

AGRO-PEDAGOGICAL COMPETENCE IS THE BASIS FOR PREPARING FUTURE AGRICULTURAL SPECIALISTS FOR PROFESSIONAL ACTIVITIES

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Abstract. *This article discusses the quality of education in theoretical and practical studies and the improvement of the professional competence of future specialists in the field of agriculture.*

Keywords: *competence, professional competence, knowledge, skills, qualifications, agro pedagogical competence, quality education.*

In our country, special attention is paid to education and upbringing of young people. As youth is the fruit of our future, how it will turn out depends on how we take care of it today. As education is the center of all relationships and connections in human society, it is also the basis of society's development.

The revolution in science, technology and information has turned man, his scientific and educational potential into a decisive factor of socio-economic development. In order to achieve the great goals that we have to achieve in the future, first of all, we need to train highly qualified specialists who meet the requirements of the time.

Organization of the educational process in the current period requires the teacher not only to have deep knowledge, but also to have pedagogical competence, to know various methods of teaching, and to work tirelessly on himself. As economic activity forms the basis of everyone's life, it necessarily requires everyone to learn professional thinking.

Today, the main goal of the educational process is to teach students to apply professional knowledge in the process of teaching general and special subjects, to be able to demonstrate their professional skills in directly selected fields, to eliminate existing problems based on information technologies, professional competence in organizing the teaching process and the methodology of its implementation (each education taking into account the content and specificity of the course) consists of teaching.

That is why it is necessary to strengthen cooperation in continuous education in our country so that our children can choose the right profession from a young age, form their professional visions correctly, and learn to think independently. Only then will we be able to supply society with modern specialists who can meet today's demands.

In the process of reforming the system of higher education in the Republic of Uzbekistan, the problem of updating and revising the approaches, content and technologies of training specialists for various fields of activity is renewed. As one of these approaches, it is proposed to use a competency-based approach.

In the modern educational systems of Europe and the United States of America, we highlight the following forms of professional-pedagogical competence and research capacity development of teachers of higher education institutions:

practice-oriented classes with new teachers, psychological-pedagogical profile courses for social adaptation of new teachers in higher education institutions;

development of an “individual direction” for the formation and development of a teacher.

These educational programs include the study and analysis of the pedagogical experience of colleagues, the study of innovative educational technologies, the development and testing of curricula and programs in the field of applied science. Socio-economic and political changes in modern society determine the priority in the system of value directions of citizens and, therefore, the whole way of life.

The need for rapid development of a new type of activity and mobile improvement of existing skills is becoming urgent. The system of additional professional education is called to respond to such appeals of citizens, within the framework of which professional retraining and professional development programs are implemented.

The research examines the problem of integration of pedagogical and agricultural knowledge in the process of mastering educational programs of professional retraining and psychological-pedagogical profile improvement by teachers of higher educational institutions in the field of agriculture.

The increasing requirements for the level of professional training of teachers of higher educational institutions in the field of agriculture creates a contradiction related to the insufficient effectiveness of their professional training system: its formation and lack of improvement, inconsistency between scientific, professional and personal interests, students, society and the agrarian sector requirements.

