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**ANALYSIS OF EFFICIENCY OF IMPLEMENTATION OF  
INNOVATION APPROACHES IN UNIVERSITY  
PROFESSIONAL ACTIVITY**

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**Introduction and aim of the research:** The urgency of the topic of research is determined by the need to find ways to improve vocational guidance work with young people in Ukraine in the context of globalization and European integration processes. Integration of our country into the international scientific and educational space, the dynamic development of a market economy, which causes a rapid change in the world of professions, place new qualitative requirements for specialists of all specialties.

**Research hypothesis.** In the context of the actual principle of humanization of social life and according to professional orientation activity on a separate person the main criterion of efficiency of all procedures of vocational guidance and its system as a whole should recognize the degree of conformity of the chosen profession to his professional abilities and interests.

**The aim** of this research is a generalization of the experience of vocational guidance work, the definition of shortcomings, the drawing of ways to improve it.

**Methodology:** The methodological basis of the study is based on the use of general methodological provisions: professional ethics; the philosophy of professions; Theories of professionalism about the factors of formation and recognition of professions; professional pedagogy and labor psychology; professionology; professionography.

**Results:** The article researches the effectiveness of using the practice of introducing innovative approaches and a complex of professional orientation measures in a new format in work with entrants, in the conditions of increasing competition in the field of higher education in Ukraine. The urgency of this problem is the need to improve the quality and efficiency of recruiting future students in higher education.

**Conclusions:** The result of the development of an integrated approach to the implementation and realization of new recruitment activity at the university, aimed at finding gifted students and facilitating their further development in areas where their strongest talents will be the formation of a qualitatively new contingent of students. This will give impetus to the development of research projects under the auspices of leading scholars with the active involvement of interested students in this activity and will allow massive involvement of talented entrants, increase the prestige of higher education and create innovative and high-tech educational programs and projects.

**Keywords:** recruiting, professional orientation, higher education, entrant motivation, university strategy.

**Problem statement and its connection with important scientific and practical tasks.** The conducted research will allow to analyze the current status of informational support of entrants, criteria of their choice of the higher educational institution, will help to determine the degree of influence of various factors on the recruitment of students. The qualitative composition of the admissions and future students depends largely on the system work and a set of activities conducted by the university in partnership with secondary schools, colleges, etc. Implementation of joint educational projects with an innovative research component, implementation of digital technologies in the recruiting activities of the university. The results of the research can be used to develop new effective directions in the university's vocational guidance programs, including the pre-university education, as well as in conducting empirical research on the motivation of choosing higher education institutions for future students, in particular, pupils of the 10th and 11th grades.

**Analysis of recent publications on the problem** Questions for the implementation of vocational guidance activities of universities and recruiting students are reflected in the works of P. Russell [10]. In particular, they present the results of the effectiveness of the use of social media in working with potential students in higher education. So, the study conducted in 2011 and devoted to the use of social media tools by universities, was attended by 950 educational institutions in the United States, and an absolute majority of them (almost 96%) noted that they are actively using social media in their work. However, the author notes that sometimes these actions are excessive and excessive use of this tool, lacking of a clear communication strategy and understanding of what information is interesting to the target audience, can negatively affect the results of recruiting.

In turn, N. Barnes and E. Matson describe the study of American universities conducted by the Mass. Institute of Technologies for several years [1]. It was devoted to the role of social media and digital technologies in implementing the marketing policy of universities. As a result, Facebook (98%) was the most popular social network used by universities to work with potential students, and YouTube and Twitter (86% and 84% respectively), with actively using YouTube. The smallest in their recruiting activities, universities are turning to the professional social network LinkedIn (47%).

J. Show, who is studying the use of digital technologies and social media, in his blog on the website of the newspaper Gardian cites the results of a study conducted among current and potential university students and devoted to the impact of various sources of information on the choice of educational institution [11]. It was held in the form of an online questionnaire, which was attended by about 300 people.

One of the main results of the study was that, despite the active daily use of social media (almost 65% of respondents noted this fact), the percentage of respondents, those who trust the information about universities in social media, is less than the number of trusting information, received in days of opened doors in universities and from information printed materials (booklets, leaflets, university brochures, etc.).

**Unresolved parts of the study.** I.M. Gryshchenko [4–6], D.A. Makatora, T.M. Vlasyuk [6], L.M. Ganuschak-Yefimenko, V.G. Shcherbak, O.M. Nifatova [3] applied their works to the search for new technologies for recruiting students and implementing marketing strategies in higher educational establishments in the conditions of increasing competition in the field of higher education.

However, the consideration of basic innovative approaches to vocational guidance work at the university did not find a systematic study and generalization.

