

## FORMATION OF METHODOLOGICAL COMPETENCE OF FUTURE TEACHERS OF GEOGRAPHY

**Kateryna Romankova<sup>1</sup>**

<sup>1</sup>graduate student of the Department of Pedagogy and Educational Management of the Volodymyr Vynnychenko Central Ukrainian State Pedagogical University, Kropyvnytskyi, Ukraine, e-mail: geograf.kat@gmail.com, ORCID: [orcid.org/0000-0003-0367-568X](https://orcid.org/0000-0003-0367-568X)

**Abstract.** *The article reflects the features of methodological training of future teachers of geography in higher education institutions. The purpose of the article is to form the methodological competence of future teachers of geography, which would meet modern requirements for the training of specialists in higher education institutions. Methodological approaches (systemic, personality-oriented, competence-oriented, activity-based, contextual, environmental) and principles of methodical training (scientific, professional orientation, integrativeness, coherence, connection of theory and practice, consciousness and activity, systematicity and sequence, strengthening creative orientation, variability, personal orientation). The components of methodological competence, such as methodological knowledge, methodological skills, pedagogical reflection are revealed their mastering by students during the study of the discipline "Methods of teaching geography" and during pedagogical practice is shown. Certain difficulties of students in mastering methodological knowledge and skills are outlined and a number of organizational and pedagogical measures that will contribute to the formation of methodological competence are identified on their basis. The purpose of training is defined as the formation of methodological competence of the future teacher of geography. A description of the process of formation of methodological competence of students - future teachers of geography through various forms of education (lectures, seminars, practical classes), independent research and teaching activities.*

**Key words:** *methodical competence, methods of teaching geography, professional competence of teachers, methodical training, future teachers of geography, principles, approaches, forms and methods.*

**JEL Classification:** JEL I0; I20

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**Introduction.** The cardinal economic, political and social changes taking place in the modern world community also lead to the modernization of the entire education system. The thesis about the continuity of education, the need for lifelong learning, as well as the formation of a teacher of a new format able to teach students to acquire new knowledge and skills, to be tolerant and patriotic is becoming increasingly important. The task of the teacher is to help to find oneself in the future, to become independent, creative and self-confident people. Responsive, attentive and receptive to the interests of students, open to all new teachers - a key feature of the school of the future.

In terms of implementation in pedagogical practice of new state educational standards, where the emphasis is on the formation of students' active citizenship, love for the Homeland, an important place is occupied by the school subject "Geography", the content of which reveals the nature, economy mainly of Ukraine [1]. And the earlier beginning of the study of geography make this subject even more popular. The success of students in solving modern problems of geographical education and the achievement of planned learning outcomes in the subject are determined by the level of professional competence of the teacher. In the current

situation, changes in the professional training of future teachers of geography are inevitable.

And these changes are reflected in the state educational standard of higher education. For example, the requirements for the results of basic educational programs are directly consistent with the requirements of school educational standards, in particular, in the formation of professional competencies of students such as the ability to solve problems of education and spiritual and moral development of students and use educational opportunities. activities and quality assurance of the educational process, the ability to organize the cooperation of students, to support the activity and initiative, independence of students, their creative abilities [3].

**Literature review.** The research of Y. Babansky, S. Honcharenko, M. Danilov, I. Zverev, I. Lerner, V. Lugovoi, L. Kondrashova, N. Kuzmina, M. Kraevsky, L. Pancheshnikova, V. Slastyonin and others are devoted to the problem of methodical teacher training as an important component of professional training.

The author's vision of the concept of methodical training of future teachers is presented in researches of home scientists M. Krylovets, N. Morse, V. Sharko. The problem of competence is developed by well-known home and foreign scientists-teachers N. Bibik, S. Goncharenko, A. Derkach, I. Zyazyun, K. Korsak, N. Kuzmina, O. Lokshina, A. Markova, N. Nychkalo, O. Ovcharuk, I. Pidlasy, O. Pometun, I. Radygina, O. Savchenko, I. Taranenko, S. Trubacheva, R. Chernyshova, A. Khutorsky and others. In the works of G. Isayeva, M. Elkin, S. Kapirulina, S. Kobernik, V. Korneev, L. Kruglyk, O. Kravchuk, T. Nazarenko, A. Syrotenko, M. Soroka, B. Chernova, G. Uvarova and in the work of teachers-practitioners O. Burlaka, O. Biryuk, G. Karpyuk, R. Kovalenko, N. Kucherenko, O. Lytvynchuk, G. Orlova, N. Pushkar, T. Rykhlyk, N. Sinya, L. Sushik, O. Filipchak, N. Shipko the methodical aspect of this pedagogical phenomenon begins. However, this important pedagogical problem has not been fully studied. On the one hand, it applies to the expansion of areas of enrichment of the terminological apparatus of pedagogy, and on the other hand, specific guidelines and practical advice to teachers-practitioners.

