

**VOCATIONAL GUIDANCE OF STUDENTS  
OF TRANSCARPATHIAN SCHOOLS WITH HUNGARIAN LANGUAGE  
OF INSTRUCTION BY INTERACTIVE MEANS OF  
MUSEUM-EDUCATIONAL ENVIRONMENT**

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**Abstract**

Modern society is interested in specialists competitive at labor market. Today's school graduates face challenges: to be able to act independently, to make decisions, to realize creative potential, to be mobile, and to quickly adapt to the rapidly changing living conditions. In this context, the system of vocational guidance of student youth is to become more optimistic and its implementation is to be directed on purposeful, constant pedagogical influence on students, support of their choice of profession, and assistance in providing counseling. After all, vocational guidance, which in school life is provided by the efforts of enthusiasts, has a great influence on the formation of professional self-determination of student youth. In addition, we mention students of schools with Hungarian language of instruction, who are mostly focused on Hungary not only due to language issues (which are being solved with interventions of the Ministry of Education and Science of Ukraine), but also due to the lack of comprehensive information on professions available within the country, and ways to convey it to students. Thus, we have a significant percentage of graduates who choose their future life path by the method of "trial and error".

The search for ways to optimize career guidance work with student youth in the multiethnic region of Transcarpathia has preconditioned the study of the state of the problem of student vocational guidance at practice.

The purpose of research is to study the state of elaboration of the problem of vocational guidance in the practice of educational institutions of Transcarpathia, in particular schools with Hungarian language of instruction.

The research methodology covered three levels: theoretical, diagnostic (ascertaining and formative), and explanatory. The theoretical level made it possible to present generalizations of approaches to the development of basic research concepts, namely: vocational guidance of students, museum-educational environment, means of career guidance in the museum-educational environment, and interactive means.

The implementation of the model of vocational guidance of students in the museum-educational environment of Transcarpathia was specified for: a) study of courses of the natural science cycle; b) group, out-of-class and out-of-school activities. The organization of vocational guidance work with students was based on the use of vocational guidance potential of the innovative museum environment, which was the “Museum of Professions”.

The results of experimental work conducted in two stages.

At the first stage we clarified the state of the problem of vocational guidance of students at practice in Transcarpathian schools by means of a questioning of teachers and students. At the second stage, we evaluated the effectiveness of the permanent virtual “Museum of vocational guidance”. The results of empirical research confirmed that the application of the latest means of museum pedagogy in vocational guidance was of great interest to students, as it contributed to the activation of the system of career guidance in schools.

**Keywords:** vocational guidance of students; museum-educational environment; vocational guidance of students in the museum-educational environment; interactive means.

### **Introduction**

The process of integration of Ukrainian society into European standards requires significant modernization of all social institutions, including educational and cultural ones. Educational reforms are aimed at providing new conditions for education, upbringing, development of individuals, their qualities and competencies. Having a set of competencies for a high school graduate means the ability to: communicate (in native and foreign languages); solve problems in applied mathematics, physics, engineering, and computer literacy; learn and organize time for study and leisure; demonstrate acceptable social and civic behavior; show initiative and practicality, ingenuity and creativity in various spheres of social and cultural life. Here we are to add – to make conscious decisions on further educational and professional development and on the sphere of professional activity a young person connects future destiny and lifestyle with. Modern society is interested in a specialist who is competitive at labor market. Today’s school graduates face challenges: to be able to act independently, to make decisions, to realize creative potential, to be mobile, and to quickly adapt to the rapidly changing living conditions.

In this context, the system of vocational guidance of student youth is to become more optimistic and its implementation is to be directed on purposeful, constant pedagogical influence on students, support of their choice of profession, and assistance in providing counseling. After all, vocational guidance, which in school life is provided by the efforts of enthusiasts, has a great influence on the formation of professional self-determination of student youth. Due to the workload of teachers, their focus on the organization of conditions for the assimilation of educational material, vocational guidance is not systemic, and school graduates face problems with professional self-determination. In addition, we mention students of schools with Hungarian language of instruction, who are mostly focused on Hungary not only due to language issues (which are being solved with interventions of the Ministry of Education and Science of Ukraine), but also due to the lack of comprehensive information on professions available within the country, and ways to convey it to students.

