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A MECHANISM FOR DEVELOPING THE TECHNICAL COMPETENCE OF FUTURE AGRICULTURAL TEACHERS

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Annotation

This article discusses the formation of technical competence in future teachers in the field of agriculture and its content, the role and importance of basic competencies in their preparation for professional activities, the formation of knowledge, skills and abilities among students in general and special subjects. through interdisciplinary communication, pedagogical and technical issues, such issues as the mechanism for the development of technical competence of students based on knowledge and an integrative-differential approach to it is explained.

Keywords: future teachers, technical, competence, competence, technical competence, interdisciplinary integration, integrative-differential approach.

Аннотация

В данной статье рассматривается формирование технической компетентности у будущих учителей в области сельского хозяйства и ее содержание, роль и значение базовых компетенций в их подготовке к профессиональной деятельности, формирование знаний, умений и навыков у студентов по общеобразовательным и специальным предметам. через межпредметную связь, педагогические и технические вопросы объясняются такие вопросы, как механизм развития технической компетентности студентов на основе знаний и интегративно-дифференциальный подход к ней.

Ключевые слова: будущие учителя, технические, компетентность, компетентность, техническая компетентность, междисциплинарная интеграция, интегративно-дифференциальный подход.

Annotatsiya

Mazkur maqolada bo‘lajak qishloq xo‘jaligi sohasidagi o‘qituvchilarda texnik kompetentlikni shakllantirish va uning mazmun-mohiyati, tayanch kompetensiyalar ularning kasbiy faoliyatga tayyorlashdagi o‘rni va ahamiyati, fanlararo aloqalar orqali talabalarning umumkasbiy va ixtisos-lik fanlardan bilim, ko‘nikma va malakalarini shakllantirish, pedagogik va texnik bilimlar asosida talabalarning texnik kompetentligini rivojlantirish mexanizmi hamda unga integrativ-differensial yondashuv kabi masalalar yoritib berilgan.

Kalit so‘zlar: bo‘lajak o‘qituvchilar, texnik, kompetensiya, kompetentlik, texnik kompetentlik, fanlararo integratsiya, integrativ-differensial yondashuv.

Introduction. There are currently several factors in place for our republic's national education system to establish its legal foundation. In turn, the implemented reforms allow for improving the structure and content of education. The declaration of 2023 by the President of our country Sh.M. Mirziyoyev as a "Year of attention to people and quality education" is a clear example of attention to education. As the President noted, "Increasing the quality of education is the only correct way of development of New Uzbekistan [1]. The pedagogical activity of higher education institutions is based on the concept of the formation of a comprehensive and well-developed creative personality. A university graduate faces many problems in the process of getting a job in the technical fields of production, or in conducting pedagogic activities at school [2].

Relevance of the topic. The interaction of integration and differentiation has been proven in the science of agricultural machinery, which provides the opportunity to create the necessary conditions for the regulation of vocational education and the construction of a hierarchical model. In modern society, attention to agricultural machinery determines the level of development of countries not only by their technical condition but also by the technical competence of specialists trained in higher educational institutions. Modernization of the educational system and changes occurring in the vocational education system creates a need for the development of the technical competence of the employees of the educational institution. Currently, state educational standards of higher professional education are introduced, and innovations in educational content and technology aimed at improving the quality of training of future teachers of technological education are widely introduced.

