POTENTIAL OF DIGITAL LEARNING ENVIRONMENT IN STUDENT CAREER GUIDANCE

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ABSTRACT
The article describes the potential of the digital learning environment in student career guidance. The authors study the factors that influence the design of students' professional careers according to the changes in the digital environment and technology.
The article considers the experience of student career guidance in the context of the digital learning environment. Particular attention is drawn to the practical and individualized approach of student career guidance in the higher school context.
Examining the university's experience resulted in arranging the challenges of student career guidance and proposing their solutions.

Keywords: *digital learning environment, career guidance, student youth.*

1. INTRODUCTION

In the digital learning environment, there is a need for training a highly skilled workforce capable of mastering the qualities to succeed in addressing challenges of the modern world in the 21st century - to be smart, flexible, fast, and digital.

The need for the development of high-tech production and the young people's natural need to choose education consciously and build up a career in response to the changes in the digital environment and technology in order to be in demand in today's labour market explains the relevance of career guidance.

2. LITERATURE REVIEW

Russian psychology has a wealth of experience in studying the issue of professional self-determination.

These are primarily papers by such scientists as E.I. Golovakha, E.F. Zeer, E.A. Klimov, N.S. Priazhnikov, S.N. Chistiakova, P.A. Shavir and many others. The influence of personal aspects on the process of professional self-determination is a common feature of the approach to the issue.

An essential methodological basis for understanding the essence of professional self-determination was provided by E.F. Zeer, who states that "professional self-determination is an active and long-term process of occupational choice, internal psychological foundations and the result of this process. Ideas about the world of jobs, knowledge on the ways to choose a career, ways of mastering professions, self-analysis and self-assessment form the content of professional self-determination" [14, p. 330].

E.A. Klimov considers the phenomenology of self-determination in the context of choosing a professional pathway and developing as a professional. E.A. Klimov writes: "In general, professional self-determination is a person's activity that acquires a particular content depending on the stage of his/her development as an actor of labour" [11, p. 9].

N.S. Priazhnikov's point of view about professional self-determination is quite widespread: "gradual formation of inner readiness of an individual to consciously build, adjust and implement his/her development prospects, to search for personally significant meanings in a particular professional activity" [12, p. 18].

Papers of several authors - N.N. Chistiakov, Y.A. Zakharov, T.N. Novikova, and T.N. Belyuk - mark out levels of professional self-determination:

- high level (formed interests, personal qualities are relevant to the chosen profession, confidence in the choice, availability of professional plans);
- medium level (lack of sustained interest and lack of confidence in the choice, difficulties in professional planning);
- low level (lack of professional interests and of a desire to achieve high results, inconsistency of personal professional orientation with the requirements of the profession, negative self-esteem) [13, p. 29].

Analysis of scientific studies showed that a practical and individualized approach to student career guidance in higher education should be applied through implementing the potential of the digital learning environment.

The modern digital learning environment is not only a new environment for students but also a source of development, which opens up opportunities for students to acquire and be able to apply digital technologies confidently and safely in all spheres of life, in particular in career guidance.

Higher education institutions not only provide their applicants with vocational guidance related to their professional self-determination, but also organize additional education-oriented activities and psychological counseling for students [3].

3. MATERIALS AND METHODS

In today's rapidly developing world and changing labour market, it is necessary to make decisions quickly and consciously and arrange life plans and prospects efficiently.

Modern digital technology allows to use the educational potential of career guidance. Scientists are interested in the issue of student career guidance because:

1) the automation and robotization of the labour market, the increasing speed of information updating, digitalization of knowledge and learning technologies determine a need for developing and improving professional and personal competencies during the specialists' training in every field of professional activity;
2) many people do not have a full understanding of their professional identity, which can lead to dissatisfaction with their occupation and thus to inefficiency of their work;
3) professional self-determination is a milestone for each student.

It can be said that such processes hinder the development of the economy, science, and the design of youth career pathways. All this indicates insufficient self-motivation in students - mobility within a career and the ability to learn independently and continuously [[1]].

As is well known, youth is a socio-demographic group that has a certain social status. Their position in society always changes according to what young people think of adulthood.

Considering young people as work-capable members of society makes it possible to identify the student youth as a specific segment. 11th graders, who are university applicants, students themselves and young professionals (graduates of higher education institutions who are starting professional careers) form the framework of this segment.

It should be noted that the period of higher education for students means a high level of social mobility, searching for and finding their own educational and professional pathways as well as mastering new social roles. This is a period of social maturity, a conscious choice of a career path, which is carried out with an understanding of responsibility for the implementation of the intended path. Vocationally relevant competence begins to form when a student understands the situation of designing a career path. The landscape of the digital learning environment is an active search for one's place in the world and prospects for professional growth.

All higher education institutions as social institutions can be seen as an educational environment for the career self-determination of their students. Higher education institutions create an attractive environment and engage students in the educational community for quite a long period (4 to 6 years) to enable them to manage their career choices.