Thus, we have a significant percentage of graduates who choose their future life path by the method of “trial and error”.

The search for ways to optimize vocational guidance work with student youth in the multiethnic Transcarpathian region has preconditioned the study of the state of the problem of student vocational guidance at practice.

### **The aim of the article**

The purpose of research is to study the state of elaboration of the problem of vocational guidance in the practice of Transcarpathian educational institutions, in particular schools with Hungarian language of instruction, to optimize vocational guidance work with students by interactive means of museum-educational environment of Transcarpathia.

### **Materials and methods**

The research methodology covers three levels: theoretical, diagnostic, and explanatory. At the theoretical level, methods of analysis, synthesis, generalization, and systematization were used, which made it possible to develop the conceptual apparatus of research: vocational guidance of students, museum-educational environment, vocational guidance of students in the museum-educational environment, and interactive tools. At the diagnostic level, methods of pedagogical observation, questionnaires, and surveys with further processing of results obtained by methods of mathematical statistics were used. In particular, cluster analysis was used. At the explanatory level, methods of interpretation of results (induction, deduction, comparison, modeling, inferences, and conclusions), their explanation were used.

### **Results and discussion**

At the theoretical level, the conceptual apparatus of the study was substantiated. In previous studies, we have analyzed the almost century-long development and formation of the concept of “vocational guidance of students” as a scientifically sound system of preparing young people for life and work [1]. Stages of development were determined: pre-industrial, industrial, post-industrial, and information. The leading tendencies and main factors of development of the system of vocational guidance in the content of each stage were characterized. We focused on current challenges in the development of vocational guidance issues. The leading tendencies of development of information society (the beginning of the XXI century), which influenced the development of modern model of vocational guidance, were defined. Among them, the following were decisive: informatization of all spheres of life, production, economy, and industry; globalization as a prospect for the development of societies in the modern civilized world; development of information and communications technology; competence-based approach to learning; online education; development of new technologies of vocational guidance work; application of computer design to provide information on professions; accessibility in self-diagnosis; reflection on past experience and projecting a professional future, etc.

Analysis of various aspects (philosophical, psychological, pedagogical, and culturological) of definition of “educational environment” made it possible to present it as a component structure, covering: the part of the educational environment (limited by the

specificity and material-technical provision of educational institutions); information and technological conditions for the implementation of tasks and goals of vocational guidance; organizational and activity influences on students with the purpose of career guidance [2].

The generalization of knowledge on the museum-educational environment made it possible to formulate a definition of the museum-educational environment. Thus, the ***museum-educational environment*** is a part of the integrative educational and museum environment, limited by the features (regional, status) and material-technical provision of educational institutions; specially set conditions (information-technological, methodical, didactic, and psychological) for the realization of purposes and tasks of upbringing, education, training; organizational-pedagogical influences (museum-educational process) that mediate the interconnected activities and communication of teachers and students in the environment of museum exhibits, objects, etc. The components of the museum-educational environment are: *museum environment* (objects, expositions, premises, equipment); *museum-educational process* (goals, content, tasks, methods, forms, means); *subjects* (teachers and students) of museum-educational communication in the museum-educational process, museum-educational interaction. The generalization of the models of educational environments made it possible to refer the museum-educational environment designed by us to the models of the integrated type: it is a combination of elements of information, innovation, research and cultural models.

We analyzed the concept of teaching means, in particular interactive ones [3-4]. The interactive means are characterized by the use of computer technology, as well as the use of a projector and an interactive whiteboard. We revealed the essence of the concepts of museum-educational environment, taking part in the museum-educational process of student vocational guidance as a means of museum pedagogy [5].

At the diagnostic level we used questionnaires, surveys of teachers and students to determine the status of career guidance work in Transcarpathian educational institutions, in particular schools with Hungarian language of instruction, in order to further offer modern ways to modernize it.

