# European Proceedings of Social and Behavioural Sciences EnSBS

www.europeanproceedings.com

e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2020.04.73

# **PEDTR 2019**

18<sup>th</sup> International Scientific Conference "Problems of Enterprise Development: Theory and Practice"

# DIGITAL TECHNOLOGIES USE FOR VOCATIONALIZATION AS BASIS OF COMPANY'S DIGITAL TRANSFORMATION

O. Kolosova (a), E. Karpova (b)\*, O. Begicheva (c)
\*Corresponding author

(a) State University of Management, 109542, Ryazansky Pr., 99, Moscow, Russia, Russian State University named by A.N. Kosygina (Technology. Design. Art), 117997, Sadovnicheskaya Str., 33, Moscow, Russia, olga\_kolosova@mail.ru

- (b) Russian State University named by A.N. Kosygina (Technology. Design. Art), 117997, Sadovnicheskaya Str., 33, Moscow, Russia, pedagogikanet@yandex.ru
- (c) Russian State University named by A.N. Kosygina (Technology. Design. Art), 117997, Sadovnicheskaya Str., 33, Moscow, Russia, olgalvb@mail.ru

#### Abstract

The article actualizes the research search for a solution to the problem of career guidance of a socializing personality in the conditions of digital transformation of society. Research methods: analysis of sources and literature, quantitative research methods - surveys in the form of questionnaires in an online environment. The transformation of society activates components, including the creation and development of digital technologies, platforms that are used to form the need for career guidance in the interaction of individuals with digital technologies and platforms. The results of the study. In the transition to the informational stage of the development of society, a new global digital environment arises surrounding the person. Since the powerful information processing industry based on computer and telecommunication information technologies is part of the life of an actively socializing individual, this implies a certain level of literacy and a developed information culture of the person, therefore those who are able to actively use the capabilities of central heating, means of communication through social networks are in a more advantageous state. Conclusions. The digital environment, as part of the global information environment, will gradually and purposefully set the vector for the pragmatic and rational use of the DH to form (and then, naturally, satisfy) fundamentally different socially useful, socially adaptive needs of a developed personality, including the need for career guidance. It will help to avoid negative side effects of the avalanche-like collapse of the global information environment on the emerging personality.

2357-1330 © 2020 Published by European Publisher.

Keywords: Digital, technology, environment, career guidance, socialization, personality.

Unported License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

Introduction to the study of the problems of using digital technologies for career guidance of a socializing individual.

#### 1.1. Actualization of the research problem

The relevance of the chosen research direction is due to the current stage of social and economic development, the need to find optimal ways of socializing young people with the expansion of the use of digital technologies (DT) and platforms for vocational guidance. Balyuk (2012) indicates that career guidance is aimed at solving one of the key social problems of modern society related to the need to ensure conditions for the full self-realization of each individual in the field of professional activity, which forms the basis for successful socialization of a person. In mass Russian education, there are trends that weakly contribute to the rapid and effective employment of young people in Russia: weakening attention to career guidance issues at school; lack of communication between school disciplines and the realities of the domestic labor market. This trend leads to problem areas in the general economic situation in the country and in the labor market for the younger generation.

# 1.2. Introduction to the problem of optimizing the career guidance process

With the advent of the 21st century, mankind is deepening more and more in the process of global digitalization. For many of us, it is no longer unusual for time to be spent on the World Wide Web. Mass media, digital technologies penetrate more and more into all aspects of human life. From the point of view of solving the problem of optimizing the career guidance process, a large number of young people, applicants use digital technology not only as a means of communication, but also to solve applied problems, namely to search for information about educational programs, universities, that is, when deciding on their choice further education strategy, that is, actively participate in the selection of the future professional development direction.

The demand for digital technologies and their popularity is inevitably growing, becoming for many the main place to spend time on the Internet. First of all, this is due to the young man's need for communication, socialization, which are not always possible in a large number of real life, as there are a number of psychological barriers, and often remoteness of communication objects. Open information is accessible to all users, without any restrictions. The most active users of digital technologies are high school and university entrants, students. This is due to the fact that it is at this age that the first peak of socialization takes place, career guidance is actively carried out, and social networks greatly contribute to this process. They also simplify the process of self-expression for an individual who is not yet strong in society, which is one of the key factors in their socialization.