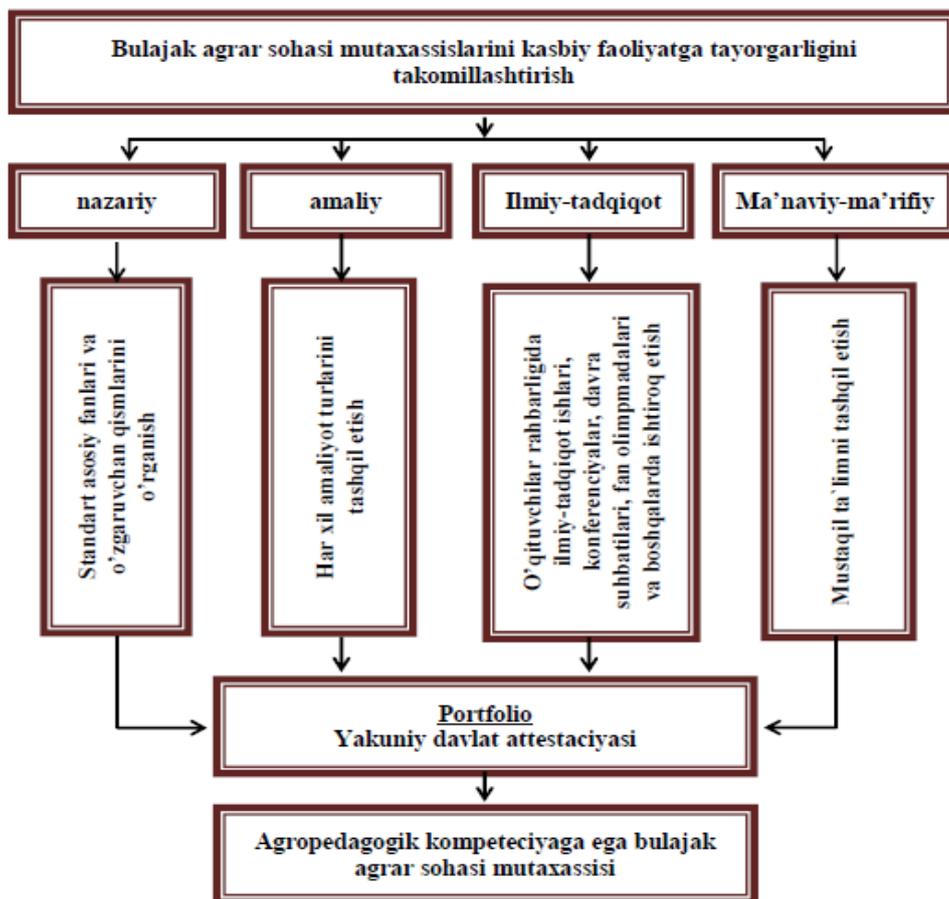


Figure 1. Integrative-differential approach to the development of students' professional competence

The uniqueness of the professional training of teachers of higher educational institutions in the field of agriculture is manifested in the integration of existing agro-pedagogical competencies and new professional psychological-pedagogical competencies acquired by them in the course of basic agricultural education.

The integrative approach in research includes both the process and the result of formation of agro-pedagogical competence among teachers of agricultural educational institutions. The general goal of the integrated approach as the basis of pedagogical training of teachers of agricultural educational institutions is to develop a holistic, well-developed personality of the teacher of agricultural educational institutions.

Based on the essence of the integrative approach, it is possible to distinguish its functions (methodical, formative, integration, design, prognostic), stages (abstraction of the general from the particular, generalization and integration of selected components), their tasks are synthesis, systematization (intellectual and cognitive potential of the individual teacher actualization, development of communication skills, the ability to rationally establish interpersonal relationships, etc.).

The integration process is carried out at three levels:

- 1) integration of professional pedagogical and basic agrarian education; “Pedagogy of higher education”, “Pedagogy of the agricultural sector”, “Methodology and technology of teaching general and special subjects”,
- 2) “Problems of scientific-research activity of scientific-pedagogical staff”; Integrating the content of the “Psychology of professional activity” programs;
- 3) integration of agro-pedagogical competence and pedagogical practice.

Agrarian-pedagogical competence of teachers of agricultural sciences is considered as an integration of three factors:

- 1) existing agro-pedagogical competencies;
- 2) psychological-pedagogical competencies acquired during professional training;
- 3) personal characteristics of professional importance.

The teacher is considered as a subject of the system of higher and additional professional education: on the one hand, he carries out educational and educational activities, on the other hand, he develops himself in every way.

Figure 2 shows the didactic system of professional training of teachers of higher educational institutions in the field of agriculture based on the integration of pedagogical and agricultural knowledge. The priority goals of agricultural pedagogy are education and upbringing of future agricultural specialists and professional training of teachers of higher educational institutions in the agrarian field.

The fact that professional pedagogical training of agricultural science teachers can be considered as a priority area of agricultural pedagogy is explained by a number of reasons:

today there is a lack of teachers of agricultural sciences with professional psychological sciences and pedagogical training in the higher education system;

successful training in professional training programs allows teachers of higher educational institutions in the field of agriculture to master a new type of professional activity - pedagogy, improve their professional skills, and respond mobile to changing socio-economic conditions.

This set of factors determines the importance of developing a didactic system of professional pedagogical training for teachers of higher educational institutions in the field of agriculture based on the integration of pedagogical and agricultural knowledge.

