# **Role of Career Guidance in the University Applicants Self-determination in the Context of Sustainable Development**

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- Keywords: Career Guidance, Digital Technologies, Self-Determination, Personnel Potential, Electronic Educational Services, Information Resources.
- Abstract: The article is devoted to the assessment of the career guidance role in the applicants professional self-determination in a regional university. The authors reveal the tasks, forms and types of career guidance work, both traditional and pmes with the use of modern information technologies. Special attention is paid to the analysis of works devoted to the theoretical understanding of career guidance, including the use of digital technologies, and its role in the individual professional self-determination. Based on the study of the applicants opinions on the choice of educational institution, areas of training (specialties), as well as the career guidance methods that influenced their professional self-determination, the factors that strengthen the role of the regional university involvement in the process of applicants professional self-determination; the impact of the digital technologies usage in career guidance work on the self-determination of the regional university applicants.

## **1 INTRODUCTION**

There is a large number of studies aimed at studying the factors of career choice by applicants from different regions of the country. There the fact of close connection and career guidance measures mutual influence and schoolchildren professional self-determination is recognised. However, each region has its own specifics, due to the socioeconomic situation and priority areas of development. In this regard, the factors of schoolchildren professional self-determination and their preferences in relation to the higher education institutions career guidance methods should be determined and taken into account in the work of all the regional career guidance system subjects.

It is obvious that the regions that are geographically remote from the center have an increased need for the career guidance main subjects close and effective interaction for the human resources formation. One of the reasons is the high level of educational migration. It negatively affects the recruitment rates in regional higher education institutions. In this regard, the professional orientation activity of universities is becoming particularly relevant in order to increase the fields of study attractiveness and specialties necessary for the regional labor market and the demand formation.

The career guidance system in the region includes a wide range of activities at the national and regional levels, some of which help attract applicants to the fields of study and regional universities specialties. Some of the events are at the implementation stage, and some have already proved their effectiveness: "Quantorium", "Sirius", "Kosmofest", the "Young Professionals" system of Worldskills, the technology platform "20.35", the roadmap "Personnel for the Digital Economy", the network "Boiling Point", the venture system "Seven", the school program "5\*5", the circle movement, mentoring.

At present, the regional universities career guidance work practice is based on a combination of various methods of career guidance initiated by the state and the institution of higher education itself. At

#### 730

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the same time, the university career guidance work effective practices choice is not always supported by empirical data that proves their effectiveness.

### 2 RESEARCH METHODOLOGY

In modern conditions, the future applicants professional orientation problem is very relevant for universities. Regional institutions of higher education are actively involved in the students professional selfdetermination process in the career guidance framework. The applicants professional selfdetermination problem is particularly acute in the conditions of development of remote regions from the central part of Russia. The essence of the problem lies not only in the need to change the emerging professional aspirations of young people to meet the region existing needs in a balanced personnel structure, but also in choosing the most effective forms of career guidance that allow managing the labor resources distribution system in the region (Stepanova, 1978; Starikova, 2009).

The importance of forming and managing the applicants professional self-determination system in educational organizations at the federal and regional levels is identified as a priority in many regulatory documents. For example, in The Fundamentals of the State Youth Policy of the Russian Federation for the period up to 2025; in the Federal Law "On Education in the Russian Federation"; in the Federal State Standard of Secondary (Comprehensive) General Education (Pak and Aytupov, 2019); in The Strategy for the Development of Education in the Russian Federation for the period up to 2025, approved by Order of the Government of the Russian Federation No. 996-p dated 29/05/2015; in the Decree of the President of the Russian Federation "On National Goals and Strategic Objectives for the Development of the Russian Federation for the period up to 2024" dated 07/05/2018 No. 204, regarding the formation of an effective system for identifying, supporting and developing the abilities and talents of children and young people, based on the justice and universality principles and aimed at self-determination and professional orientation of all students.

Currently, the issues of developing and implementing effective youth career guidance models at the regional, municipal and educational levels are being actively discussed (Revyakina and Osetrin, 2015).