Based on this data, it can be understood that:

- Digital technologies are an excellent platform for disseminating information, including those related to the choice of future educational programs;
- It is digital technologies, including social networks, that are in a winning position in comparison with more traditional methods of transmitting information. And there are several

reasons for this, firstly, school graduates, applicants make up the most active contingent of a social network, which gives them more chances to familiarize themselves with and find information of interest to them, and secondly, social networks remove the time and distance restrictions, that is, allows to study the entire range of information remotely;

Digital technologies are one of the most productive ways to disseminate educational programs that help graduates and applicants perhaps in one of the most important decisions in their lives, and also help to conduct career-oriented events at a higher information level.

# 2. Problem Statement

# 2.1. Current status of career guidance problems

Actualization of the problem of career guidance at the present stage consists in the fact that, not having solved the problem of professional choice, or having chosen a profession only under the influence of factors from outside, many young people in the future are disappointed in their choice. Most often this happens after graduating from secondary and higher educational institutions. Having received a secondary vocational or higher education, specialists graduate who do not go to work in the profession, as a result of which some professions are deficient in qualified specialists. As a result, an unsuccessful professional choice can turn into a global problem not only for an individual, but for society as a whole. A lot of research works are devoted to the problem of professional self-determination, such as works (Andronov & Ionova, 2015; Begicheva, Beregovskaya, & Grishaeva, 2019; Bein, 2013; Zotova & Karapetyan, 2015; Retivina, 2019; Sibileva & Artemenko, 2015) and others. The need for career guidance, which is actualized in the interaction of the individual with the CT, is the need experienced by the individual as a state of internal tension, stimulating mental activity associated with the goal-setting of professional choice. As a result of the pedagogical impact with the use of CT, its stable form arises, which is then determined by interaction with the CT, being updated as a result of the reflection of the need, desirability of introspection, self-esteem of professionally important qualities and inclinations, choice of profession, preparation for professional activity, selection places of work, etc. in accordance with the situation. Over time, this need can become a trait inherent in this person, a property of his personality, a personal disposition.

# 2.2. Development of methods and means of career guidance for youth

Despite the fact that at different times various forms, methods and means of career guidance work with young people were developed; established knowledge, skills and functions of the activities of individual entities; scientific-theoretical and practical basics of career guidance have been created, however, the actualization of this problem at the present stage, dissatisfaction with the degree of youth's need for professional self-determination, the intensification of the search for ways to improve the methods of educating modern youth of the need for a conscious, justified, well-reasoned choice of profession indicate the inconsistency of this wealth of experience with the degree of today's requirements to the problem of career guidance for youth. There are undoubtedly a number of reasons for this discrepancy. It is necessary to list the disagreements that are inherent in the approaches and in the career guidance system:

1) Between the need for various subjects of the career guidance process and the absence of such differentiation:

2) Between the obvious need to distinguish between the fields of activity of different subjects of career guidance, and the uncertain status of all subjects, the unregulated organizational, legal and economic norms of their interaction;

3) Between the needs of the region, country, world economy in personnel with completely defined requirements for them, the possibilities of obtaining appropriate education and youth awareness about this;

4) Between the existing potential of digital technologies in the professional self-determination of youth of the information society and the lack of demand for their application in this direction;

5) Between the existing realities in youth employment, the problem of unemployment, the problem of choosing a profession that is in demand, the problem of obtaining an appropriate professional education, a number of other problems of this kind and the lack of awareness of the need for an appropriate analysis of the reasons that generate and exacerbate such issues from the point of view of individual government officials, their inattention to existing scientific developments in this area.

The resolution of these contradictions will provide a solution to eliminate these disagreements and help bring career guidance of young people to a higher scientific and professional level corresponding to the stage of digital transformation of society.

# 3. Research Questions

- To conduct a study of the features of socialization and professional choice among students in 11th grade;
- To conduct a study of the features of socialization and professional choice among applicants entering universities;
- Analyze the results and draw the appropriate conclusions.

# 4. Purpose of the Study

The purpose of this study is to determine the impact of digital technology on the socialization and professional choice of youth. The object of the study is young people: namely, graduates of secondary schools, applicants. Subject of research: the impact of digital technology on the professional choice of youth when entering a university. The hypothesis of the study is as follows: young people who use primarily information technology for professional choice have a more stable professional orientation and optimal socialization at this stage of development.

# 5. Research Methods

The identification and determination of the specific effects of digital technologies on the socialization and professional choice of young people was conducted from May 2019 to the end of September 2019. This study consisted of the steps:

1) Questionnaire of students in graduation classes regarding the use of information technology in the process of professional choice;

2) Questionnaire of university applicants for the use of information technology in the process of professional choice.

