers. In this paper, we propose one of the ways to eliminate these problems.

3. Research Questions

Definition of the composition and essence of socio-economic changes that occur as a result of the formation of a digital society. Formulation of the goals and objectives of changes in the educational system, in particular, in the higher education system, to form the individual's readiness to be competitive in the constantly changing labor market and to propose ways to implement the goals and objectives set.

4. Purpose of the Study

On the basis of the analysis and systematization of modern socio-economic changes, it is necessary to determine the goals and objectives of the transformation of modern higher education, as well as to propose ways to solve these problems

5. Research Methods

To achieve the goal of the study, an analysis of the scientific literature on a specific research problem was carried out. Based on the results of the analysis, the goals and objectives of changes in the higher education system were formulated. The system of formation of the specified characteristics of the competitive specialist's personality is tested. The results obtained are systematized and analyzed from the point of view of the tasks set at the beginning of the study.

6. Findings

The beginning of the XXI century was manifested by the rapid penetration of digital technologies into all spheres of human life, which allows researchers to call the current stage of the development of civilization the digital era (Liga & Shchetkina, 2021). Such rapid changes in historical terms cannot have an unambiguous interpretation. On the one hand, robotics, the introduction of artificial intelligence, the use of large amounts of data for making management decisions, the focus on the needs of an individual in the production of goods increase the efficiency of production. Thus it is possible to reduce its costs, accelerating capital turnover (Bondarenko, 2019), eliminating the factors of human imperfection (Korovin, 2019), such as the limited cognitive abilities of a person in processing a large amount of information, the instability of performance over time, errors due to inattention, fatigue, etc. On the other hand, the emergence of cyber-physical systems that work without direct human involvement creates a "competition for relevance" (Yudina, 2020), when a person unexpectedly has to find his place in modern society, which no longer needs his professional skills, performed more effectively by robots.

One of the ways out for a person is the creative economy, when a creative product, whatever it is, performs the role of an economic commodity (Prokofeva & Shamardina, 2020). This position is justified by the fact that creativity in the foreseeable future will be inaccessible to robots and artificial intelligence. At the same time, the question remains open about the number of people who are ready and able to make creativity their permanent work, history proves indisputably that there are few talented creators born, and no educational system has been able to successfully educate them.

And we must not forget about another danger of the digital society – the possibility of complete control over any person. This danger is most pronounced in China, which is actively testing a social credit rating system based on an extensive network of intelligent security cameras with face recognition, as well as collecting data from all possible sources (Klimovich, 2020). In Russia, this danger has not yet fully manifested itself, partly it can be seen in the example of official comments about this or that information posted by a person on social networks.

The ambiguity of the impact of the spread of digital technologies on the lives of individuals and even social groups has led to the identification of new risks in the development of society:

- * growing socio-economic inequality;
- * increased social tension;
- * job cuts;
- * transformation of professions (Mamontova, 2019).

The manifestation of these risks is quite understandable, because the reduction of jobs is due to the total automation of production processes. Socio-economic inequality will not disappear until everyone is provided with the opportunity to realize themselves in a new society, whether it is creative realization or retraining. Creative realization is possible only if a person is helped to realize where he can show his abilities, which means that a network of leisure centers for older people is needed, where, with state funding, an individual will try different types of creativity. The possibility of retraining is no less important, because rapidly transforming digital technologies often cause fear and rejection among older people due to uncertainty about the possibility of mastering them independently. At the same time, the researchers reasonably note that due to the transformation of professions, the prospect of structural unemployment, when there are no jobs available because of the lack of necessary knowledge and skills, is very likely (Mamontova, 2019).

The goals and objectives of education are regulated by the law "On Education in the Russian Federation" (Federal Law, 2012). In particular, one of the tasks is the formation of motivation to receive education throughout life. In the light of all the above, it becomes clear that education should form not only motivation, but also readiness for the fact that it will be a vital necessity. It will be quite difficult at the beginning of the professional path to choose the profession that will last the entire active conscious life of the individual. Most likely, after some unpredictable period of time, a person will need to change their profession, remaining in the same professional field or radically changing the career vector. In this case, the goal of education, including higher education, is not only the formation of narrow professional competencies and the transfer of a certain set of knowledge, skills, and skills, but also the formation of readiness at any time of life to analyze the situation in the professional sphere, to outline ways to further realize themselves in the workplace, to implement their plans to achieve their competitiveness.

To achieve this goal, you need to solve the following tasks.

It is necessary to form stress tolerance, since uncertainty, instability, especially in adulthood, always cause strong emotions. To do this, you can teach some psychological techniques for overcoming negative mental states.

Creating an algorithm of actions in a situation of uncertainty, focusing on various methods adopted in management, means analyzing their interests, comparing them with the situation in the labor market, choosing several priority areas for changing the professional trajectory, finding ways to implement changes, taking actions to transform their work activities.