The topic of professional orientation is given quite a lot of attention, both in domestic and foreign scientific literature. The works of Chistyakova, S.N. (Chistyakova, 2018), Merenkova, A.V., Mokerova, Y.V., Smirnova, O.G. (Merenkov, Mokerova and Smirnova, 2015) etc. are devoted to study of the process of school graduates professional self-determination problems from the positions of pedagogy, psychology, and sociology.

The career guidance role in the professional selfdetermination of young people and the specifics of its implementation are actively discussed in the Russian scientific literature. Thus, Pryazhnikova, E.Y. (Pryazhnikova, 2006) examines the career guidance historical and cultural prerequisites abroad and the psychological reasons for its occurrence in Russia, as well as the impact of career guidance on the person professional self-determination development and formation.

The analysis of recent works devoted to the theoretical understanding of the career guidance institute and its role in individual professional self-determination (Dinner, 2017; Pryazhnikova and Pryazhnikov, 2007; Starikova, 2009), shows a variety of approaches to its understanding and areas of implementation.

Recent publications focus on the problems of the regional career guidance system influence on migration processes in the regions (Polovinko and Dinner, 2017), applicants with disabilities professional self-determination, as well as the choice of career guidance measures in an uncertain socio-economic situation (Pryazhnikov, Pryazhnikova and Sergeeva, 2018).

Many works of different authors (Titova, 2011; Flerov, 2015; Mutyrova, 2010; Kurnaya, 2015; Shafranov-Kutsev and Tolstoguzov, 2014) are devoted to the career guidance issues in Russian universities. In the English-language literature, there is a number of works that reflect the results of empirical studies on students attitudes to career guidance at the university level (Ayçiçek, 2020), its impact on students academic performance and further success (Wierik, Beishuizen and Van Os., 2015).

In modern conditions, while managing career guidance, universities implement various approaches: client-oriented (Reznik and Ponomarenko, 2012), "project approach" through interaction with schools (Vinokurova, 2015), conceptual, competence-based, acmeological, managerial and informational (Mordovskaya and Panina, 2012).

The active use of the information approach in the university career guidance is conditioned by the growing interest in ICT technologies from the young people side and the technologies relevance in all areas of the economy in the sustainable development context. Nevertheless, the question of the career guidance activities effectiveness in higher education institutions, including those using modern information technologies, remains open.

In order to study the applicants opinions regarding the choice of an educational institution, fields of study (specialties), as well as methods of career guidance that influenced their professional self-determination, two Amur State University applicants surveys were conducted: in June 2019 and in September 2020 with sample volumes of 270 and 268 people, respectively.

Amur State University is the leading classical educational institution of higher education in the region, which provides training for specialists in 80 educational programs.

To achieve this goal, the following tasks were set:

- to review current theoretical and practical approaches to the university career guidance activities and impact of these activities on the school graduates professional definition;
- to identify the factors of choosing the field of study (specialty), educational institution;
- to study the actual methods of career guidance used by regional university applicants, including the use of digital technologies, and to determine the most effective career guidance practices.

At present, the following career guidance practices are distinguished (which were included in the research tool (questionnaire)): the use of modern up-to-date information resources aimed directly at applicants; professions portals-handbooks; information resources on the state of the labor market in higher education institutions career guidance.

According to the data obtained during the survey, the Amur region school graduates awareness level about modern information resources is quite low. Thus, not a single applicant used the data from the portal for monitoring the graduates employment, despite the fact that its main purpose was to provide applicants and their parents with reliable information about the graduates employment effectiveness. At the same time, the key criterion for choosing a profession for the majority of applicants remains the possibility of employment in the chosen profession. It seems that this situation, to a certain extent, was the result of applicants low awareness about modern resources and services. As a result, the productivity of such measures for career guidance remains relatively weak.

The practice of higher education institutions shows that, along with the use of common open (nationwide, public) resources of the Internet environment, each university demonstrates its own solutions for career guidance and attracting applicants and resorts to the use various IT tools. At the same time, the determining factors in the choice of such career guidance tools are the organizations internal capabilities. In our opinion, in order to obtain a comprehensive understanding of what happens in practice when using ICT during the university applicants career guidance, it is necessary to rely on their preferences.