**Aims.** The purpose of the article is to form the methodological competence of future teachers of geography, which would meet modern requirements for the training of specialists in higher education institutions.

**Methods.** When we were writing the article, we used general scientific research methods, empirical: description, observation, questionnaire, survey; methods of mathematical statistics - to process the results of the study.

**Results.** Methodical training is a fundamental component of professional training of future teachers of geography and is considered as a system that covers the purpose and objectives, content, methods, tools and forms of organization of student learning. This system belongs to the system of the highest level - professional training of future teachers of geography - and functions in its structure.

Methodical training provides a synthesis of subject geographical, psychological and pedagogical and professionally significant methodological knowledge, skills, personal qualities of the future teacher of geography. There is no clear definition of

this concept, despite the importance of methodological training in the professional development of student teachers in the scientific literature there is no clear definition of this concept [1].

The structure, content and specifics of methodical training of future teachers of natural sciences, namely geography, were studied by home and foreign scientists, in particular N. Vereshchagin, M. Krylovets, O. Tamozhnya, I. Starchakova.

The purpose of methodical training is the formation of methodical competence of the future teacher of geography, methodical readiness to perform professional activities in the system of school geographical education.

The main tasks of methodical training of students are: mastering theoretical knowledge of methods of teaching geography; formation of methodical abilities and skills; gaining experience in applying the acquired knowledge and skills; development of professional abilities of a geography teacher; development of individual methodical style.

The purpose of methodical training will be considered achieved if future teachers will have a number of methodological competencies, formed methodical thinking and will continuously work on self-education, enrichment of own methodical experience.

Among the professional knowledge that determines the methodological competence, subject, psychological, pedagogical and methodological knowledge are of special importance. In this case, for the future teacher of geography subject knowledge - is the knowledge of the basics of geographical science in its many areas [6].

Of the whole set of psychological and pedagogical knowledge taught in the relevant disciplines at the Pedagogical University, the most important and necessary for further professional activity of a geography teacher are: knowledge of psychological and age characteristics of students, psychological theories and concepts of educational activities, choice of psychological and pedagogical tools influence on students and psychological and pedagogical introspection.

Methodical knowledge includes knowledge of students: legal documentation in the sphere of education and methods of teaching geography; the importance and problems of research in methodological science, its relationship with other psychological, pedagogical and geographical sciences; goals of teaching geography at school; structure and content of school geographical education; modern requirements for the organization of educational and cognitive activities of students; typology of methods and technologies of teaching geography, etc.

The whole set of psychological, pedagogical and methodological knowledge is related to the method of teaching the subject, that is the ability to apply existing knowledge in the teaching of their subject in practice. Methodical skills of the future teacher of geography are represented by skills: to plan educational process proceeding from the set purposes of a lesson and features of cognitive activity of pupils; develop software and methodological support for the course of geography, thematic and lesson plans; to organize an effective process of teaching geography in the conditions of general educational institutions with an orientation on formation of

geographical representations of schoolboys, training of their receptions of educational activity; to conduct lessons of different types and kinds; to carry out an individual and differentiated approach to students in the learning process; select teaching aids for the lesson in accordance with its objectives; develop test questions and tasks; to make interdisciplinary and intradisciplinary connections in the process of teaching geography; to analyze the pedagogical activity for the purpose of its improvement, to be engaged in self-education; to organize the work of students in the field to study the native land, to conduct extracurricular work in geography, etc.

Another important component of the methodological competence of the future teacher is reflection. Reflection in the pedagogical process is a process of self-identification of the subject of pedagogical interaction and with the formed pedagogical situation, with what constitutes the pedagogical situation: students, teacher, conditions of development of participants of pedagogical process, environment, content, pedagogical technologies and so on [3].

The formation of methodological competence in the field of teaching geography is carried out during the study of the discipline "Methods of teaching geography" by students, during the pedagogical practice at school and will continue in future pedagogical activities.

The program of the discipline provides various forms of organization of education: lectures, practical and seminar classes dedicated to solving practical problems faced by a geography teacher in a modern school (development of programs, calendar-thematic plans, lesson plans in accordance with new school standards; ; creation of didactic materials for lessons; organization of design and research activities of students, etc.) However, as the experience of teaching shows, one theoretical training for becoming a teacher is not enough, so some classes are held at school, where students have the opportunity to try themselves as a teacher trial lessons and extracurricular activities. So, students before the active pedagogical practice adapt to the educational process and later feel less stress during training sessions.

