

METHODOLOGICAL FOUNDATIONS ON THE FORMATION OF RESEARCH COMPETENCE OF FUTURE TEACHERS OF PROFESSIONAL TRAINING

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doi: 10.18355/PG.2022.11.2.13

Abstract

The educational process in higher education is a very complex multicomponent structure. In this study, we will consider only one aspect - the research function of future teachers of historians. It should be noted that the educational process is based on methodological foundations and principles, then the methods and rules of teaching are subject to a certain system. If we consider the formation of the research competence of future teachers as a scientific and pedagogical problem, then first of all, it is necessary to determine the meaning of the word "science". "Science is the search for a system of continuous development of nature and society, as well as objective patterns of thinking as a result of special human activity. Therefore, the basis of science is search, that is, accumulated knowledge," D. Poshaev said. Laws, Basic concepts, and principle (theory), says that there should be an ideal (Poshaev, 2011). The basic, initial state of any theory or doctrine is interpreted as a principle. Researchers in the field of education are actively involved in the educational process. For example, such a study can be called a scientific and pedagogical study. ... Pring's research in education, which is also based on the social sciences, is closely related to education, which distinguishes research focused on knowledge gained through the sciences. That is, there are studies that can be called educational or scientific-pedagogical, pursuing different directions and goals [Kvitkina L.G. The impact of students' research work on improving the quality of specialist training: (Sociological consideration of problems)]. Knowledge of the principles, forms and methods of formation of scientific and cognitive activity is called "methodology". The methodology of pedagogical research is a process of formation of new pedagogical knowledge and cognitive activity aimed at identifying objective patterns of learning, education and development of students.

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Key words

Methodology, pedagogical research, formation, professional training, teacher

Introduction

The theoretical and methodological basis for studying a particular problem is a set of appropriate methodological approaches. From a philosophical point of view, a "principle" is the essence of a point of view, a set of methods and principles.

The principle is richer than the method, complex in structure, multifaceted in content, and reflects the leading idea and principle.

Speaking about the principles of pedagogical training, phenomena and processes arise from the following cases:

- a) pedagogical phenomena and processes have a complex, multi-layered structure,
- b) pedagogical facts and phenomena are influenced by many factors and circumstances,
- c) there are no clear boundaries in the educational space in which the personality develops,
- d) the functioning of the pedagogical process, its management is carried out simultaneously on the basis of several laws and principles,
- e) the pedagogical process acts as an integral system and requires an integrative approach,
- f) the pedagogical process is characterized by its continuity and dynamism, the influence of random factors and circumstances that cannot always be taken into account or taken into account,
- g) the pedagogical process is multifunctional, which simultaneously affects the intellectual, emotional, free and effective practical spheres of the individual.

The methodological principle is the fundamental methodological direction of research, the approach to which the object of research is considered (the method of determining the object), and the concept or principle governing the overall research strategy. A distinctive feature of the development of civilization in the third millennium is the transition from an industrial society to an information one. This process, in turn, required not only a radical change in the structure of social labor but also the restructuring of the main paradigms. The research has accumulated experience in preparing future teachers for research activities (Dneprov, Podymova, Nikandrov, Kan-Kalik, Khutorskoy).

Research work on professional and pedagogical education Batysheva S.Ya., Belyaeva A.P., Vazina K.Ya., Zeera E.F., Kuzmina M.V., Ledenev V.V., Markova S.M., Ledenev Yu.N. Petrova, etc. studied in the works.

The transition to continuing education creates different conditions for the implementation of new directions in vocational education and significantly actualizes this problem, defining the essence and competencies in a new way. Vocational education is one of the most important links to a person's continuing education. The phenomenon of professionalism in modern society is characterized, on the one hand, by many aspects, relatively complex scientific developments, and on the other hand, future specialists working in the field of public practice do not have sufficient knowledge of the theory and practice of vocational training.

This approach implements in practice the creation of a comprehensive theoretical and methodological basis for the development of the content of the technology of the level of competence of qualified personnel in all

subjects of the country. This task requires a scientifically based approach to teaching and professional pedagogical education.

First of all, it is necessary to create specific mechanisms for theoretical and practical training of specialists. Modern professional training is based on its close connection with practice. In this regard, modern society places high demands on professional education. The distinctive features of such specialists are such qualities as high professionalism and competence.

The relevance of the in-depth study of the theoretical aspects of the phenomenon of professionalism in modern society is indisputable. In this regard, the logic of the research is based on philosophical propositions about the continuity and interdependence of personality development and its professionalism (E. N. Gusinsky, A. I. Turchinov, V. D. Shadrikov, G. P. Shchedrovitsky, etc.), as well as on the works of specialists (V. P. Bepalko, B. S. Gershunsky, V. I. Zagvyazinsky, V. V. Krayevsky et al.) also had a special influence on the methodological aspects of the development of professional competence of teachers.

The work on the theory of action to create a model for the formation of students' research competence (L.S. Vygotsky, S.L. Rubinstein, N.F. Talyzina, D.B. Maslow, G. Heckauzen, V.I. Kovalev, V.D. Shadrikova, etc.) was of great interest.