In particular, in our opinion, it is precisely the introduction of innovative approaches and a complex of vocational guidance measures of a new format in dealing with entrants, the role of state structures and educational institutions themselves in this process is considered insufficient.

**The aim of the study.** Analysis of the effectiveness of the implementation of innovative approaches in the professional orientation activities of the University.

**Presentation of the main results and their justification** Objective and detailed analysis of the needs of entrants and the factors influencing the choice of educational institution, allows developing a marketing strategy for the provision of educational services and outlining directions for improving the university management system in order to fully satisfy the needs of consumers. The presence of a university strategy with potential entrants allows more efficient recruiting of students (including the most gifted ones), increasing the prestige of higher education, developing a marketing policy in the field of development of new specialties and preserving existing, establishing long-term and mutually beneficial relations with employers in the context of the use of their practical base, internships and placement of graduates of higher educational institutions [4].

One of the prerequisites for the effective functioning of a higher educational institution in the modern world is its orientation towards the consumer of educational services, namely the entrants, the implementation of a client-oriented approach. The opinion of future students is essential in assessing the quality of the work of a university.

In the field of higher education of Ukraine there is high competition between higher educational institutions (both public and private) for involving talented entrants.

At the same time, the fact that a significant segment in the education system in Ukraine is engaged in paid educational services [6] is also important. Therefore, the conduct of sociological and marketing research in this area is necessary in order to study the interests of potential consumers of educational services of universities. Objective assessment of the quality of education in a university can only be obtained on the basis of a comprehensive analysis of all the results.

The study of the motivation of professional choice and the system of value orientations for potential university students is an important tool for identifying the changes that are taking place with regard to the prospects of obtaining higher education in the educational chain "school-university-employer" [5]. This will allow the formation of a single ecosystem of continuous training "specialist of the future", capable of solving problems in interdisciplinary teams. The training of such a specialist is possible only in conditions of advanced vocational guidance, which allows, at the stage of general education, to recognize as soon as possible the child's ability to certain academic disciplines and develop them with various forms.

The global education system in Ukraine is significantly influenced by the globalization processes, which have led to a significant increase in the demand for high-quality higher education in the international markets of these services. At the same time, in the domestic market, the leading universities of the country, given the adverse demographic processes, are in a state of fierce competition for talented graduates of schools and entrants who enter into extra-budgetary conditions. In connection with this, absolutely new forms and technologies of professional orientation activities of higher educational institutions are needed, including both individual work with talented students and mass projects (conducting of city, regional and inter-regional festivals of science, popular science "Open Fire" and BTL-actions, the Olympiad under the auspices of the university), which will allow to attract as many children as possible in the field of activity.

Relevance of the creation of a unified system of vocational guidance work with pupils of different levels of education: general (school), higher (undergraduate, postgraduate, post-graduate), post-secondary (additional education and vocational retraining) due to new challenges of the country's scientific and technological development in conditions of fierce competition for qualified professionals in the global labor market. In these conditions, it is necessary to overcome the institutional and psychological barriers of the student when joining the university.

The main goal of the outgoing professional orientation in the conditions of continuous education is the formation of a unified information and educational environment, which helps to create an effective system of early career guidance, detection and support of gifted children and young people in solving the problems of scientific and technological development of Ukraine.

Kyiv National University of Technologies and Design (hereinafter KNUTD) has always paid and pays great attention to the development of vocational guidance, interaction with leading schools, lyceums, gymnasiums of Ukraine, participation in the organization of all-Ukrainian Olympiads, seminars, fairs, roundtables for future students in order to form a potential contingent. Students and the involvement of gifted students in the university. There are two vocational guidance centers in KNUTD: "The Center for Pre-University and Individual Education" – pre-university training is carried out directly in the KNUTD, as well as on the basis of the research and production complex, which currently includes: 24 technical colleges, 35 colleges and lyceums, 22 higher vocational colleges, 4 vocational schools and 143 general secondary schools located in 11 regions of Ukraine and the Center for Labor and Career, whose mission is to create a "school of the future", aimed at the development of the initiative for students in, the ability to think creatively, to find non-standard solutions. Within these centers, KNUTD creates a cross-cutting system for ensuring the quality of school education, contributes to the implementation of special courses, electives, provides leadership in teaching and research work of students with the use of modern scientific and educational infrastructure.

As part of the implementation of the KNUTD policy in the area of introducing new forms and methods to work with entrants, the formation of a comprehensive way for the university in the school environment, as well as within the framework of the tasks for determining the motivational constituents of the choice of admissions of higher education institutions for training from 2012 to 2016 during the summer introductory campaigns, the authors conducted a series of sociological studies.