The study involved teachers and students from the following schools:

- Velyka Dobron Secondary School of I-III grades (with Hungarian language of instruction) – Uzhhorod district;
- Batiovo Secondary School of III grades (with Hungarian language of instruction) – Berehovo district;
- Chervone Secondary School of I-III grades (with Ukrainian language of instruction) – Uzhhorod district;
- Serednie Secondary school of I-III degrees (with Ukrainian language of instruction) – Uzhhorod district;
- Rafajново Secondary School of I-II grades (with Hungarian language of instruction) – Berehovo district.

More than 334 students and 141 teachers took part in the experimental study.

The results of experimental work conducted in two stages. At the first stage we clarified the state of the problem of vocational guidance of students at practice in Transcarpathian

schools by means of a questioning of teachers and students. At the second stage, we evaluated the effectiveness of the permanent virtual “Museum of vocational guidance”. The results of empirical research testified that the application of modern means of museum pedagogy in vocational guidance was of great interest to students and contributed to the activation of the system of career guidance in schools.

At the first stage, the questionnaire allowed to conclude that teachers spent most of the time for vocational guidance of students during the educational process, implementing the principle of linking learning to life by demonstrating to students the possibilities for the application of their knowledge at practice. Educational activities of vocational guidance content were at the second place in the distribution diagram. And almost next to them was the individual work with students, i.e. work in the process of communication with each individual student, conducting vocational guidance interviews, etc. (Table 1).

Table 1  
 Statistical distribution of teachers’ answers  
 (When and how do you introduce students to professions?)

Категорії	Таблиця частот: Коли і як знайомите учнів з професіями			
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
У процесі виховних заходів	38	38	26,95035	26,9504
У процесі навчання	53	91	37,58865	64,5390
У процесі екскурсій	12	103	8,51064	73,0496
В індивідуальних розмовах з учнями	36	139	25,53191	98,5816
Інше	2	141	1,41844	100,0000
Missing	0	141	0,00000	100,0000

According to the survey results, teachers almost did not make use of potential of such forms of vocational guidance as excursions (Table 2).

Table 2  
 Statistical distribution of teachers’ answers  
 (Do you make use of such a form of work as an excursion?)

Категорії	Таблиця частот: Використання екскурсій, як форми роботи			
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
Так, постійно	21	21	14,89362	14,8936
Іноді	96	117	68,08511	82,9787
Ні	24	141	17,02128	100,0000
Missing	0	141	0,00000	100,0000

Based on statistical analysis, it became clear that almost 15% of surveyed teachers constantly used excursions in the process of their pedagogical activities. The vast majority (68%) of teachers partially used excursions (by the curriculum).

Teachers also noted the lack of time to select content and material for vocational guidance activities. However, when asked what forms they considered the most effective for introducing students to professions, the majority noted meetings with school leavers who succeeded in professional careers or become masters in their respective fields. Meetings with people always evoked positive emotions, promoting the activation of professional interests and preferences of students.

Teachers indicated project activities among the effective forms of work. Participation in career guidance projects promoted the activation of cognitive, research, and professional interests of students. Effective forms of work included excursions to agricultural sites (regional specificity), thematic evenings and visits to cultural-artistic institutions (theaters, exhibitions).

In modern conditions, the predominance of the distance form of organization of the educational process, students had the opportunity to travel to museums around the world. In order to involve the museum-educational environment in the implementation of vocational guidance of students, we intensified the issue of the role of museums, in particular, Transcarpathian museums in the lives of children (Table 3).

Table 3  
 Statistical distribution of students' answers  
*(How often do you visit museums?)*

Категорії	Таблиця частот: Як часто відвідуєш музеї			
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
Дуже часто	6	6	1,79641	1,7964
Іноді	68	74	20,35928	22,1557
Дуже рідко	127	201	38,02395	60,1796
Не відвідую	64	265	19,16168	79,3413
Якби була б можливість	69	334	20,65868	100,0000
Missing	0	334	0,00000	100,0000

As can be seen from the Table 3, the vast majority of students visited museums very rarely, and if they had the opportunity, they would visit more often. To the question “What museums do you know, which ones have you visited?” students answered differently (Fig. 1).

As can be seen from the Fig. 1, the vast majority of students visited Uzhhorod and Mukachevo castles. A much smaller number of students visited the Botanical Garden and the Zoological Museum, also located in Transcarpathia. A significant proportion of students believed that ancestors' lifestyle was the most interesting fact for the visiting museums (Table 4).