Career guidance in higher education institutions includes expert information (increasing knowledge about the world of jobs and the regional labour market), expert diagnostics (identifying the interests, aptitudes and abilities of the individual for a particular job), expert counseling (providing social and psychological assistance in planning a professional career, in adaptation of the workers-to-be to the work environment) [2].

Each stage of student career guidance assumes implementation of the following objectives:

- first stage (1st-year students) - to form the ideas about the chosen profession, understand the role of knowledge in human life through participation in learning practices;
- second stage (2nd-year students) - to use the theoretical knowledge gained during the technological practical training;
- third stage (3rd-year students) - to gain skills and professional knowledge, to make familiar with the social environment of the organization in order to

acquire the social and personal competencies required for work in the professional sphere and job placement;

- fourth stage (graduates) - to develop and improve professional competencies, to perform professional activities at different stages of setting and solving professional tasks during pre-graduation practical training.

In their article *Educational Technology Research in a VUCA World* (2015), T.K. Reeves and P.M. Reeves considered studies on educational technology in the world of VUCA. The authors defined the acronym VUCA that stands for Variability (rapidly changing contexts and conditions), Uncertainty (lack of information that is crucial to solving problems), Complexity (multiple factors that are difficult to classify or control) and Ambiguity (fuzzy data that can be interpreted in different ways) [15].

It should be noted that students may find it difficult to construct a personal career plan because of the increased uncertainty in the VUCA world.

Many students do not take seriously the construction of the professional orientation field or do not want to think about the future at all. Besides, the professional development of the student's personality takes place within a difficult socioeconomic context and associated challenges.

Most foreign and Russian scientists agree that in today's environment, "in order to address these challenges successfully, companies have to rely on employees at all levels of the hierarchy, who can adapt quickly to unknown situations and complex problems" [16].

Western scientists E. Wuttke, J. Seifried, and H.M. Niegemann (2020) believe that digitalization is one of the main challenges of vocational education and training in the current digital age. The authors state that the growing digitalization of the labour sphere is associated with accelerated structural changes. It is related to changes in qualification profiles and hence to new challenges for vocational education and training. Companies, vocational schools and other educational institutions should respond accordingly [17].

Thus, the social mission of career guidance is to help people shape their professional pathway so that their personal qualities and capabilities meet the demands of the modern labour market for specialists in various fields of production.

4. STUDY RESULTS

Astrakhan State University established a Career Planning Centre in 2007, which received the status of a regional employment promotion centre for graduates.

The Centre makes active use of the digital learning environment to apply innovative technologies for building students' professional careers and establishing cooperation with employers in organizing internships, work placement and the employment of graduates.

The university has a comprehensive system of modern information technology for career guidance, which has been set up on the university website as a form of interactive communication among students, graduates and employers. Modern digital technology provides students with free access to information resources that acquaint them with the labour market and modern requirements for young specialists. Students have the opportunity to take psychological tests and receive career advice online.

Taking into account individual psychological, age-specific features and professional preferences of young students, digital technologies enhance their opportunities for self-determination.

Practice shows that the development of general professional competencies of a student on the basis of education, diagnostics, and counseling with the use of ICT is an efficient method in solving the following tasks of a higher education institution:

- to provide advice on building a career pathway;
- to conduct career guidance and psychological testing;
- to organize and conduct student internships and to assist in the employment of graduates;
- to cooperate with employers;
- to conduct regional career forums, job fairs, and master classes for students with the participation of sectoral ministries, agencies, local authorities and employers.

To illustrate this statement, the experience of Astrakhan State University is presented below.

The university is constantly working to improve the system of informing students and graduates about the labour market, employment opportunities and professional career development. The scheme of informing students and graduates is shown in figure.