Literature review. The most complete psychological forms of professional development of an individual in the process of professional self-management in modern social and economic conditions, the development characteristics of professional competence were studied by E.F. Zeyer [3]. He evaluates professional competence as one of the main components of the structure of professional activity. In T.M.Sorokina's studies, the technical competence of the teacher is interpreted as the unity of theoretical and practical preparation for the implementation of pedagogical activities. According to his approach, teaching competence is one of the stages of professionalism, which is the basis of a teacher's pedagogical activity [4]. According to V.N. Vvedensky, the concept of "professional competence" is characterized by the breadth of content, integral features that unite common concepts such as "professionalism", "qualification", and "professional qualifications". However, it is still often identified with the concept in question as 'competence'. Competence is a set of personal, and competent professional or functional. **Research methodology**. The English concept of "competence" literally means "ability". In our opinion, competence means "the effective use of theoretical knowledge in the activity, the ability to demonstrate high-level professional skills, skills and talent." The concept of "competence" entered the field of education as a result of psychological research. Therefore, competence means "how a specialist behaves in unconventional situations, unexpected situations, engages in communication, takes a new way in relations with opponents, performs ambiguous tasks, uses information full of conflicts, has a plan of movement in consistently developing and complex processes." The modern labor market presents growing demands for the quality of education, and the technical competence and professional training of future teachers in the field of agriculture, in turn, leads to an increase in competition among graduates of higher educational institutions,

including technical higher educational institutions "Agricultural Mechanization". If the initial qualification of a specialist implies only the suitability for jobs and the acquisition of narrow information, then "competence" requires mastering knowledge not only of a general type but also of a wide field in particular. It implies the preparation and ability of the specialist in the successful implementation of his skills, improving the efficiency and quality of his work.

We believe that the formation of technical competence of future specialists in technical higher education institutions is not yet at a sufficient level of meaningful education and the use of interdisciplinary communication. Because in content education, modeling of technical and professional aspects of the future engineering activity takes place, and interdisciplinary integration, in turn, emerges as a uniting element in various fields of science. A modern graduate - a future technical specialist (teacher in the field of agriculture) - should be able to apply a complex of knowledge in various disciplines in his professional activity. Interdisciplinary integration can be interpreted as a process of combining academic disciplines based on knowledge and technological problems [6]. The main essence of teaching based on the competence approach is to direct the formation of the knowledge, skills and abilities acquired by students in the course of education and training organized by subjects in their personal life in their future professional and social activities.

In the future, students should have the basic competencies necessary to engage in personal, social, economic, and professional relationships, to take their place in society, to solve the problems encountered in this process, and most importantly, to be competitive in their field and profession. It is known that, through the educational process, students are tasked with developing basic competencies, including communicative, and informational skills, self-development competencies as individuals, socially active citizenship competencies, general cultural competencies, mathematical literacy, awareness of science and technology innovations, and competencies of use. To achieve the set goals of forming students' professional competence through interdisciplinary integration, it is necessary for teachers of higher education institutions to systematically implement this work. For example, "Tractor and cars", "Agricultural machines", "Agricultural hydro-technical reclamation", "Mechanical engineering", "Materials science", "Technical mechanics", etc. cluster, media education, discussions, mobile education, and other active and interactive education methods are used in the integrated teaching of subjects [6].

The organization of such classes helps students not only to separate technical cycle sciences from humanities, but also to find their interrelationships, epistemological relations, and to have a rational and conscious approach to work in the future. Practical training with students can also be organized using interdisciplinary connections. It will be possible to use information and communication technologies in interdisciplinary laboratory work, to define tasks in this field and to develop education with innovative discoveries in the educational process of "Technical Mechanics" and "Educational Technologies". A single approach to interdisciplinary relations faces difficulties in determining the assessment of student knowledge between humanitarian, national, and special cycle subjects. That is, the level of student's knowledge, the knowledge acquired in the study of the subjects of humanitarian and general science departments, may not be sufficient for the study of special subjects. Therefore, this knowledge is necessary not only for a joint approach to the creation of cycle science programs for the development of the content of the subjects, and a careful approach to the transfer of educational material, but also for the assessment of knowledge and skills. New subjects aimed at solving the problems of higher

technical educational institutions appear every year in the educational process. This is not surprising, because to understand the rapidly developing industry and economy, it is necessary to change people's minds and bring discoveries to humanity. For example, in the "Agricultural Mechanization" field of study, how to meet agrotechnical requirements to increase land productivity, create measures to improve the meliorative state, develop innovative technologies for effective irrigation and melioration, agricultural mechanization discoveries (inventions), creates a need for special sciences. At such a time, it is necessary to find interdisciplinary connections. Therefore, the method of expert evaluation can help in the construction of a scheme between disciplines in the implementation of mutual relations. In some cases, teachers act as experts.