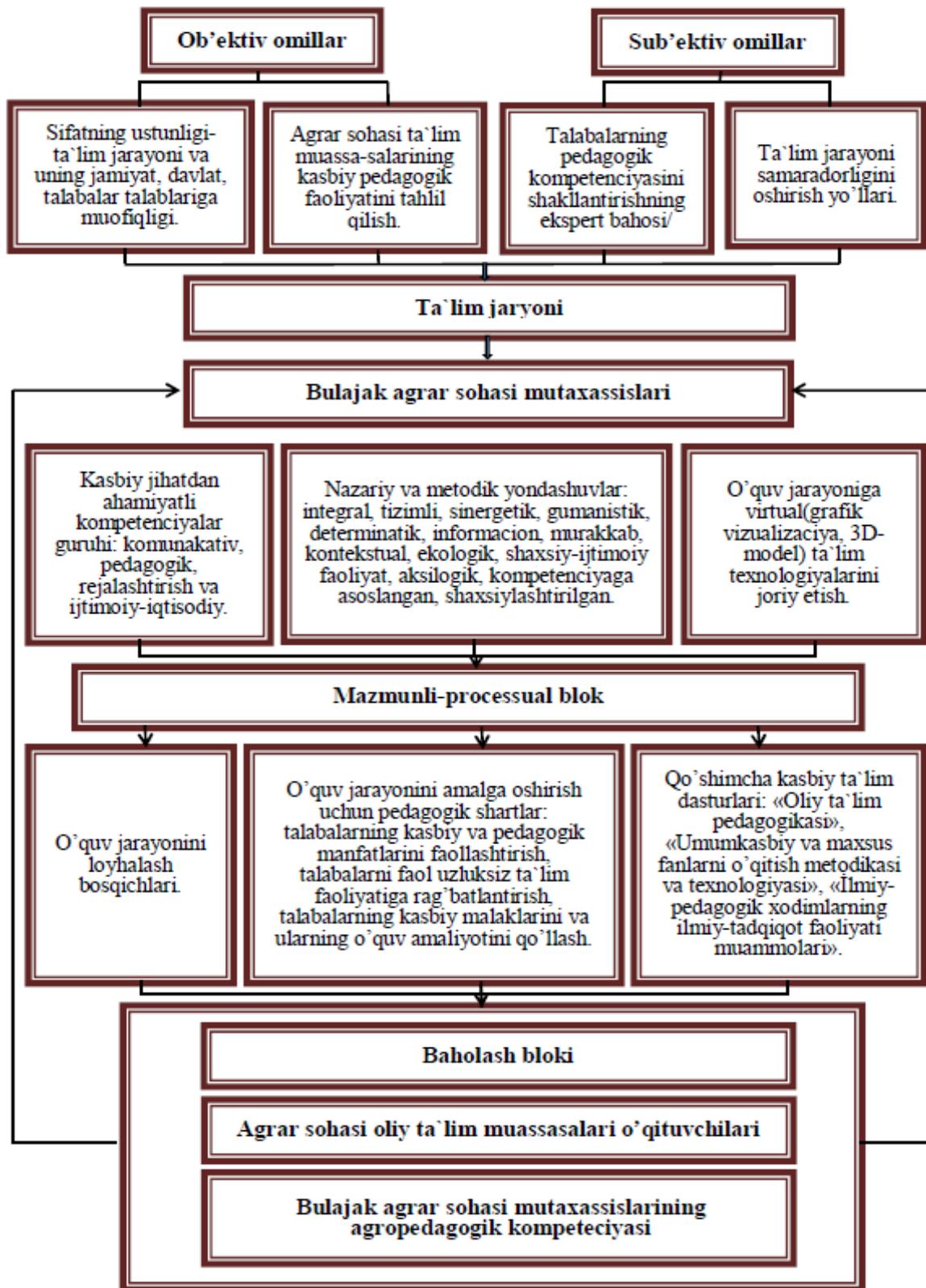


Figure 2. Didactic system of professional training of teachers of higher educational institutions in the agricultural sector

In turn, the subjective factors that determine the direction of its development are the components of the system (objective and subjective factors, all subjects of the educational process - students and teachers, design-objective block, content-procedural block, result evaluation block, educational result), interact with each other affect, but at the same time work separately, which justifies the synergistic nature of the entire educational system and increases its effectiveness.