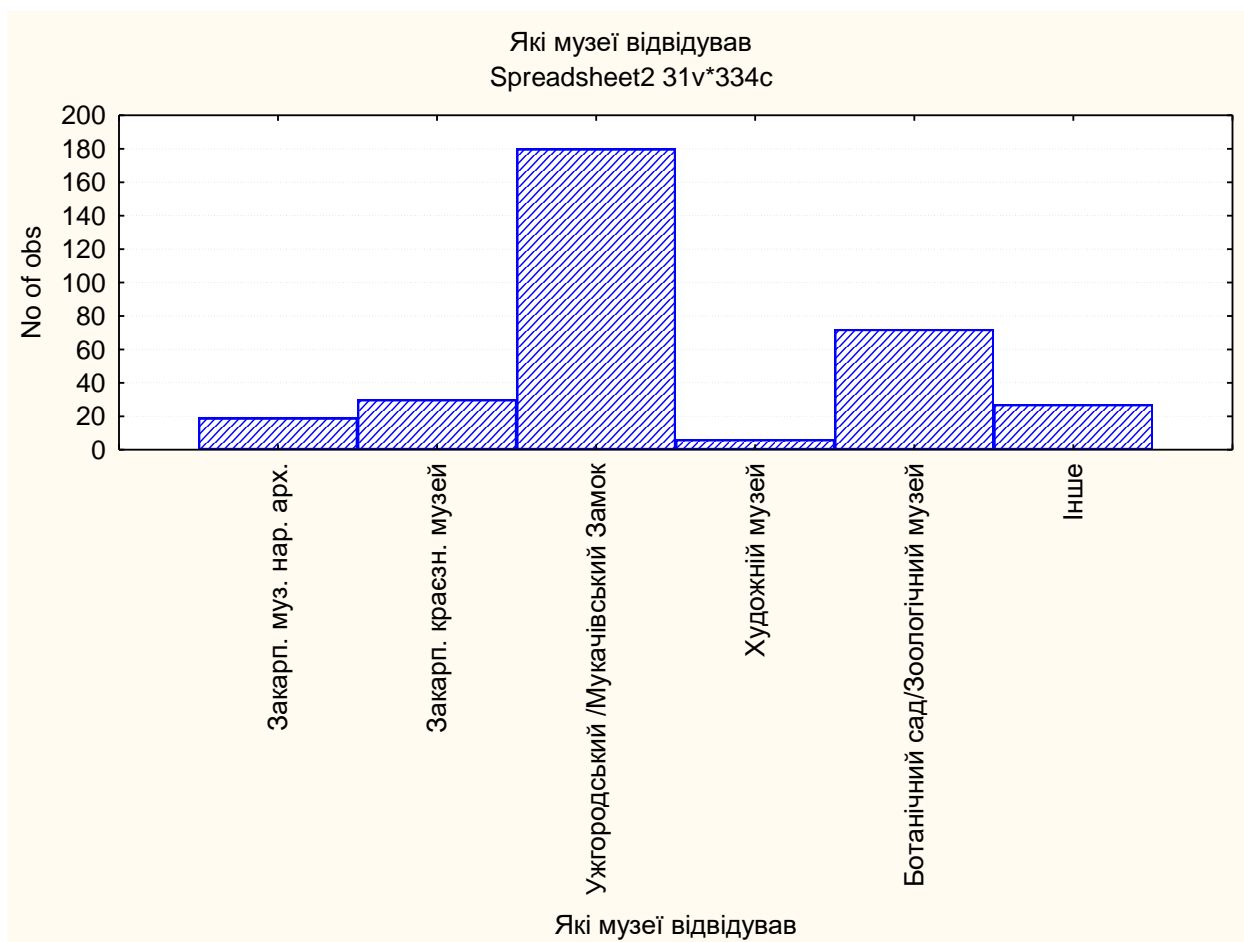


Fig. 1. Distribution of students' answers to the question "What Transcarpathian museums have you visited?"