Analysis and results. Thus, it is reasonable for technical activities to be carried out by interdisciplinary integration if students of technical higher education institutions perform integration tasks with regular use and perform practical training, only practical training allows to strengthen the knowledge gained in studying theoretical materials. While performing this or that laboratory work, solving a complex educational task, the student acquires practical skills necessary for successful professional activity. Interdisciplinary integration of students of higher education institutions plays important roles in improving the quality of scientific-theoretical and practical training of students, because the problems of implementation of the interdisciplinary approach are solved at each stage, not only the educational program, but also the education and development of modern students [7]. All-round creative, developing personality of the future specialist can be formed only in the conditions of integral pedagogical process. Technical competence of the engineer - each stage is built on the basis of general principles, methods and goals for the final purpose. That is why interdisciplinary integration is an important condition for the education and upbringing of students in the field of agriculture in technical higher educational institutions. Integration and differentiation processes in the preparation of agricultural mechanization specialists for technical activities appear as the development of a single vocational education trend. Based on this, we have determined the integrative-differential approach as a pedagogical phenomenon that prepares future teachers of vocational education. In this case, it is related to the implementation of educational and technical process that can work in different agricultural mechanization systems, changing knowledge and agricultural mechanization education by organizing a dynamic balance between the processes of integration and differences.

The implementation of the mechanism of improving the preparation of agricultural teachers for technical activities based on an integrative-differential approach is carried out step by step through the formation of an expert personality in each course of education. At the stage of understanding the status of a student, there is a holistic development of a person, his preparation for a new professional activity is related to the development of the role and acquisition of the general scientific foundations of the profession. Agriculture requires a systematic approach to improving the technical competence of students based on the integration of pedagogic-psychological theoretical and practical knowledge, interdisciplinary integration, integration of pedagogical and technical knowledge in diagnosing preparation for professional activity. Therefore, a systematic approach is taken to ensure the integration of pedagogical and technical knowledge in the diagnosis of preparation for agricultural activities. Based on the classification of the stages of formation of important personal and professional qualities in future specialists, the mechanism of development of competencies such as mobility, reflexivity, and integrativeness in the directions of theoretical, practical, and scientific-research training has been

improved. At this stage, the need to choose a place of practice to use in the experience of professional activity is more consciously approached. At each stage of improving students' readiness for agricultural activity, the main attention is focused on their specific qualities - improvement of preparation for technical activity.

Results and discussion. As a theoretical direction of our ideas presented above, the content of the preparation for professional activity within the State educational standards implements all the blocks and models; practical direction - provides various types of practice - educational, pedagogical-introduction, pedagogical, production, pre-graduation, etc.; scientific-research direction - opens the organizational foundations of technical activity in the system of preparation for the activity of the agricultural direction, according to which it can be built to it or a parallel complement to it in the educational process; spiritual-educational and ethical direction - provides cultural recreation, professionally oriented, civil-legal, informational, spiritual-educational and public events, etc. in various types of organized activities.

Integrated teaching in the continuous education system is one of the important factors of education - coherence. Integration is a specialized function of providing integrated processes of education and its results in the educational system. Organizational tools used in all stages of the continuous education system play an important role in the formation of integrated knowledge and in ensuring the integrity of content and form in the educational process. The integrative approach to education is also here, the expression of the target approach to the integrated system in the educational content of the future specialists, if they are taught using vertical integration and horizontal integration in the teaching of the science of agricultural machinery, students will be able to understand the interdisciplinarity more easily, and the basis will be created for increasing knowledge, skills, and qualifications [6].

Conclusions and suggestions. To sum up, the mechanism of developing the technical competence of teachers in the field of agriculture contributes to the organization of teaching students based on integrative and integrative-differential approaches, the formation of interest in their specialties in students, the perfect study of agricultural machines, and the formation of creative-scientific activities.

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