The developed didactic system of professional training of teachers of agricultural higher education institutions is the result of a theoretical analysis of a number of indicators affecting the development and improvement of the entire modern education system.

Among them we highlight the following:

analysis of the legislative framework of higher education and additional professional education in the Republic of Uzbekistan;

study the research experience of leading theoreticians and practitioners dealing with this problem;

analysis of modern approaches to quality management of professional retraining of pedagogic personnel of higher educational institutions and the improvement of their qualifications, development of the main directions of formation and development of the process of professional training of pedagogic personnel of higher educational institutions;

his professional psychological-pedagogical experience and the experience of his colleagues in the field of additional professional education, work in the field of determining the methodological bases, goals, tasks, laws, principles, structure and content of professional training for teachers of technical sciences.

We distinguish the following as objective factors determining the formation and development of this system:

changes in the socio-political and economic spheres of modern society;

The definition of education as the priority goal of the state policy in the field of education (the concept of the target program approved by the Decree of the President of the Republic of Uzbekistan "On approval of the concept of the development of the higher education system of the Republic of Uzbekistan until 2030" dated October 8, 2019 No. PF-5847 [1]) meets the modern requirements of economic development, aimed at providing high-quality education that meets the needs of society and society, every citizen, in particular;

changes in the local education system;

The impact of modern trends in the development of the higher education system in international educational practice, which provides for the implementation of the provisions of the Bologna Agreement;

the need to develop the most up-to-date conceptual technical and other rules for the further development of the process of professional training of teachers of higher educational institutions in the agricultural sector based on the use of the necessary resources (scientific, personnel, organizational, material and material-technical), integrating pedagogical and agricultural knowledge);

renewal of the integration of the foundations (methodical, theoretical and practical experience - empiricism) of formation and development of the process of pedagogical training of pedagogic personnel of higher educational institutions of the agrarian sector without basic psychological and pedagogical knowledge;

the desire of teachers of modern higher education in the agrarian field not only to be highly qualified specialists in the applied scientific field, but also to be competitive in the domestic and international educational services market and therefore to have professional competencies and personal qualities, to carry out professional psychological, pedagogical and scientific activities; their professional skills and level of personal (intellectual, creative, moral, etc.) development meet the requirements of the state, industry, higher education, students and colleagues;

increase the level of requirements for the level of professional training of teachers from the production sector of the society, state and agrarian sector.

As we dwell on the problem of increasing the professional competence of teachers in their work, it should be noted that improving the quality of pedagogical training of teachers of higher educational institutions in the agrarian field is closely related to its content, in particular, scientific or technical characteristics specific to a particular subject.

A number of modern researchers in the field of educational content (L.Ya.Zorina, V.V.Kraevsky, V.S.Lednev, I.Ya.Lerner, V.M.Monakhov, A.M.Sokhor, S.A.Shaporinsky) fully revealed the principles of educational formation in their works, but it should be noted that they do not always take into account the specific characteristics of the educational institution where the educational process is carried out.

The intended didactic system of training teachers of higher educational institutions in the field of agriculture for professional activity is based on a number of conceptual rules:

1. On the basis of the integration of pedagogical and agricultural knowledge, the formation and development of the process of professional training of teachers of higher educational institutions of the agrarian sector should be focused on the fact that this process has the characteristics of being socially open, purposeful, multi-functional, multi-component, and has its own characteristics. The process of self-reproduction, adaptation, development, self-management and its effectiveness depends on the active interaction of all structures;

2. The goals and objectives of the process of professional training of teachers of higher educational institutions in the agricultural sector are determined by the type of ideological and political processes currently taking place in the field of higher education and additional professional education in the country and in the world;