Table 4  
Statistical distribution of students' answers

Категорії	Таблиця частот:		Що подобається у музеї	
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
Як жили раніше наші предки	128	128	38,32335	38,3234
Історія свого краю	64	192	19,16168	57,4850
Картини художників	32	224	9,58084	67,0659
Життя рослин і тварин	71	295	21,25749	88,3234
Дізнат. про різні професії	27	322	8,08383	96,4072
Інше	12	334	3,59281	100,0000
Missing	0	334	0,00000	100,0000

To the question "What sources do you learn about the world of professions from?" the majority of students responded – from the media. Also, a significant number of students got informed about different professions by their parents (Table 5).

Table 5  
 Statistical distribution of students' answers  
 (“What sources do you learn about the world of professions from?”)

Категорії	Таблиця частот: З яких джерел дізн. про світ профес			
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
Батьки	112	112	33,53293	33,5329
Вчителі	64	176	19,16168	52,6946
Близькість розт. вузу	15	191	4,49102	57,1856
Профорієнт. заходи у школі	23	214	6,88623	64,0719
Інформ. із ЗМІ	119	333	35,62874	99,7006
Інше	1	334	0,29940	100,0000
Missing	0	334	0,00000	100,0000

Filling the museum-educational environment with professionally-directed content and specially organized activities aimed at forming knowledge on the world of professions, professional activities, conditions, tools and results of work provided systematic assistance to students in choosing future professional activities.

The organization of vocational guidance work with students was based on the use of vocational guidance potential of the innovative museum environment, which was the “Museum of Professions”. The peculiarities of using interactive means of museum pedagogy to acquaint students with different professions typical in the region were disclosed in the students’ “visit” to virtual “Museum of Professions” and search-supplementing of the available information on the world of professions with new information received during the projecting activity.

At the second stage, we evaluated the effectiveness of the use of the permanent virtual “Museum of vocational guidance”. According to the results of experimental research, the use of modern means of museum pedagogy in vocational guidance was of considerable interest to students and contributed to the activation of the system of vocational guidance in schools.

Table 6  
 Statistical distribution of students’ answers  
 (What did you like about “Museum of Professions”?)

Категорії	Таблиця частот: Що сподоб. тобі у муз. професій			
	Рахунок	Сукупний підрахунок	Відсоток	Сукупний відсоток
Текст з яскр. ілюстр.	31	31	9,28144	9,2814
Все сподоб.	140	171	41,91617	51,1976
Можл. доповн. новими фактами	47	218	14,07186	65,2695
Допом. у проектн. роботі	20	238	5,98802	71,2575
Дізн. про професію, яка мені подоб.	78	316	23,35329	94,6108
Інше	18	334	5,38922	100,0000
Missing	0	334	0,00000	100,0000

After visiting the virtual “Museum of Professions”, a survey of students was conducted. According to students’ answers, visiting the virtual museum was very interesting (approximately 78% of the total number learned about the profession they were interested in). They liked to spend time in a virtual museum of professions, because they felt comfortable and cozy there (Table 6)

To activate students’ feedback, a game form of questioning was used (out of two columns of adverbs students chose only 5 that best conveyed the feelings experienced from meetings to a virtual museum) to find out how students felt after visits to the interactive “Museum of vocational guidance”. The students’ answers were distributed as following (Fig. 2):