The method of collecting primary information in the framework of this study was an online questionnaire. The questionnaire consisted of 22 questions, which determined the reasons for formulating the attractiveness of a particular institution of higher education, a source of information on which regions and settlements were the incoming high schools, their advantages in choosing the direction of training, the level of wages during the year after graduation and other

The general audience in this study is the number of applicants who submitted applications in the KNUTD during the summer introductory campaigns 2012–2016 (Table 1).

Table 1

**The statistics of the applications submitted to the KNUTD  
for the summer admissions campaign 2012–2016**

Applications filed in KNUTD	2012	2013	2014	2015	2016
	9711	9835	10063	9620	11495

Source: Systematized according to data [8].

The average of the total population is 10,144 people. To calculate the sample size, use the statistical method. The sample will be representative if it describes the characteristics of the general population with a minimum acceptable error. Calculate the required sample size by the formula:

$$n = \frac{t^2 * \delta^2 * N}{t^2 * \delta^2 + \Delta^2 * N}$$

$N$  – size of the general population;  $\delta$  – selective dispersion;  $\Delta$  – limit sample size of error;  $t$  – Students statistics.

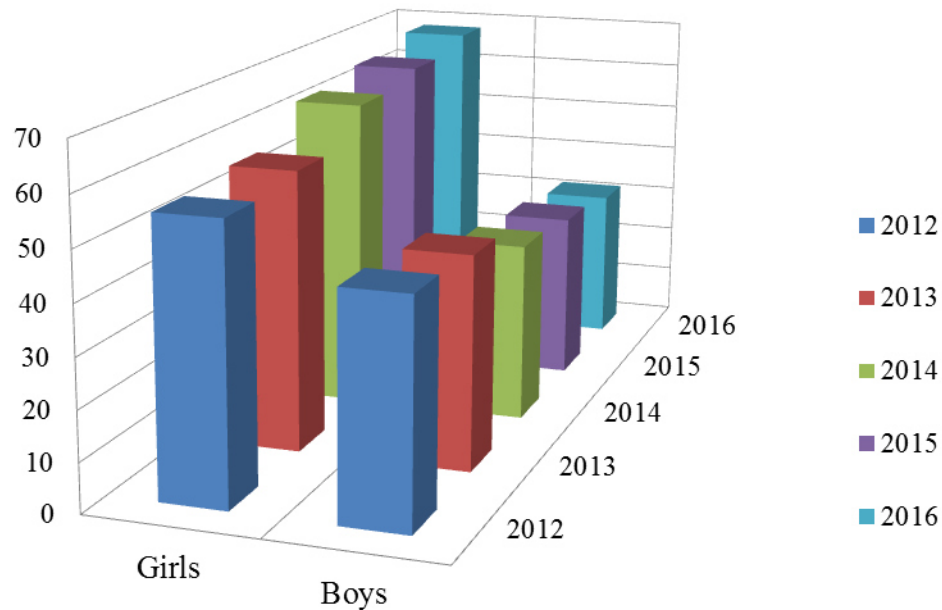
Using the necessary numerical values we get:

$$n = \frac{3^2 * 1^2 * 10144}{3^2 * 1^2 + 0,1^2 * 10144} = \frac{91296}{110,44} \approx 827$$

Thus, the sample should be achieved through a survey of at least 827 entrants.

Due to certain time constraints and heterogeneity of the flow of entrants, the sample size ranged from 853 to 1 304 respondents, satisfying the minimum value necessary to achieve representativeness.

Based on the results of a study aimed at determining the effectiveness of university vocational guidance activities, as well as the causes and factors that have a dominant influence on the attitudes of applicants in the decision-making process on the choice of higher education institutions, the following indicators are derived and described. The results of the analysis of entrants by gender (Figure 1) show that the number of girls respondents (from 54% in 2012 to 67.77% in 2016) consistently exceeds the number of respondents-boys (from 46% in 2012 to 32.23% in 2016).



*Fig. 1. Distribution of respondents by gender*

A comparative analysis of which sources of information about the university were most popular among the entrants of the KNUTD in 2012–2016, showed the following results (Table 2).

*Table 2*

**Popularity of sources of information, %**

Options for answers	Year				
	2012	2013	2014	2015	2016
Official site of KNUTD	26.8	22.3	19.8	20.1	36.1
Social networks	17.1	12.5	6.8	19.17	18.27
Professional guidance work in schools, gymnasia etc.	48.9	45.5	34.2	35.6	38.7
From friends, friends, relatives	65.2	69.8	62.1	58.9	60.3
Advertising on TV and radio	3.2	3.7	2.9	2.4	3.9
Advertising in newspapers, magazines, booklets etc.	5.9	7.3	8.6	8.4	3.8

On this question, respondents could choose up to 3 variants of answers from 6 proposed. The obtained results indicate that the most popular sources of information are friends, relatives (from 65.2% in 2011 to 60.3 in 2016); vocational guidance work (from 48.9% in 2012 to 38.7 in 2016); the official site of KNUTD (from 26.8% in 2012 to 36.1% in 2016); social networks on the Internet (from 17.1% in 2012 to 18.27 in 2016).