An important part of the methodological training of future teachers of geography is their independent research activities. Every student, working on a methodological topic that interests him, learns to analyze and summarize the best pedagogical experience, to carry out their own methodological developments and present the results at scientific and practical conferences. Research activity of students is further realized in course and final qualifying works. Independent work should occupy a leading place during classroom classes and in extracurricular time, to reproduce in the tasks a variety of methodological activities of a geography teacher. The using of computer technologies and the Internet has significant opportunities in the organization of independent work of future teachers. Tasks for independent work can be the search for information, images, videos and their analysis, compiling a dictionary of methodological terms, a card file of methodological literature, analysis of scientific works of scientists-methodologists, development of presentations, etc.

An important stage of continuous methodological training is the pedagogical practice of students in secondary schools, which allows them to identify in the real

educational process the accumulated baggage of methodological knowledge and skills.

To identify the level of formation of methodological competence of students, a number of diagnostic methods were selected:

1) methods of diagnostics of methodical knowledge (tests of current and intermediate control of knowledge in the discipline "Methods of teaching geography" - IV course) (table 1);

2) methods of diagnostics of methodical skills by means of the analysis of the executed practical works on IV course and results of industrial (pedagogical) practice on IV course (table 1);

3) methods of determining the level of formation of pedagogical reflection;

4) methods of assessing creative potential;

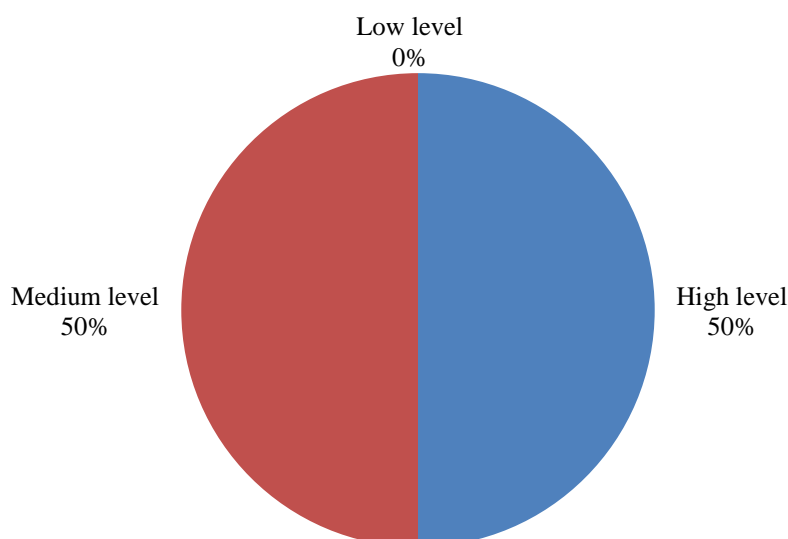
5) methods of identifying factors of attractiveness of the profession.

Table 1

**Methods of diagnostics of methodical knowledge**

Method	Results of the research
Diagnosis of methodical knowledge	Students demonstrated "excellent" and "good" levels of knowledge.
Diagnosis of methodical knowledge	Students demonstrated a "sufficient" level of mastery of skills. Students have difficulty in independently developing lessons of different types and using different technologies.

Determining the level of formation of pedagogical reflection was carried out according to the method of O. V Kalashnikova [9]. The questions of the questionnaire concerned the analysis of their behavior and actions in different situations. According to the sum of points scored, 50% of students have an medium level of pedagogical reflection, another 50% - high, low level of reflection is not detected (Fig. 1).



**Fig. 1. The level of formation of pedagogical reflection**

The results show that students are worried about the results of their work, they are able to learn and perform work in accordance with the requirements, to improve its quality.

The method of studying the creative potential of I. N Semenova [8] concerned its components such as curiosity, self-confidence, the desire for independence, the ability to concentrate and abstract. 80% of the surveyed students show high creative potential, but there are also barriers to its development in the form of fear of failure, condemnation and misunderstanding. This greatly reduces creative activity and restrains the imagination as a necessary condition for the formation of a creative personality. One-fifth of the surveyed students have a very high creative potential, but also an overestimated self-esteem. This technique showed that students are ready to implement various creative tasks with students, have many ideas and want to implement them in future teaching.

Whereas methodological competence is part of pedagogical competence, it is necessary to find out the attitude of students in general to the teaching profession as a future sphere of activity. A questionnaire was conducted with students according to the method of V. Yadova [10] on the attractiveness of the profession of geography teacher, the most significant are listed in table 2.

Table 2

**The attractiveness of the teaching profession**

"Positive" factors	"Negative" factors
Profession is one of the most important in society	A small salary
The work requires a creative approach	Great working day

All these suggests that students do not have full confidence that they will work at school, but all respondents would like to try themselves as a teacher.