The stage of empirical research is devoted to determining the use of information technology by students of final classes before entering a university and making their professional choice. It was carried out using electronic questionnaires on the Internet. The study involved 164 respondents. A research program and tools were developed (based on a preliminary analysis of the sources). Next, the empirical stage of the study was implemented.

The survey was conducted on social networks using the online survey methodology. Before the direct questionnaire, the topic of confidentiality and the importance of obtaining individual results was covered. Students did not have time to fill out questionnaires. At the last stage of the study, processing, analysis and description of the obtained empirical data were carried out.

In a study on the topic "Features of the use of digital technologies by applicants, graduates of schools of digital technologies for career-oriented choice of study direction at a university", 164 respondents were interviewed. Of the respondents 164 people, 78% are girls, and 22% are boys. Since the survey was conducted on the Internet on the IAnketa.ru portal, and on sites with the active presence of applicants posted motivational appeals and links to the questionnaire.

As a result of the analysis of the study, we can conclude that girls spend much more time on the Internet than boys. Of the surveyed students 57.2% of applicants are in 11th grade, this is the largest number of respondents who are going to enter universities, from this indicator we can conclude that 11 classics are most interested in entering universities, because for 11th grade is the last year in their training, which involves them in the process of studying and choosing educational programs. 10.5% of respondents study in the 10th grade, and 7.2% in the 9th grade. 5.9% of respondents study at college, and only 2% at college.

Most Russian schoolchildren think about continuing their education, getting higher education, and also about the fact that they will have to work in any particular specialty, which requires special skills, most of them are going to go to college - 92.5%. Almost all respondents use the Internet (99.3%) and only 0.7% do not use the Internet. This indicator clearly demonstrates that in modern times the Internet is an integral part of society, and that young people are actively using virtual space. Of the respondents, 99.3% use the Internet daily. This is due to the large spread of digital technology in recent years. Only 0.7% of respondents indicated that they use the Internet several times a week.

More than 11% of respondents use the Internet over 10 hours a day. Even today, modern technology is an extremely high indicator, and we can assume that among these 11% there are representatives of grades 9-10 who are not faced with the task of preparing for final exams and entering a university. 24.7% of respondents spend 6 or more hours a day on the Internet. The largest number of applicants use the Internet for 3 to 6 hours a day (36.7%). 24.7% use the Internet from 1 to 3 hours a day. Less than 1 hour per day on the Internet spend only 2.7% of respondents.

Next, the question was examined whether applicants use digital technology to search for information about universities and educational programs. The following results were obtained: almost all

(98%) applicants use the Internet to search for information about universities. Only 2% do not look for information about universities on the Internet. That is, the Internet can be considered as one of the main channels of digital technology, through which applicants can get the information they need about universities and possible educational programs for further education.

The authors conducted studies, the results of which are indicated below in the diagram. Most applicants (95%) use the official websites of universities to search for information about universities and educational programs. Consequently, it is possible to recommend that the employees of the selection commissions of universities and vocational guidance departments use more actively the official websites of their educational institutions, and all basic information about the university as a whole should be posted on the official websites of universities. Other answers were distributed as follows: 61% of respondents use sites containing information about universities, social networks use 43% of interviewed applicants, 22.0% of applicants use forums. Only 4.0% of applicants are looking for information about universities on advertising links (Figure 01)

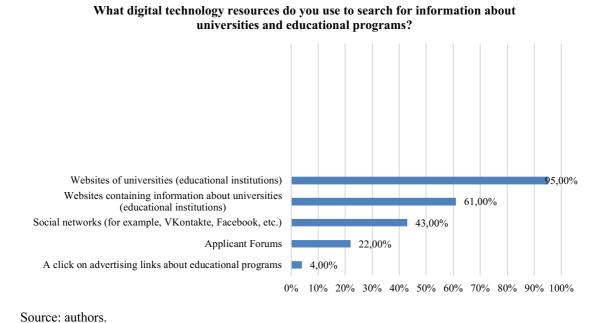
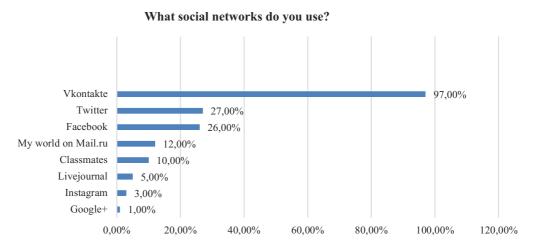


Figure 01. Resources for finding information about universities and educational programs.