V.I. Ginetsinsky is interested in developing a model of pedagogical competence, which offers four functional components: presentation, incentive, correction and diagnostic.

1) Presentation competence – consists of students' presentation of the content of the material. The choice of this competence is based on abstraction from specific types of training. Attention is focused on the fact of the submission of educational material.

2) Motivational competence –to arouse students' interest in learning information. Its implementation depends on the formulation of questions and the evaluation of answers.

3) Correctional competence – is associated with the correction and comparison of the results of the work of future teachers.

4) Diagnostic competence – provides feedback.

According to V.I. Ginetsinsky, the predominance of instinctive competence in the work of a teacher indicates that he has analytical abilities and uses research abilities in his work. We agree with the position of E.P. Belozertsev, which gives a complete typology of the main components of pedagogical competence. In addition to constructive, organizational and communicative competencies, informational, developmental, orientation, mobile and research (gnostic) competencies are distinguished in the structure of pedagogical activity. Firstly, it provides an informational function as the initial stage of all educational work. The realization of information competence requires deep and free mastery of educational material, methods and techniques of its teaching, as well as mastery of the art of speaking, other sources of information, etc. (Balasaguni, 1987).

Developing competence - provides management of perceptual, mental, emotional, volitional and other components of the future teacher, reflecting the unity of learning, education and development. The systematic implementation of the teacher's developing competence teaches future specialists to analyze, generalize, classify and systematize facts, establish cause-and-effect relationships, master concepts, categories, laws and their conscious use, and form ideological and moral qualities. Indicative competence - determines the content of the value orientations of future teachers in the natural and social environment. Forms an active attitude to the phenomena and processes of the environment, the causes of ideas and behavior, and social actions. The competence of mobility is aimed at updating the knowledge and life experience of future teachers, which is reflected in the work of teachers on the formation of cognitive independence and socio-political activity. The realization of gnostic competence gives the teacher's work a creative, research character. The generalized professional skills of a teacher include research activities and operations. However, experience and special research show that most teachers, educators and educators with higher pedagogical education, regardless of profession, work experience and age, are not ready to solve most research tasks. The research competence of a teacher is to improve quality, develop the system, and develop science, production, social and cultural spheres.

As a subject of research competence, the teacher must master the following skills:

- identify the need for research to gain new knowledge;
- setting research objectives;
- development of a hypothesis;
- research planning;
- to carry out research activities;
- analysis of primary data and evaluation of research results.

Thus, when performing research competencies, the teacher carries out two different activities:

- projected;
- activity.

Table 2 – The level of development of important professional qualities of a teacher, determined by the scaling method

| Quality Groups | indicates | | |
|------------------------------|-----------|---------|---------|
| | low | medium | high |
| Moral and ethical | До 17 | 18 – 22 | 23 – 35 |
| Social | -//- 27 | 28 – 35 | 36 – 40 |
| Professional and pedagogical | -//- 24 | 25 – 31 | 32 – 35 |

| | | | | |
|-----------------------|------|----|---------|---------|
| Pedagogical | -//- | 17 | 18 – 22 | 23 – 25 |
| General professional | -//- | 20 | 21 – 25 | 26 – 30 |
| Special professional | -//- | 24 | 25 – 31 | 32 – 35 |
| Emotionally arbitrary | -//- | 39 | 40 – 48 | 49 – 55 |
| Psychophysiological | -//- | 32 | 33 – 39 | 40 – 45 |
| Physical | -//- | 27 | 28 - 35 | 36 – 40 |

If the quality is well defined and often noticeable, a rating of "4" is given. The rating is "3" if the quality is average and the number of its manifestations and manifestations is expressed in equal proportions. The "2" rating indicates that if the quality is weak and infrequent, then the "1" quality rating is practically not formed.

When performing the first type of activity, the need to solve any type of research task is determined, and goals are set. They are planned to be achieved, research methods are selected, and their results are evaluated. The second type of activity is research activity, as a result of which hypotheses are put forward, information is collected, processed and analyzed, and conclusions are drawn.

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For a future teacher, this is knowledge and skills of a certain type of professional (industry) activity. This is due to the fact that the teacher participates in two types of activities at once: pedagogical and professional (production).

Therefore, teachers face significant difficulties in restructuring and organizing their competencies on a research basis. They are not ready for a significant change in their usual professional activities. This is confirmed by the assessment of the heads of educational institutions, the self-assessment of teachers and educators.

The reasons for this are the established practice of professional training of future teachers at the university, which does not provide the formation of the necessary skills and abilities for the implementation of research competence.

An analysis of the goals and content of our curricula and programs, pedagogical educational organizations, and methods suggests that the main reason for the low level of training of graduate researchers is the lack of an adequate training system.

In the educational process, the orientation of students to the formation of research competencies is expressed only in the purpose of higher pedagogical education and its content, but there is no connection between them in accordance with the pedagogical system.