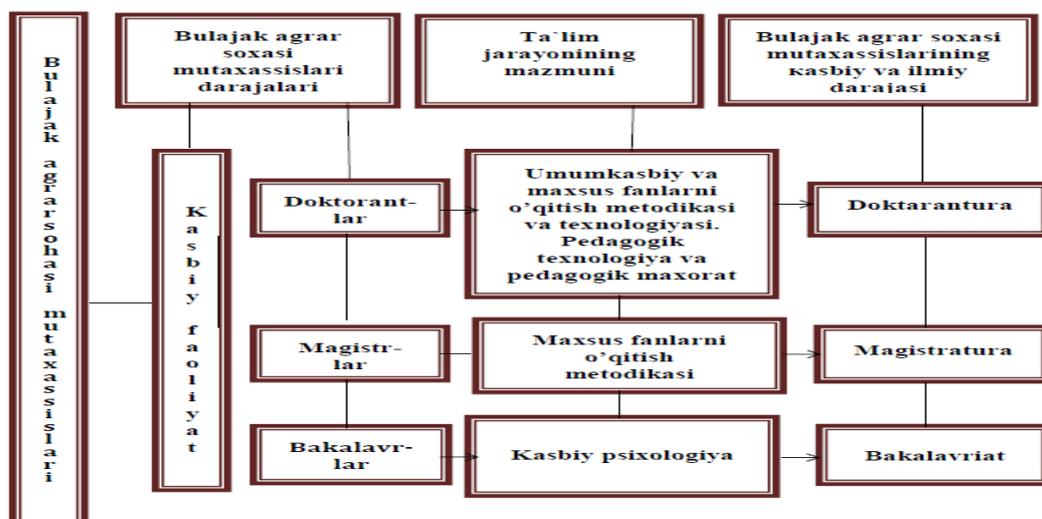


Figure 3. Adapted procedural model of professional training of teachers of higher educational institutions in the agricultural sector based on the integration of pedagogical and agricultural knowledge

3. The content of professional training of teachers of higher educational institutions in the agricultural sector should be organized as follows:

contribute to the formation of the subjective position of future agricultural specialists;
achieve the goal of learning through the interaction of teachers and students of these programs;

to adapt the knowledge acquired by future agricultural specialists only to the objective conditions of their professional activity and to the whole life in general;

use of teaching methods aimed at activating all cognitive processes of the personality of future agricultural specialists;

orient future agricultural specialists to the permanent nature of their professional activity and self-determination in society;

complying with the international trend of building program content on a modular basis.

4. The technology of organizing the professional training of teachers of higher educational institutions in the agricultural sector is defined by a set of approaches that provide methodological synergy. These approaches complement each other, form a new conceptual basis of education that determines the activity of the pedagogical training system of higher education pedagogues, and increase its effectiveness.

5. The stages of implementation of professional training should be placed hierarchically according to the following chronology:

a) theoretical justification of the system of professional training of teachers of higher educational institutions in the agrarian sector;

b) formation of conditions for the development of the pedagogical training system of teachers within the framework of the educational organization;

v) the functioning and development of the system of professional training of professors and teachers of higher educational institutions of the agricultural sector (the purpose of this stage is to give an active, progressive character to the educational process)

d) to ensure the stable operation and development of the system of training pedagogic personnel of higher educational institutions in the agrarian sector;

e) to determine ways to improve its efficiency.

6. The conceptual priorities for improving the studied process are primarily focused on the process of improving the state of this process at this stage; secondly, the formation of new qualities of the activities of its components that meet the changing needs of society and program listeners.

The design of an adapted procedural model of the process of professional training of teachers of higher educational institutions of the agricultural sector (see Figure 3) was carried out in the following stages: organizational-preparation, content-technological, evaluation and forecasting was developed and based on the structure and foundations and the content of their professional activity, their model shown in the figure (see Figure 4).

The priority goal of the developed model is the formation of engineering-pedagogical competence of teachers of higher technical schools.

To achieve this, it is necessary to solve the following tasks:

acquisition of professional competence programs (psychological-pedagogical, scientific-research, organizational-technological, educational-methodical) of future agricultural specialists;

mastering one's professional skills in accordance with the requirements of the state, social society, industry and education system;

to meet the professional, personal and scientific needs of future agricultural specialists of agrarian sciences;

The theoretical model of the professional-pedagogical activity of teachers of higher educational institutions of the agricultural sector is aimed at preparing the teachers of higher educational institutions of the agricultural sector for the most effective implementation of their scientific and professional activities.