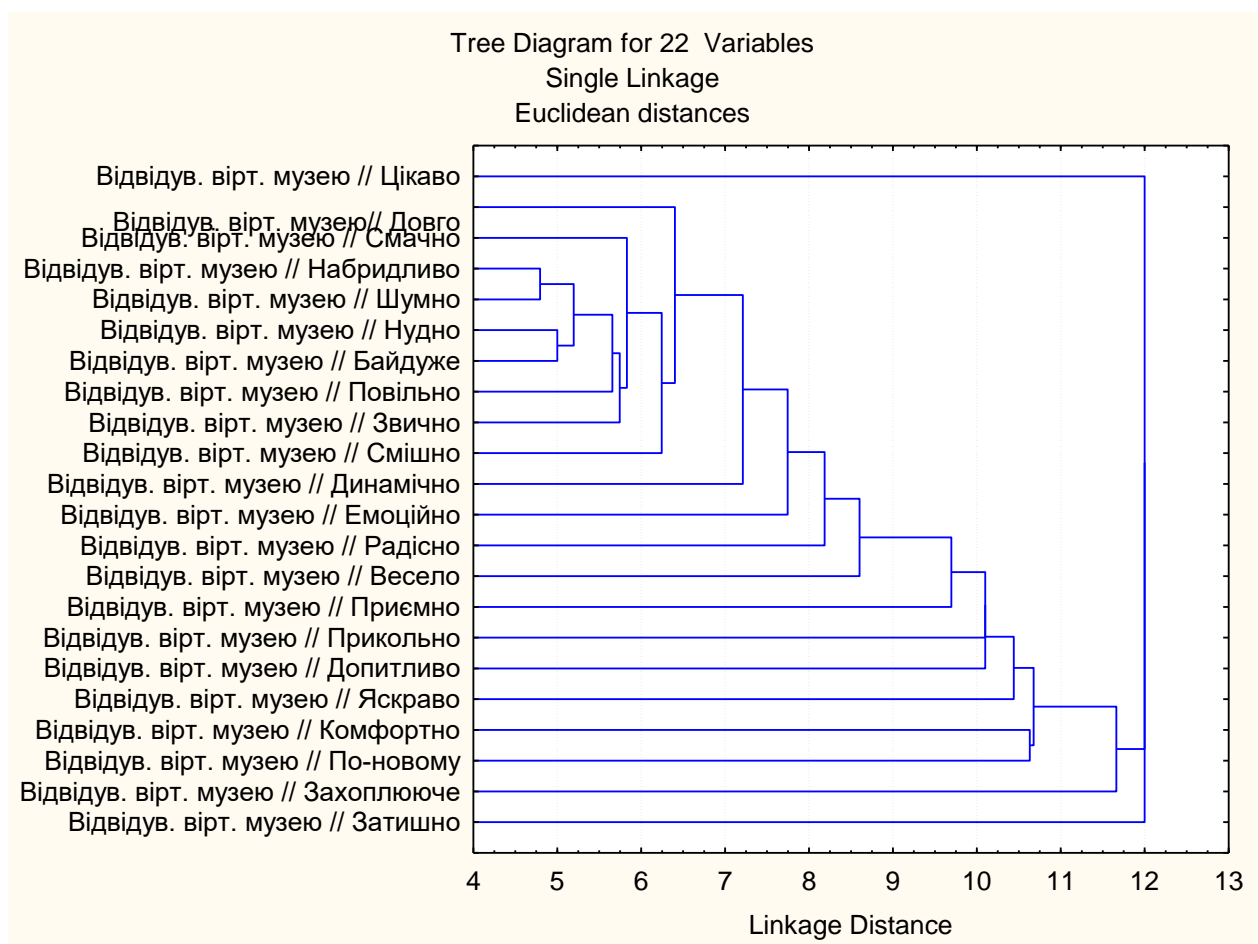


Fig. 2. Cluster analysis of the distribution of students’ answers to the question “There are two columns of adverbs. Read them all. Choose only five words that best describe your visit to the virtual museum”

**Conclusions**

Thus, as confirmed by the results of experimental research, the modern means of vocational guidance of students, including innovative museum-educational environment, which is the “Museum of Professions” have significant advantages in use and prospects for further student vocational guidance.

The organization of vocational guidance work with students is based on the use of vocational guidance potential of the innovative museum-educational environment, which is the 'Museum of Professions'. Peculiarities of using interactive means of museum pedagogy to acquaint students with different professions typical in the region are the students' "visits" to the virtual "Museum of Professions" and search-supplementing of the available information on the world of professions with new information received in the process of research, cognitive, creative and projecting activities.

We see the essence of vocational guidance work with student youth in activating of students' interests to the new way of presenting professional information, stimulating cognitive and research activity of students by involving them in projecting activities of vocational guidance content. The main advantages of the virtual museum according to the results of surveys are:

- visit to it does not depend on weather conditions;
- it is easily accessible to students;
- students can supplement its content;
- it is brightly illustrated with photos.

In further research the vocational guidance of students in the museum-educational environment of Transcarpathia is specified for: a) study of courses of the natural science cycle; b) group, out-of-class and out-of-school activities.

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