To identify the most popular ways to obtain information about universities through social networks, the question was asked: "How are you using digital technologies, including social networks, to search / get information about universities, educational programs?" Of the respondents, 84% use open groups of universities and training areas to search for information about universities and training areas. 23.3% are in contact with students of other universities in order to find information on areas of study, 19.3% of applicants, in contact with their friends, find out information about universities, 15.3% of respondents communicate with other applicants in the process of searching for information about a university. Also 3.3% of respondents chose the option "other".

The authors conducted studies, the results of which are indicated below in the diagram. Among all the applicants surveyed, 97% use the Vkontakte social network. Accordingly, this social network is the

most popular today. 27% of respondents use Facebook and 26% use Twitter. It is worth noting that on Twitter, some universities, such as the HSE, have their own page, which marks the most significant events of the university and student life, as well as the opportunity to answer questions from interested applicants quickly and informally, thereby helping to implement the decisive a choice. 12% and 10% of applicants respectively use the social networks "My World" and "Classmates". Only 1% of applicants do not use social networks and 3% chose the option "other", where they indicated such social networks as: "Instagram" (Figure 02).



Source: authors.

Figure 02. Popular social networks among applicants

Usually, applicants spend on social networks from 3 to 6 hours a day (38%). According to these results, the fact that modern youth is deeply involved in the modern Internet space is once again confirmed. 30.7% of respondents - more than 6 hours, and 22.7% - up to 3 hours a day. Less than 1 hour a day in social networks spends time 7.3% of respondents. A few hours a week and a month spend 0.7% of applicants.

It was interesting to find out if the respondents are in communities (in social networks) dedicated to various universities that are interested in their areas of training. Having received the results of respondents' answers to this question, it will be seen whether applicants really choose universities and areas of study on the Internet and, in particular, on social networks, or not. The data obtained as a result of the survey led to the following conclusion: the majority (62.7%) of the applicants surveyed are in communities dedicated to specific universities and areas of study (37.3%) - not members.

The following answers were received to this question about which communities dedicated to certain universities and areas of training applicants consist of: Eavesdropped by RSU, GUU, MGOU, eavesdropped by RSU, MGOU, RSUH, VKontakte, etc. This really confirms the fact that applicants not only sometimes look in groups dedicated to universities, but also these groups are often visited by them, these groups entered 63 participants of the survey, which is 38.4% of all respondents.

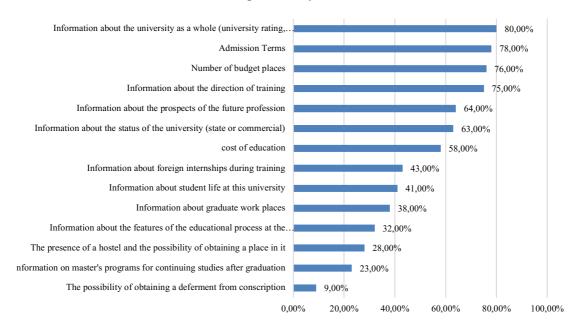
The most important thing in the study was an attempt to understand what is the highest priority for applicants when choosing a university, what information is most important for them?

eISSN: 2357-1330

To this question, applicants gave the following answers. The authors conducted studies, the results of which are indicated below in the diagram. The most important information (80%) for applicants upon admission to a university is information about the university as a whole, its rating, and accreditation. The conditions of admission (78%), the number of budget places (76%) and information on the direction of training (75%) also play an important role. Of particular importance for 64% of respondents is information on the status of the university, the prospects for the future profession, and the cost of training (58%). Applicants are interested in the opportunity to study abroad (43%) more than information about student life in this university (41%) or about places of further work after graduation (38%).

For 32% of respondents, information about how many days a week they will study, or at what time classes are held, is important. 28% of the applicants surveyed are newcomers, since it is extremely important for them to have a hostel at the university, and the possibility of getting a place in it. Only 23% of respondents said they were interested in master's programs to continue their studies after graduation. 9% of respondents consider receiving a deferment from draft in the army. Also, 4% chose the option "other", in which they indicated such reasons as: the teaching staff of the university, information about the cultural life of the university (contests, olympiads) (Figure 03).

# When choosing a university or educational program, what information is important to you?



Source: authors.

Figure 03. What information is important to you when choosing a university.

