



To the Question of Forming the Readiness of Masster Students for Scientific Research Activity

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Abstract: The article reveals the essence and content of the pedagogical model of formation of readiness of undergraduates for research activities. The model consists of motivational-target, content-technological, diagnostic-evaluation and effective-final components.

Key word and concepts: model, master's degree, motivational-target, content-technological, diagnostic-evaluation, effective-final.

The change in socio-economic conditions in the modern world has led to a change in the role of education in society, has led to most of the innovative processes in the system of education and upbringing. An important direction in the development of education is the introduction of a multi-level education system, the implementation of which is directly related to the development of the magistracy institute. Master's programs, being a particularly important link in the system of multilevel education, are designed to provide an opportunity to realize, increase their professional knowledge, as well as their personal abilities, personal potential in general cultural and intellectual terms. The intellectual and moral development of a person on the basis of his involvement in a variety of independent activities in various fields of knowledge can be considered as a strategic direction in the development of education. Therefore, at the master's level, readiness for research activity (IR) becomes one of the important and backbone of professional training, as it is not only a goal, but also a means of effective development of the undergraduate's personality. It is also important to take into account that the master's program is the basis for the training of not only highly qualified specialists, but also future scientists, whose level of general and professional training must be adequate to the requirements of a constantly changing society. In this regard, the problem of ensuring the quality of the educational process in the master's program is put forward, focused on the training of creative specialists who, in addition to high professional qualifications, have the ability to set research tasks, plan research, perform research activities, analyze initial data and evaluate research results. Analysis of the state and development of the magistracy in the system of multilevel education, scientific and pedagogical literature, generalization of the experience of this area shows that the professional training of masters involves the active inclusion of undergraduates in systematic research activities as the main type of educational activity of undergraduates, is based on the conceptual ideas of fundamentalization, humanization, professionalization, informatization of the educational process. The result of the professional training of future masters is the competence of the graduate, including the knowledge and skills necessary for the implementation of professional activities. In the competence of the master, a characteristic is distinguished that ensures the quality of the preparation of a graduate of the master's program - research competence, which is determined by the level of the preparedness of the undergraduate for IE. From this point of view, we have defined the key concepts of our study: "research activity of undergraduates", "readiness of undergraduates for IE" and "the process of formation of undergraduates' readiness for IA". Having studied the content of master's educational programs, we came to the conclusion that the concept of "research activity" at the master's level is a

broader concept and is a synthesis of teaching and research activities (AED) and research activities (R&D), which differ from each other in the degree of independence in performing the study. Taking into account the specified specifics, under the research activity of undergraduates we mean a specially organized activity to master the methodology of scientific knowledge and organization of research search, the result of which is the appropriate level of formation of research knowledge, skills and professionally significant personal qualities that ensure the successful functioning of this activity. When determining the structure of the research activity of undergraduates, we relied on the conceptual model of activity developed by A.N. Leontiev. The structure of the research activity of undergraduates is a set of interrelated and interdependent components: need, motive, goal, actions, operations, conditions.

Its successful implementation presupposes that the undergraduate is ready for research activity, which is defined in our study as a holistic personal education of the undergraduate, reflecting the attitude and result of his internal intellectual and personal development, including a motivational and value attitude to research activity, a system of methodological knowledge and research skills, professionally significant personal qualities that ensure the success of research activities. We solved the problem of the content of undergraduates' readiness for IE through the study of filling the content of readiness for professional activity. We share the point of view of scientists (K.M. Durai-Novakova, V.A. Slastenina, N.D. Khmel and others), who consider "readiness for professional activity" as a holistic phenomenon that integrates not only the orientation of the personality and certain knowledge, skills, but also personality traits. We have identified the following components in the structure of undergraduates' readiness for IE: motivational-value component, which includes a set of stable motives (cognitive, personal, socially significant, professionally valuable), which determine not only the interest, the positive attitude of the undergraduate to IE, but also reflect the general orientation of the personality, his search-creative, research position, which embodies the conviction in the professional and social significance of research activities and in the awareness of the need for active participation in it; cognitive-operational, includes general scientific methodological knowledge and skills, specific scientific research knowledge and skills, knowledge of procedures and possession of the technique of scientific and pedagogical research; personal, includes a system of formed professionally significant personal qualities of a teacher-researcher, such as: self-organization, self-control, activity, ability to reflect. The combination of these components constitutes the phenomenon of undergraduate readiness for research activities. The study of the state of the problem of formation of the readiness of undergraduates for IE in the system of multilevel education led to the conclusion that the readiness of undergraduates for IE is not formed independently; purposeful efforts are required to form it. At the same time, under the formation of undergraduates' readiness for IE, we mean a process aimed at the motivational and value attitude of undergraduates to IA, mastering methodological research knowledge and skills by undergraduates; development of professionally significant personal qualities that ensure the success and effectiveness of research activities. Having decided on the basic terminology, we were faced with the task of building a model for the formation of undergraduate readiness for IE. The decisive factor in its development is the choice of a theoretical and methodological strategy that reflects the direction of scientific research and its result. Considering the formation of readiness of undergraduates for IE as a complex and multifaceted process, the full study of which cannot be carried out on the basis of one approach, we relied on a combination of systemic, informational and personal-activity approaches. As a general scientific level, a systematic approach was chosen, which provides a comprehensive study of the problem of forming the readiness of undergraduates for IE and allows us to consider this process as a pedagogical system.