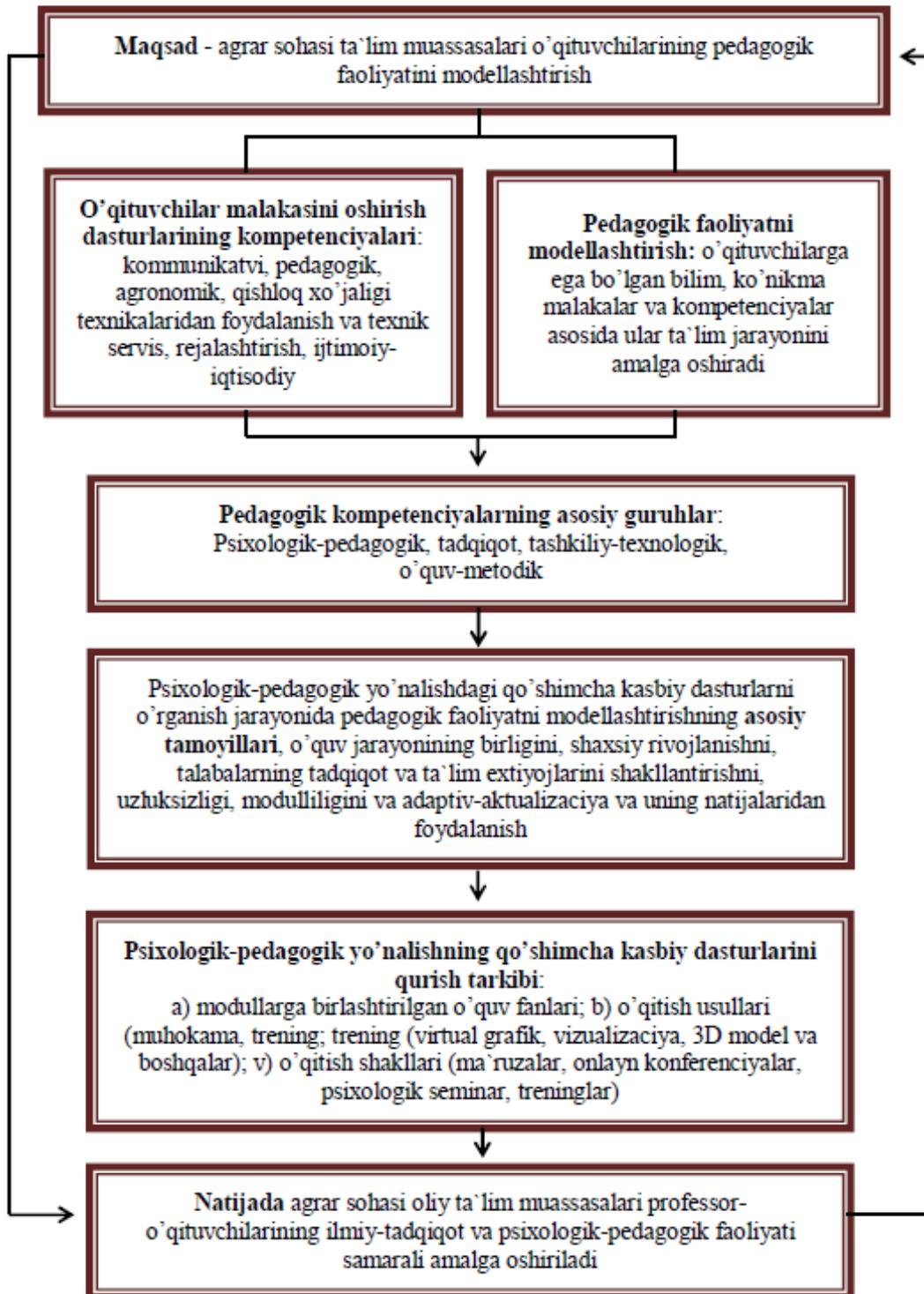


Figure 4. Pedagogical activity model of teachers of higher educational institutions in the agricultural sector

The model consists of a set of components that are part of additional software and personal computer programs for teachers of higher education institutions in the field of agriculture; groups organized by them, focusing on the problem of increasing the professional competence of teachers in their work, it should be noted that improving the quality of pedagogical training of teachers of higher educational institutions in the agrarian field is closely related to its content, in particular, scientific or technical characteristics, and is specific to a certain higher educational institution [3].

The analysis of practical experience in the implementation of professional training programs for professors and teachers of higher educational institutions in the agricultural sector showed that the specific requirements for this process are as follows:

providing future agricultural specialists with the latest information on modern scientific and technical achievements, as well as the results of the development of innovative technologies;

to ensure the organization of additional professional programs in the psychological-pedagogical profile at a high level;

adapt the content of additional professional programs to the level of preparation of students, their scientific, professional and personal interests;

taking into account high modern domestic and international requirements for professional competence and competitiveness of future agricultural specialists;

increase the agro-pedagogical competence of graduates of additional professional programs and support their comprehensive personal development;

directing additional professional education programs of professional retraining and professional development to introduce graduates to the international scientific and cultural space; be flexible and adaptable.