# 6. Findings

With the introduction of information technology into the everyday life of adolescents, completely new components appear in the professional self-determination of the personality of a young person:

1) The ability to receive global professional information in real time, including on the range of specialties offered by places for admission to higher and secondary special educational institutions, conditions for competitive selection;

- 2) The opportunity to participate in the professional selection (selection) of personnel on virtual labor exchanges and on electronic announcements;
  - 3) Distant professional psychodiagnostics on special sites;
- 4) Interactive professional consultation with leading specialists and in the best institutions and organizations through a teleconference system and e-mail;
- 5) Communication without borders with peers, discussion of the general problems of choosing a profession, obtaining a vocational education and employment;
  - 6) Continuing professional education in the system of open education;
  - 7) Modeling of situations of professional activity in special educational and training environments.

# 7. Conclusion

Conclusions from the study of a quantitative research method – questionnaire.

Conclusion 1. As a result of the study, the specifics of the influence of digital technologies, virtual network communities on the social activity of young people socializing at this stage of development and career guidance were described. It is concluded that the influence of virtual network communities and the Internet on career counseling and social activity of young people is determined, on the one hand, by the presence and accessibility of a large number of digital technologies, web resources that allow for certain types of social activity on the Web, on the other parties, the relevance of these web resources to youth.

Data on the most used digital technologies by young people, applicants.

Conclusion 2. The most used social network "Vkontakte" has been identified, which can be a platform for disseminating information about educational programs and priority areas that applicants are interested in, and which should be emphasized when disseminating information about the university and the educational program on the websites of educational institutions and in thematic educational groups online.

Conclusion 3. Data on what information is most important for applicants in order to make their final choice: information about the university as a whole, its rating, accreditation, conditions for admission, the number of budget places, information about the direction of preparation. In addition, for most of the respondents, information about the status of the university, the prospects of the future profession, and the cost of training, the opportunity to study abroad, is also of particular importance.

Conclusion 4. The majority of young people entering the university do not have stable professional orientations, while making professional choices they demonstrate a focus on the status aspects of the profession and are rather poorly aware of their inclinations and interests.

Conclusion 5. The inclusion of school graduates, applicants in various social practices to improve knowledge, both formal and informal, self-education distinguishes school graduates who demonstrate an active type of choice. The accessibility of digital technologies and the practice of obtaining additional knowledge using digital technologies is an important factor in the formation of a sustainable professional orientation and professional choice aimed at realizing one's own abilities, inclinations, interest in the

content of the profession, and therefore the successful socialization of the young man at this stage of development.

Summarizing the above, in these circumstances, the delineation of the areas of social and managerial activity of various subjects of career guidance can significantly advance the professional orientation of young people at the stage of digital transformation of society. Undoubtedly, the fact that educational institutions should be entrusted with the mission of social and professional education of youth in that part that relates to the education of the young man's need for a conscious, motivated choice of profession in the process of using digital technologies. The information stage in the development of society has tremendous opportunities for professional choice. A person can take advantage of them only if he is able to satisfy the named traditional need by the means provided to him by the modern information society. Further research can be expanded towards the creation of various models of career guidance for young people; development of the theory and practice of comprehensive support for graduates of educational institutions in professional choice at the stage of digital transformation of society, etc.

# References

- Andronov, V. P., & Ionova, M. S. (2015). The value of prognostic abilities for professional self-determination of high school students. *Integration of Society*, 19(1(78), 118-123.
- Balyuk, A. D. (2012). Socialization and professional orientation problem in modern terms: Theoretical and methodological approaches to the research. *Humanitarian and Socio-Economic Sciences*. *Sociology, 5.* Retrieved from http://gsen.sfedu.ru/articles2012/issue5/5-25a.pdf Accessed: 12.12.2019.
- Begicheva, O. L., Beregovskaya, T. A., & Grishaeva, S. A. (2019). Online education in higher education. In I. Vylegzhanina (Ed.), 1st International Scientific Conference "Modern Management Trends and the Digital Economy: from Regional Development to Global Economic Growth" (MTDE 2019). Advances in Economics, Business and Management Research, 81 (142). Paris: Atlantis Press.
- Bein, J. (2013). Vocational education: A need for the Indian economy. Retrieved from http://www.uran.donetsk.ua/masters/2013/iem/boyko /library/article3.htm Accessed: 12.12.2019.
- Retivina, V. V. (2019). Labor values and attitudes of modern student youth. *Higher Education in Russia*, 1, 57-63.
- Sibileva, L. V., & Artemenko, B. A. (2015). Analysis of the problems of career guidance in theory and practice. *Modern Problems of Science and Education, 1*(1). Retrieved from http://www.science-education.ru/ru/article/view?id=17689 Accessed: 12.12.2019.
- Zotova, O. Y., & Karapetyan, L. V. (2015). Occupation as a factor of personality subjective well-being. *Psychology in Russia: State of the Art*, 8(2), 126-136.