Using the provisions of the systems approach allowed us to make the following generalizations:

1. the process of forming the readiness of undergraduates for research activities is a subsystem of professional training, which allows it to be built taking into account general didactic principles;
2. the process of forming the readiness of undergraduates for research activities as a pedagogical system is open, probabilistic in nature, has flexibility, dynamism, controllability,

3. the effectiveness of the process of forming the readiness of undergraduates for research activities depends on the organization of systemic influences to prepare undergraduates for the educational process of postgraduate education and the creation of special pedagogical conditions;
4. Readiness for research activities can be considered as a pedagogical system, which is a holistic education of special knowledge, skills and qualities of the undergraduate's personality, ensuring the effectiveness of the implementation of scientific, pedagogical and research activities.

These provisions are most fully disclosed in combination with the informational approach, which is a research strategy at a specific scientific level. The information approach in our study allows us to formulate the following generalizations:

1. the process of forming the readiness of undergraduates for research activities is informational in nature, the quality of information determines its effectiveness;
2. information that forms the basis of the process of formation of readiness for research activities, reflects the experience of the subjects of the educational process, their goals and value orientations;
3. from the point of view of the information approach, the process of forming the readiness of undergraduates for research activities is an open system that involves a constant exchange of information with the external environment;
4. Information support for the process of forming the readiness of undergraduates for research activities should include the necessary theoretical knowledge about the methodology of research activities; the use of modern information technologies in research activities. The practice-oriented tactics of work is the personal-activity approach. The main provisions of the personal-activity approach within the framework of the problem of forming the readiness of undergraduates for IE are: 1) the formation of the readiness of undergraduates for research activities is a pedagogical process in which undergraduates take a subjective position. 2) the formation of undergraduate readiness for IE as a process is built on the basis of general didactic principles, using the methods of activating this process.

the formation of undergraduate readiness for research activities is carried out on the basis of subjective experience and their individual characteristics, due to subject-subject relations with teachers. On the basis of these provisions of the systemic, informational and personal-activity approaches, taking into account the structure of undergraduates' readiness for IE, we have constructed a model for the formation of undergraduates' readiness for IA, which includes three main components: motivational-targeted, content-technological, result-evaluative.

The motivational-target component ensures the formation of a research position among undergraduates, a value attitude towards the IE, and an orientation towards the IE. This component performs the functions of goal-setting, motivating, prognostic. The motivational component involves the transfer of external motives into internal ones, carried out through specially organized stimulating effects on undergraduates, ensuring the formation of personally significant motives. Master students are specialists who already have a higher professional education (bachelor's degree), a certain professional experience, and are highly motivated to learn. Consequently, the undergraduate is considered by us not as a student, but as a student: he strives for independence, self-realization, self-government; has comprehensive experience that is used as a source of learning; learns to solve an important life problem to achieve a specific goal. Therefore, at the level of development of master's programs in the motivational component, completely different methods, techniques and means aimed at self-educational activity should be updated. With this in mind, we used motivational and value personal elements that are an integral part of research activities: problematic, critical, open to complement, self-actualizing subjectivity.

The development of the motivational component is realized in the conditions of subject-subject, equal-partner interaction between the teacher and students.

Such an organization of learning requires high skill of teachers: entertaining presentation, creating an emotionally favorable atmosphere during training, situations of dispute and discussion. In order to form an awareness of the professional significance of IE, the need to master research knowledge, skills and attitude to their implementation, training sessions were built in a dialogue-search mode. In the process of direct implementation of the search for solutions to problems, their comprehension by undergraduates, a motivational-value attitude to research activities is formed. The target component of this component includes the goals of the process of forming the readiness of undergraduates for research activities. Any activity must be subordinated to a common goal. The purpose of our study is to form the readiness of undergraduates for research activities. Setting and effective implementation of the goal (A.Yu. Konarzhevsky) requires its representation through a system of subgoals, that is, decomposition. As a result of the decomposition of the goal of the process of forming the readiness of undergraduates for research activities, a set of subgoals was revealed, which formed three groups: 1) the formation of a motivational-value attitude to IE; 2) formation of theoretical readiness for ID; 3) formation of practical readiness for ID. These goals determine the content and technological aspects of the process of forming the readiness of undergraduates for research activities, which require purposeful work to form undergraduates' knowledge, skills and a positive attitude towards research activities.

The content-technological component ensures the formation of undergraduate readiness for research activities in the process of studying specific academic disciplines, research and teaching practices, in the course of writing a master's thesis. This component performs teaching, educational and developmental functions. Theoretical training is aimed at mastering methodological research knowledge by undergraduates. Theoretical training is implemented through the study of psychological, pedagogical and special disciplines that provide maximum fundamental training of a specialist at a high methodological level. With the help of the special course "Theoretical and methodological foundations of ID", developed by us, undergraduates master philosophical and ideological knowledge, get acquainted with the trends in the development of science, assimilate general scientific methodological approaches, logical and methodological concepts, general scientific principles and forms of research, scientific concepts. We assign a special place to some academic disciplines in the system of formation of undergraduate readiness for research activities, since the study of these disciplines is necessary for mastering methodological research knowledge at the level of specific scientific methodology. One of these disciplines is "Organization and planning of scientific research in pedagogy". The study of this course contributes to the formation of undergraduates' knowledge on the methodology of scientific research in pedagogy, mastery of knowledge about the logical structure of pedagogical research and its scientific apparatus; procedures and main characteristics of the experiment, the logic of evidence in the pedagogical experiment; development of research skills. Practical training within the framework of the content-technological component of the model involves mastering the knowledge and skills of the procedures and techniques of scientific and pedagogical research. The content of the practical part is the implementation of research assignments by undergraduates in the educational process and the conduct of research work on writing a master's thesis.

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