Testing the algorithm in practical classes implies developing one's own tactics for its implementation.

Changes in the higher education system are necessary; attempts are being made to create a new model of a specialist (Rudskoy et al., 2018), to analyze the main trends in the development of higher

education (Seroshan & Ketova, 2020). At the same time, surveys of employers show that only half of them believe that higher education institutions are preparing for real work (Romanchuk, 2020). And there are objective reasons for this. The rapid change of technologies, the higher education system does not have time to react. On the other hand, some professions are born in the process of getting an education by the next generation, at the beginning of the study there is no profession yet, knowledge and skills are not clear how to work out, you need to learn in the process of working.

One of the ways to solve these tasks is to build the educational process in such a way that the necessary personal qualities are formed, for example, soft skills. Within the framework of our research, an integrative characteristic of the individual was formed – information and communication competence (Tymoshchuk & Myakinkova, 2018). It combines the qualities of a person that provide work with information, as well as interaction with people at different levels – individual, collective; mediated communication by carriers, online and offline communication.

The study was conducted at Samara State Technical University with students of the Institute of Oil and Gas Technologies (INGT) and the Faculty of Heat and Power Engineering (TEF). The number of students who participated in the experiment (first year) is 91 people.

The work began with a lecture, which presented the trends that manifest themselves in the formation of the digital economy. After that, an entrance questionnaire was conducted, which revealed how well the individual components of information and communication competence were formed. The results are quite expected. A little more than a third of the respondents (33%) are ready to show creative initiative, about the same number of participants in the experiment are interested in technological innovations (32%), information is most often obtained from the Internet (82%), the media (77%), books (57%), communication with other people (31%). Methods of processing information for better assimilation were identified as follows: 25% of students named a summary; highlighting information with color / symbols – 16%; converting it into a diagram – 17%, a table-3%, graphs and theses – less than 10%. The results show that only a third of the respondents are ready for the realities of the emerging digital economy, and are able to adequately respond to the situation of uncertainty in their professional life.

As part of the teaching of the discipline "Psychology of Social Communication", students worked with the following methods: "The individual's perception of the group", "Types of behavior in a conflict situation according to K.Thomas", "Assessment of communicative and organizational inclinations in the process of communication" (as cited in Stolyarenko & Samygin, 2009). There was also a lecture, which covered the ways of working with information, the sources of its receipt. Unfortunately, due to sanitary and epidemiological restrictions, lectures were given in an online format, and practical classes were held in the classrooms of the university. The results of the classes were different. At the end of the course, another survey was conducted.

The distribution of the popularity of the source of information remained almost unchanged, a significant discrepancy was only the receipt of information through communication with other people – 38%, but still this figure is less than 50% of the respondents. Indirectly, the students confirmed that they themselves are aware of the problems in their communication abilities. When asked what skills need to be developed, 46% of respondents named organizational, 36% - communicative, 31% - the ability to behave in conflict. A very frequent comment on the choice of the answer is the inability to communicate with

strangers, difficulties in working with a group, a team. Such answers give hope that awareness of the problem is the first step to its elimination.

82% of respondents are set to work in the group; the preferred roles are "responsible performer" - 41%, "inspirer" - 38%, "leader" - 15%. At the same time, the first two roles were agreed to combine (if there are not enough participants in the group, you can take two roles), then the leader does not agree to perform any other role. Less than 10% of respondents agreed to the role of "communicator" and "critic". The distribution of roles by popularity coincides with the result of the survey on creativity – the same third of students are ready to create something new, generate ideas. And almost half of the respondents are ready to do the work assigned to them, without seeking to innovate.

7. Conclusion

The realities of the formation of the digital economy have determined the following features of changes in the labor market. The release of people from labor relations characterized by algorithmization, monotony, and the replacement of a person with a robot. The disappearance of a large number of professions, but at the same time the emergence of new ones based on digital technologies. As a result, structural unemployment begins to manifest itself vividly, when a person cannot perform work because he does not have the necessary competencies.

The role of the educational system is growing, which should not only prepare a person for lifelong learning, but also adjust to the inevitability of changing the professional trajectory in the course of work. It is necessary to develop an algorithm of actions in a situation of uncertainty, which consists in analyzing your needs, comparing them with the realities of the labor market, choosing the best ways to further your career, and developing strategies for implementing the planned path. Moreover, this method of action in a situation of uncertainty should be tested in the course of study, so that the student can make an individual adjustment to the capabilities of his personality. This work should be carried out not only with representatives of the older generation, but also with students of higher education institutions, as the study showed that even among first-year undergraduate students, less than half of students are ready to respond adequately to stressful situations of the labor market. In addition, their work activities will be affected by the factors of the digital economy from the very beginning.

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