#### **3** RESULTS OF RESEARCH

The structural relationships of the data obtained as a result of the studies coincided. For modern graduates, the priority and most important factors in choosing a higher education institution remain following: high chances of employment after receiving higher education; the an interesting field of training availability; the quality of teaching; the educational institution prestige; the number of budget places. To a lesser extent, its location is important for the applicant when choosing a university. It is obvious that the choice of the university by the applicant is carried out under the influence of several factors at the same time.

It should be noted that the importance ratings of university selection factors among regional center schools graduates (where all institutions of higher education operate geographically) and other localities of the region differ. Among the priority criteria for choosing a university, the regional center secondary schools graduates include: the possibility of further employment; the presence of an interesting field of study; the quality of teaching; the passing score of the Unified State Exam and the number of budget positions. As with the sample as a whole, friends' opinions and university graduates opinions are less important.

Applicants from schools in cities and villages in the region, as well as schools graduates in the regional center, are more focused on the possibility of further employment. However, for this educational services consumers segment, the second most important thing is the presence of an interesting field of study in a university. It is interesting that for nonresident applicants it is not important to have dormitories.

In the process of making a decision about choosing a university, the applicant relies on the available and relevant content of the information environment. The results of the survey showed the most popular information sources used by school graduates. The leaders included: information obtained as a result of visiting the "University Open Day" events; the position and opinion of a school teacher; data presented on the Internet (websites of higher education institutions and social networks).

Over the past five years, priorities for sources of information needed for school children have changed (Rychkova and Balcezhak, 2013). The active career guidance policy of higher education institutions contributed to the growth of students interest in attending open days (both in person and remotely). At the same time, the teacher opinion is authoritative for almost every fifth applicant.

Serious awareness of the choice for the professional study future direction occurs in 10-11 grades in 39% and 36% of cases, respectively. Obviously, more significant factors in choosing a future profession are compliance with aptitudes and interest in the profession. School graduates are focused on their own abilities, while the opportunity to have a stable and reliable income remains an important factor.

The vast majority of higher education institutions future applicants are involved in career guidance

activities. Among the career guidance methods used by applicants for professional self-determination, such as, in the first place, consultation, recommendations and additional information in the university admission committee when submitting documents; in the second place, the ability testing; in the third place, thematic class hours at school.

In fact, 36.4% of applicants are ready to abandon the initially chosen field of study (specialty) in favor of the "passing" one according to the USE points. It is obvious that the importance of university employees career guidance activity in the admissions committee at the time of admission to universities increases.

The top career-oriented events that applicants are ready to recommend to other applicants interested in admission include open days, specialized classes at the university, preparatory courses and informational meetings at school with graduates who are currently studying at the university (Table 1).

Career guidance method	Used	Consider promising	Recommend to others
Ability testing	11.6	5.6	2.6
Open days at the university	7.2	5.6	11.8
Lectures and practical classes (master classes) conducted by university teachers ("University Saturdays")	5.1	6.3	5.3
Preparatory courses at the university	2.9	6.3	7.2
Informational meetings with university representatives at school	5.1	7.0	3.9
Specialized classes, university lyceum	3.6	5.6	7.2
Conferences, forums, meetings for students at the university	3.6	7.0	6.6
University summer school	1.4	6.3	6.6
Subject Olympiads at the university	7.2	5.6	4.6
Informational meetings at the school with graduates who are currently studying at the university ("Come to us to study!" campaign)	4.3	5.0	7.2
Project work under the university teachers guidance	2.2	6.3	5.3
Classes in additional education institutions (clubs, sections, studios, etc.)	6.5	6.0	3.9
Consultation, recommendations and additional information in the univer- sity admission committee when submitting documents	12.3	5.3	3.9
Remote counseling and training for remote regional schools students	2.2	5.3	6.6
Thematic class hours with teachers at school	10.1	4.6	5.9
Specialized classes at school	8.0	5.3	5.9
Meetings with professions representatives	6.5	7.0	5.3
Total	100.0	100.0	100.0

Table 1: The distribution of respondents preferences regarding career guidance activities.

The most promising methods of career guidance were meetings with real professions representatives, participation in conferences, forums and meetings, as well as informational meetings with universities representatives at schools.