Analyzing the issue of reducing the significance of social networks as a source of information on higher education in respondents' responses, it should be noted that due to the active development of the official site of KNUTD and its integration with social networks (the creation of official accounts in social networks), the number of entrants who choose the official site KNUTD as the primary source of objective information about the university, from 2012 to 2016. Significantly increased, so "social networks" were chosen by fewer amount of respondents.

A comparative analysis of the reasons influencing the choice of applicants for admission to the University in 2012–2016 showed that, on equal terms, a large proportion of future students, as the main reason for choosing a university, mentions parents' advice (the indicator varied from 44% in 2012 to 38.15 – in 2016), followed by the information received from the representatives of universities (30% in 2012 and 36.46 in 2016), the advice of friends and acquaintances (20.5% in 2012 and 36.3 in 2016) and advertising, ranking of universities (24.2% in 2011 and 8.09 in 2016). The fifth position in respondents' answers is the rate of attendance of preparatory courses (from 12% in 2011 to 4.85 in 2016) (Table 3).

Table 3

**Reasons influencing the choice of future students  
when entering the university, %**

Options for answers	Year				
	2012	2013	2014	2015	2016
Parents' Tips	44.0	38.9	43.4	33.6	38.15
Information from higher education institutions	30.0	31.7	23.2	33.7	36.46
Advertising, university rating	24.2	15.1	27.3	15.45	8.09
Tips of friends and acquaintances	20.5	28.3	25.4	27.86	36.3
Visiting preparatory courses	12.0	8.5	7.6	6.9	4.85
Other	7.5	5.3	6.6	7.2	3.93



It is necessary to pay attention to a significant decrease in the role of advertising of universities, as well as attending preparatory courses in respondents' responses from 2012 to 2016. Due to the reformation of the university's advertising policy and the development of digital technologies, including the fundamental update of the KNUTD website and the subsequent active promotion of it on the Internet, as well as through the implementation of new recruitment programs for entrants and the introduction of a more personalized approach to working with schools, teachers and themselves future students, the significance of the influence of traditional advertising on television, radio and in printed publications on entry into KNUTD is reduced.

**Conclusions.** As part of the implementation of the comprehensive vocational guidance program of KNUTD during the 2012–2016 introductory campaigns the study of the enrollment environment was carried out, which clearly illustrates the current status of the information provision of the entrants to the university, the criteria for choosing an educational institution, and the degree of influence of various factors on the entrants.

Analysis of the reasons for the future students' entry to the KNUTD showed that from 2012 to 2016 there was a steady decline in the demand for preparatory courses, therefore, in these conditions, it is becoming important to reformat the vocational guidance activities from traditional measures to expand work with schools in the implementation of joint educational programs, the development of resource bases in schools, and the creation of scientific and cognitive circles, as well as the implementation of new projects for future entrants, including the involvement of remote technologies and social media.

The accumulated scientific and practical experience of evaluation of vocational guidance activities of KNUTD allows us to conclude about its effectiveness and good prospects in expanding the geography of vocational guidance activities and attracting more of the leading schools of Ukraine to this area of KNUTD influence. The University's professional orientation program involves the use of different formats and technologies for interacting with entrants at different levels: directly at the school through lectures by university professors, in the KNUTD through the opening of doors, popular science festivals, fairs and other mass events, as well as in the exhibition activity .

Only a comprehensive approach to solving the problem of attracting to the University of talented and highly motivated students can ensure the achievement of the goals set by the university.

The result of the development of an integrated approach to the implementation and realization of new recruitment activity at the university, aimed at finding gifted students and facilitating their further development in areas where their strongest talents will be the formation of a qualitatively new contingent of students. This will give impetus to the development of research

projects under the auspices of leading scholars with the active involvement of interested students in this activity and will allow massive involvement of talented entrants, increase the prestige of higher education and create innovative and high-tech educational programs and projects.

This approach has the following benefits:

1) raising the general level of education, knowledge and skills of senior pupils through pre-university training, as well as smooth adaptation to the system of higher education;

2) execution of research works by students under the guidance of leading teachers of the University;

3) expanding the range of events, introducing high school students to the University: excursions to the museums of the University, the days of open doors at the faculties, conducting popular science events, festivals and open-air;

4) introduction of innovative teaching methods;

5) development of Internet resources of the university and network scientific communities under the auspices of KNUTD, including the dynamic development of social media activity, the creation of thematic Internet communities with the participation of teachers and researchers of the University.

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