Educational and methodical support of the process of formation of methodical competence of students - future teachers of geography is a working program, a course of lectures, a workshop, a fund of funds for the discipline "Methods of teaching geography". All these methodological developments are aimed at developing motivation for the profession of "teacher of geography", providing optimal conditions for students to master the basics of professional activity in the field of methods of teaching geography in secondary schools.

**Discussion.** Professional training of students at the Pedagogical University should be aimed at forming a new type of thinking and professional competence. Teacher's professional competence - personal and value characteristics, attitude to the profession as a meaning of life, manifested in the pursuit of self-development in this area, in the acceptance (motivation) and ability to solve problems and typical professional problems that arise in real situations of teaching, using knowledge, professional and life experience, the potential of their individuality [2].

The strategy of methodological training of geography teachers is based on the integration of such methodological approaches as systemic, personality-oriented, competence, activity, context and environment, in the context of the proposed study. These approaches do not contradict each other, but on the contrary, complement each

other, which provides a choice of research tactics, appropriate forms, methods and tools of teaching, as well as the content of training future professionals.

The theory of methodical training is based on certain initial positions - the principles which define the purpose, the maintenance, ways of the organization and management of activity of students.

The principles of methodical training of future teachers of geography in the conditions of a modern institution of higher education are defined as follows:

- the principle of scientificity (compliance of the content of education with the current level of development of pedagogical and methodological science, methods of scientific knowledge);

- the principle of professional orientation (any component of training should contribute to the professional development of the future specialist);

- the principle of integrativity (methodical training is an important component of professional training of geography teachers, where subject, psychological, pedagogical and methodical training complement and enrich each other; integrative methodological training is also realized through integration of content and teaching methods, combination of subject knowledge and teaching methods, integration educational-methodical and scientific-methodical activity of students);

- the principle of consistency (all blocks of the standard of education and their content should be reflected in the trajectory of the methodological formation of the future specialist and mutually agreed with it);

- the principle of connection of theory and practice (maintaining a balance between the study of theoretical material and the practical application of methodological knowledge acquired during laboratory-practical classes and pedagogical practice);

- the principle of consciousness and activity (subjective position of the student in education, the ability to independently perform first educational and then professional tasks, contribute to the formation of methodological competence of the future teacher);

- the principle of consistency and systematicity (consistent mastery of methodological knowledge, the formation of methodological competencies in the course of professional training in higher education);

- the principle of strengthening the creative orientation of methodical training (development of methodical thinking of the future teacher by solving methodical problems of problematic and creative nature, performance of research tasks);

- the principle of variability (implementation of individual and differentiated approaches to methodological training, which allows to determine possible individual educational routes of students during methodological training and ensures the implementation of individual trajectory of methodological formation);

- the principle of personal orientation (using of professional potential of every student, formation of individual methodical style).

**Result.** Analyzing the difficulties that arise in students during the development of methodological training at the university, we can identify a number of

organizational and pedagogical measures that contribute to the formation of methodological competence of students:

- earlier acquaintance with the pedagogical process at school (passive observation of the teacher in class, involvement in extracurricular activities, etc.);
- adjustment of practical tasks for students taking into account the requirements of modern school, which would include the development of work programs for school courses in geography, elective courses and extracurricular activities: development of technological maps of lessons, application of multimedia technologies in geography lessons, etc.);

To determine the level of formation of methodological competence, the following criteria are inherent in each level in the chain to know - be able - to own on the basis of leading activities. At *the first level* the student knows modern pedagogical methods and technologies. Has an idea of the basic curricula of school courses in geography, elective courses, the universal types of educational activities that are formed in students during the teaching of geography at school. At *the second level* the student is able to apply modern pedagogical methods and technologies. At *the third level*, the student has methods of analysis and development of pedagogical technologies, taking into account the peculiarities of the educational process, the tasks of education and personal development. In the majority of cases, students of geography can be divided into levels as follows: students of I-III courses are at the first level of formation of methodological competence, most fourth-year and master students - at the second. The third level has not yet been reached by students, it is typical mainly for practicing teachers [7].

Consequently, the methodical training of future teachers of geography is a purposeful formation of a set of methodological competencies of future specialists in the context of solving methodological problems in the school course of geography. Methodical training not only provides students with knowledge and skills in the area of theory and methods of teaching geography, but also contributes to the formation of values to the profession and experience of methodical activities. The purpose of training is the formation of methodological competence of the future teacher.

Accordingly, we can say that the process of forming the methodological competence of the future teacher of geography is long and complex, and in higher education institutions only its foundations are laid, but we can already say that current graduates are ready to teach.

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