According to the sources, professional competence is described as a special subject of a specialist, professional in his field of activity.

Agro-pedagogical competence is a special type of organization of special knowledge, skills and qualifications of a specialist in the field of agriculture and pedagogy, allowing him to make effective decisions in the course of professional activity [2].

Agro-pedagogical competence reflects the essence of the agrarian field specialties mastered by the student, so it can be described as the conceptual basis of specialist training. It reflects the level of formation of professional knowledge, skills and abilities, his professional knowledge, which allows to successfully solve three classes of professional activity tasks provided for in the legal documents of higher education: stereotyped, diagnostic and heuristic [2].

Agro-pedagogical competence is the ability of a person to successfully perform the professional duties and obligations of the position applied for in the agricultural sector. This is the qualification characteristic of the future agrarian specialist, in particular:

1) perfect knowledge of general education, general professional and special subjects (general knowledge);

2) having professional technology - the competence to mobilize knowledge and skills to solve specific professional problems;

3) high qualification characterized by the ability to transfer the acquired ability to perform production tasks to different levels of professional activity;

4) to be able to discuss methods of problem solving at different levels of activity;

5) ability to cooperate with colleagues (community, mutual aid, etc.);

Agro-pedagogical competence is related to the successful behavior of specialists in non-standard situations, informal interaction with partners, the ability to work with conflicting information or dynamic systems [2].

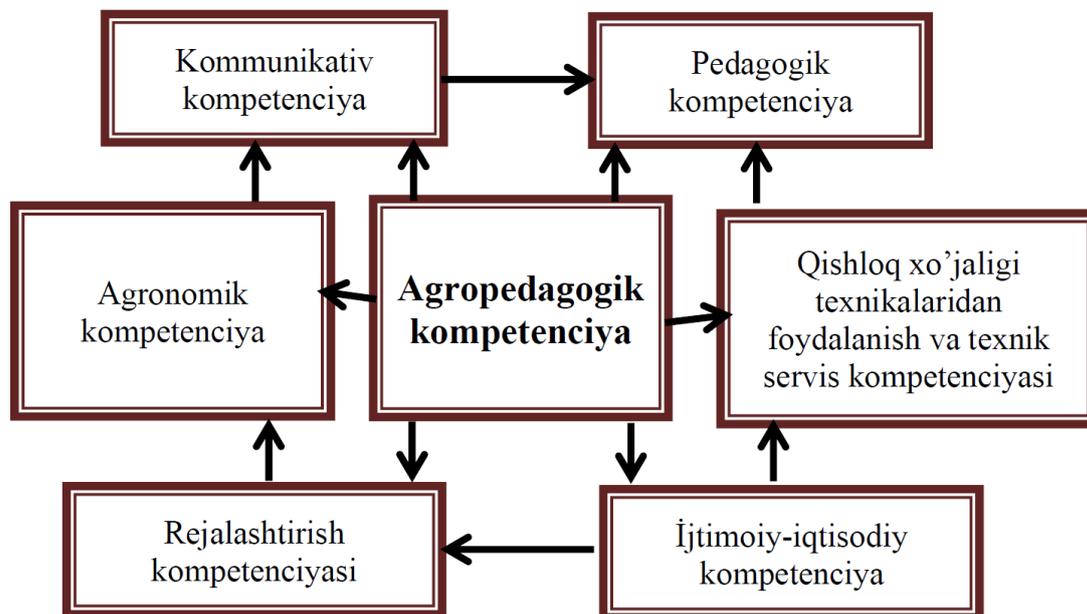


Figure 5 shows the competencies of agro-pedagogical competence.

Thus, there are many studies on the effect of vocational education on improving the quality of training of future agricultural specialists. At the same time, it should be noted that the use of didactic capabilities of ICT tools, in particular, Internet services, in the teaching of “Mechanization and automation of agriculture” on the basis of virtual (graphic visualization, 3D-model) technology to students of higher educational institutions in the agricultural sector The problem was defined as a means of forming the agropedagogical competence of the future agrarian specialist [2].

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