Educational activities and competencies

Theoretical and methodological support for the creation of such a system has not been developed. Changing the situation requires the creation

in each university of a special system for the formation of professional training of future teachers to perform research competencies.

This is a difficult practical task, and its successful solution requires appropriate scientific support. First of all, it is necessary to determine the purpose of forming the research competence of future teachers.

To be ready for competence means to have the qualities necessary to fulfill the competencies of its subject. Research competence is a special kind of competence and, like any special competence, imposes special requirements on the quality of its subject. To establish these requirements, you need to understand what makes this feature unique.

Psychological studies (N. V. Kuzmina, V. A. Slastenin, etc.) show that the following interrelated competencies of the teacher's pedagogical activity take place in the learning process:

- diagnostics;
- orientation and forecasting;
- design and engineering;
- organizational;
- information and explanatory;
- communicative and stimulating;
- evaluation;
- research - creative competence.

Elements of research and creative competence are present in the work of every conscious teacher. Both sides are especially important. One of them is that the application of pedagogical theory inherently requires certain creativity of the teacher. As mentioned above, pedagogical and methodological ideas reflect typical learning conditions. The specific conditions of education and upbringing are different and sometimes unique. For example, the general theoretical position on respect and demand for students has many methodological modifications as patterns of education in the real educational process: in one case, it is important to help the student in work; in another, it is necessary to discuss his shortcomings, in the third to point out positive actions or make a suggestion, etc.

For example, we need to think about how to use this rule and which educational techniques are better to use here. It takes place in all the work of the teacher.

Defining the conceptual principles of the formation of the research competence of future teachers, we proceed from the fact that the concept (Lat. conception-perception) in pedagogical theory looks like this:

- 1) the system of views on society and natural processes and phenomena;
- 2) the leading concept defining the strategy of actions in the implementation of reforms, programs, projects, and plans.

In our opinion, the most meaningful and applicable conclusion to pedagogical science is the definition of Professor E. P. Belozertsev: The concept as an object of scientific knowledge is formulated on the basis of

methodological principles and meets a number of requirements" - V.V. Kraevsky, L.F. Savinova V.V. Serikov D.B. Pryakhin, etc. Scientists believe that the concept of developing the research competence of teachers in the postgraduate period should be based on an analysis of the state of the pedagogical system in a particular area, accumulated traditions and features of the human potential in the education system.

In our opinion, the methodological principles of the study of pedagogical problems are described in detail in the work of E.I.Sharchuk "Quality management of education in education": acmeological, axiological, qualimetric, competence-based, culturological, personality-oriented, synergetic, systemic, integrity principles. A description of their contents is given below. Principles of pedagogical research by E.I.Sakharchuk:

Acmeological principle - involves the study of human development in adulthood and the achievement of peaks in this development, as a person, as a subject of activity, and as a professional (A. A. Bodalev, A. A. Derkach, N. V. Kuzmina)

Axiological principle - involves the study of the nature of human values, the meaning of life, and the goals of human activity (P.S. Gurevich, B.S. Gershunsky, E.I. Belozertsev)

Qualimetric principle – assumes a quantitative assessment of the quality of objects (AIS Subbeto)

Conclusions

The principle of competence involves the analysis of subjects, processes, and phenomena of pedagogical life from the point of view of the teacher's ability to act professionally in the development of a high level of knowledge, and business skills (Bolotov, Kalpey, Serikov.)

The principle of cultural studies presupposes the vision of education as a cultural process carried out in cultural thinking, the components of which are a personality filled with human thinking and the ability to freely express their individuality, cultural self-development and self-determination in the world. cultural values (Bondarevskaya, Taubaeva).

Personality-oriented approach - assumes that the student's relationship as a person interacts with its integrity, such as the qualitative fulfillment of key characteristics (Serikov, Yakimanskaya).

The synergetic principle is the study of the process of transition of existing systems from unregulated to disciplined: this is the process of interaction, cooperation (Kulnevich).

System principle - from the point of view of the system principle, any pedagogical phenomenon is a system. Therefore, the study is based on the use of such categories as "system", "whole", "part", "element", "connection", "structure" (I. V. Blauberg, M. N. Skatkin, E. G. Yudina, etc.).

The principle of integrity - all components of the pedagogical process must be analyzed through the prism of a holistic concept since the main function of each component is its generality and integrity (Ilyin, Saranov, Sergeev).

R.I. Atakhanov and V.I. Zagvyazinsky, in their works, consider the substantive aspect of the principle of action, which is often used by researchers (7).

In determining the essence of the principle of action, according to these authors, the real process of human interaction with the outside world is studied, providing a solution to certain life tasks. At the same time, a person acts as an active initiator as a subject of interaction, performing a certain sequence of various actions, including mental ones. All the functional capabilities of the psyche depend on the solution of the tasks of the implemented and ongoing activities.

To create pedagogical concepts, it is necessary to identify the following basic pedagogical principles: humanism, continuity and integrity, freedom of choice, personality and competence.

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