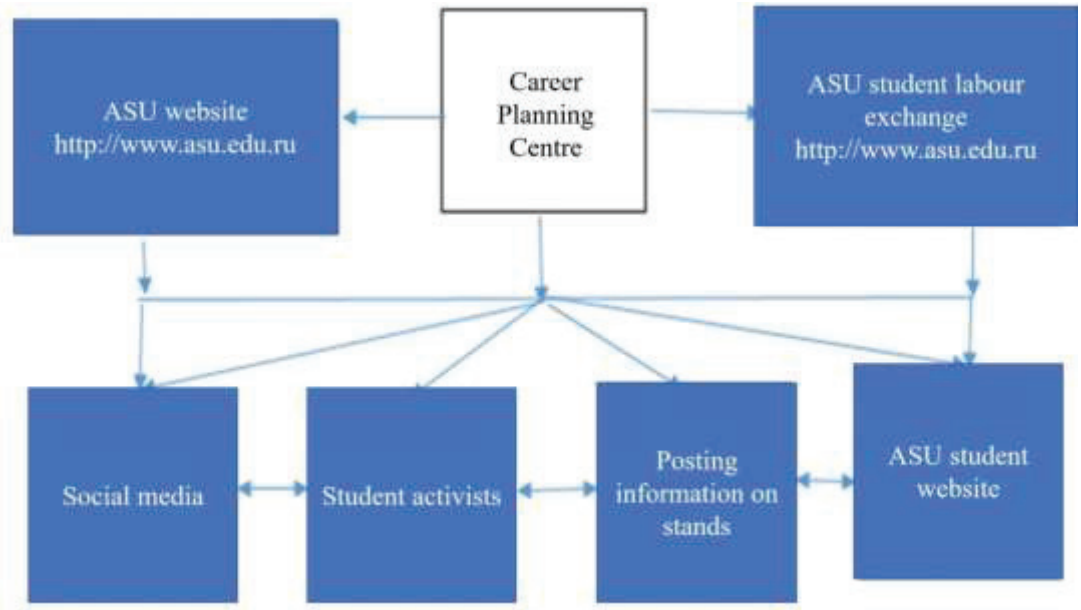

Figure 1. Scheme of informing students and graduates

The main channels of informing students and graduates about professional self-determination are *Work in Russia* all-Russian job database, an interactive website of the Employment Agency of the Astrakhan Region, and the official website of Astrakhan State University.

The homepage of the university website hosts banners that allow students to quickly navigate to the desired electronic resource in a click.

Work has been organized to constantly post information for students and graduates on vacancies on the ASU Student Labour Exchange e-resource. Users can easily find it on the university website via the *Your Career is Our Care* banner http://asu.edu.ru/universitet/3174-studencheskaia-birja-truda.html [[9]]

The information system with databases of job openings posted by companies and organizations, and students' CVs is constantly updated. One can customize a search by the following criteria: by job, by CV, by field of training, by company. The e-mailing function allows the administrator to send users all relevant information in a timely manner. Universal mailing uses test e-mail addresses of the users.

Since July 2021, the university has participated in the *Facultetus* all-Russian project, which aims to digitize the process of student-university-employer interaction, and to implement the digital career environment in order to assist in the organization of employment, internships and practical training https://facultetus.ru/ [[10]].

The implementation of this project creates conditions to form digital student profiles with CVs and to set up a single window for employers with tools for selecting and controlling their interaction with universities.

Social media are the most popular platform for youth communication, informing students and getting feedback from students on employment issues, so they are the most important source in the ongoing monitoring of the employment of graduates and their labour mobility. The monitoring results are entered into the database of the *Student+* university information automated system.

The digital environment allows to expand opportunities for individual work on career guidance and efficient behaviour in the labour market with applicants, rural youth, international students, and graduates.

In the 2020/2021 academic year, the *Career; START!* regional employment forum was successfully held within the digital learning environment of the university, where heads of enterprises and organizations, representatives of industry ministries and departments of the Astrakhan Region presented the information about employment prospects for young professionals.

Representatives of *Alabuga* special economic zone, the Republic of Tatarstan, took part in a video conference that was held for graduates.

Online master classes were held within the framework of the *Time of Career* all-Russian campaign.

A master class *Career start* was moderated by *Pilot* Group. The participants received recommendations on how a job seeker should behave at an interview with the employer when applying for a job and how to prepare a successful CV.

A master class *Job Interview* was moderated by *AZIMUT Hotel Astrakhan*. HR specialists told the participants about the job prospects in the organization.

The *Boiling Point* co-working centre of ASU held a master class *Secrets of Successful Employment*, moderated by specialists of the Employment Agency of the Astrakhan Region, who provided detailed answers to students' questions about ways to become competitive in the labour market.

5. CONCLUSION AND FINDINGS

Therefore, in today's fast-evolving world and changing labour market, the student youth needs to make decisions quickly and consciously, and efficiently arrange their life plans and prospects for the future.

Modern digital technologies allow to set new tasks in career guidance. The digital learning environment greatly expands the opportunities for student career guidance, which contributes to the efficient solution of tasks aimed at helping students and graduates get employed.

The practical experience of Astrakhan State University confirms that at the present stage, the digital learning environment in the student career guidance contributes to:

- developing a modern system of informing students and graduates about the labour market;
- addressing specific issues of youth employment;
- expanding cooperation forms among professional educational institutions and employers and business communities;
- implementing innovative technologies and methods of monitoring studies for further improvement of youth career guidance;
- developing alumni databases for continuous interaction and cooperation in order to build further professional career of young specialists.

AUTHORS' CONTRIBUTIONS

T. Vostrikova analyzed student career guidance activities;

I. Sorokina analyzed the concept of the digital learning environment;

S. Akhmedova analyzed the potential of the digital learning environment for career guidance activities;

I. Bezrukavova reviewed scientific and methodological literature on the topic of the article.

ACKNOWLEDGEMENTS

The authors express their gratitude to the translator and editors for their assistance with the formatting and translation of the article.

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