It is interesting that there are no significant differences in recommendations among the regional center schoolchildren and other regional cities and villages. All students are unanimous about the "Open Day" action. It is noteworthy that against the background of actually low involvement of rural schools graduates in participating in conferences, meetings and forums, there is a high level of trust and a desire to recommend other students to participate in such events for professional self-determination.

26.2% of applicants attributed the lack of an opportunity to see how they work in specific professions to the factors that make it difficult to choose a future profession. 18% of respondents are not sure about further employment in their chosen profession. The share of respondents who believe that the information provided about professions is insufficient was 15%. The proportion of respondents who did not face difficulties in choosing a profession was 14.8%. 18% of school graduates lack a clear vision of their place in the labor market.

#### 4 RESULTS AND DISCUSSION

The main reason that reduces the level of professional self-determination is the limited opportunity to get acquainted with the profession and understand its internal specifics. This indicates the relevance of using the network interaction of the classical university with the region enterprises and general and secondary professional education institutions. In favor of a systematic approach to university career guidance activities is the universities in other regions successful experience (Chuvash State University, National Research Lobachevsky State University of Nizhny Novgorod) (Troyeshivova and Vasilieva, 2017). The school graduates professional selfdetermination low level manifestation creates a number of problems of a quantitative and qualitative nature for higher education institutions, both at the applicants recruitment stage and the specialists release (employment). These circumstances are the actual confirmation of the importance of involving universities in the schoolchildren professional guidance process.

Probably, one of the measures to partially resolve this problem may be the implementation of the federal project for schoolchildren early career guidance "Tickets to the future" (introduced in schools in Blagoveshchensk in a pilot mode) (Government of the Amur Region, 2020). However, the interest formation in the profession does not solve the migration outflow problems and the choice of a regional higher education institution for its development. In this regard, the importance of higher education in the career guidance regional system increases.

Thus, the results of the study allow us to draw the following conclusions:

1. The regional university involvement role in the process of applicants professional self-determination is increasing.

2. The priority of budget education in regional universities changes the trajectory of the applicant's behavior when enrolling the university, which significantly increases the importance of career guidance at the documents submission time. In this regard, the importance of career guidance measures within the framework of the admissions committees activities increases. It provides for the need for additional measures on the part of the university to form the admissions committees personnel and additional information support for applicants.

3. With the high importance of different subjects involved in the vocational guidance activities for schoolchildren implementation (school, university, employers), their interrelated work is necessary within the framework of original activities at the regional level. One of the measures contributing to this can be the of patronage institution revival and the social partnership development.

4. Based on the generally accepted fact that school positions determine the proportion of students entering universities and the students confidence high degree in teachers opinion (according to the survey results), a joint approach of schools and universities to career guidance is important.

5. The relationship between career guidance and professional self-determination among school graduates in the Amur region can be traced to a greater extent in such events at the federal level as "Quantorium" and "Kosmofest". It indicates the need to intensify career guidance events of such format and the interaction effectiveness at the school-university level.

6. In the context of dynamically implemented federal projects on career guidance and career choice changing factors, there is a need to monitor the relationship and mutual influence in career guidance measures and professional self-determination of schoolchildren in a regional university.

7. The problems of information support for career guidance activities for higher education institutions remain, i.e. the lack of a systematic approach to providing access to a digital platform that integrates information about the labor market and the educational services market; the low level of applicants awareness about existing information systems and services that promote professional selfdetermination, which makes it difficult to solve the information asymmetry problem. It is paradoxical that the current problem manifests itself in the education conditions of increasing system information openness (Mertsalova, 2015), due to the ICT development and state support (Consultant.ru, 2020).

8. University websites weak integration, as the most popular tool for information interaction, with information resources containing information about the graduate employment effectiveness, the universities effectiveness and rating (rating system importance is noted by many authors (Mertsalova, 2015)).

### 5 CONCLUSION

The conducted empirical studies results, confirming the existence of a relationship between the regional universities career guidance activity practices and the applicants professional self-determination, can be used for practical purposes. A conscious choice of the most effective practices will permit to optimize the improving the vocational guidance system costs not only for higher education institutions, but also for the vocational guidance system in the region as a whole.

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