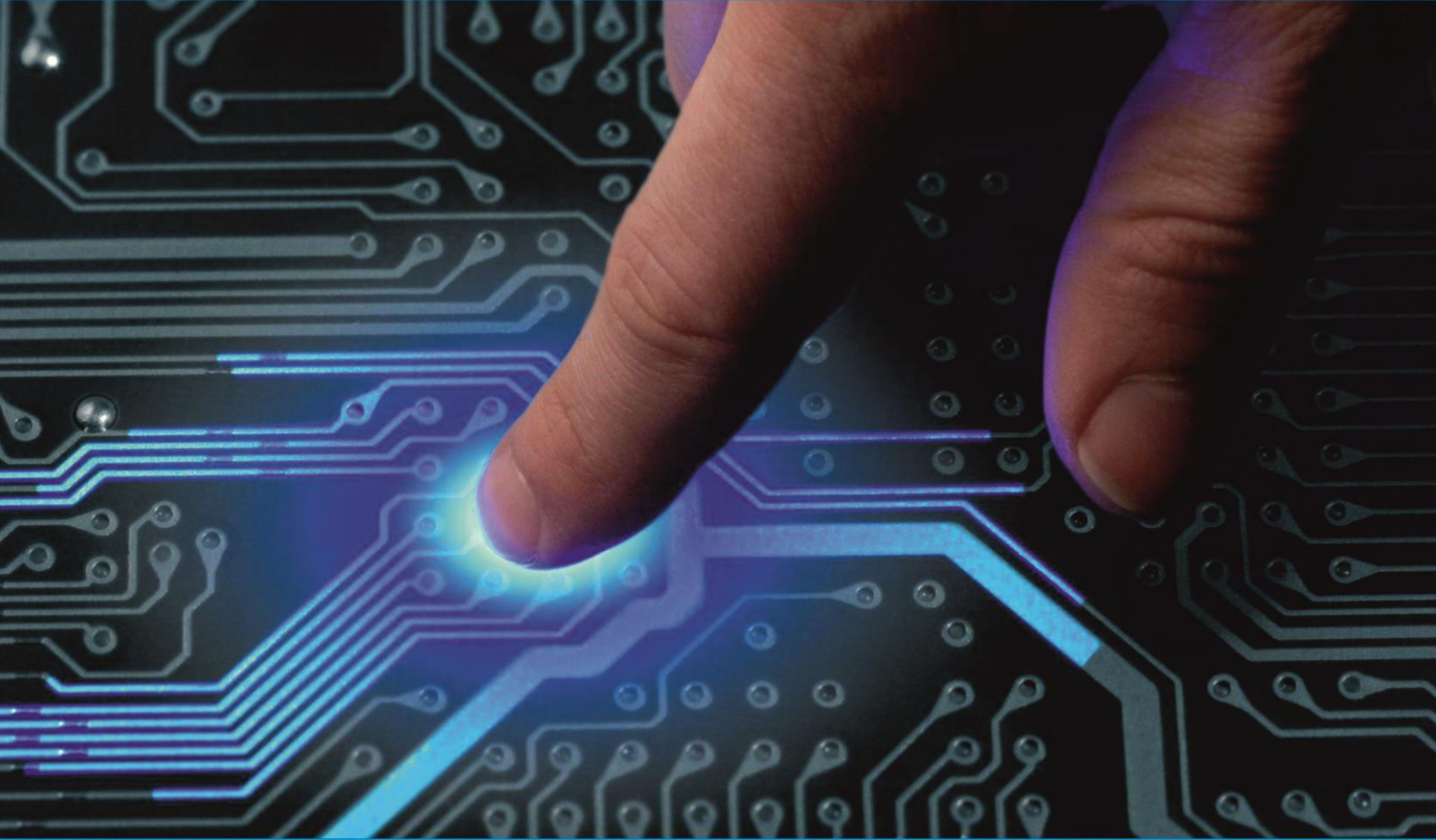




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# The Place of Competent Approach in Interdisciplinary Relations is a Guarantee of High Efficiency

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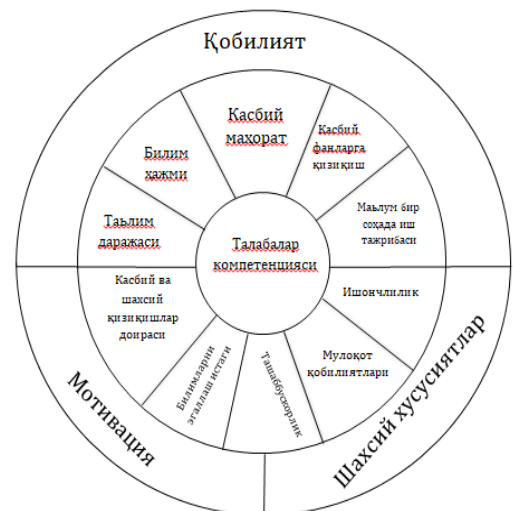
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**ANNOTATION:** In this article, the field of education in the late twentieth and early twenty-first centuries, the emergence of a competency-based approach in world science and practice, its importance in increasing the effectiveness of education, the model of student competence, the relationship between the qualities, motivation and abilities of students are fully covered. High results have been achieved by defining and developing lesson requirements on the basis of a competency approach, improving textbooks on the basis of a competency approach, using interdisciplinary links and putting them into practice.

**KEYWORDS:** Technique, learning effectiveness, competence, competence, personal potential, problem, science integration.

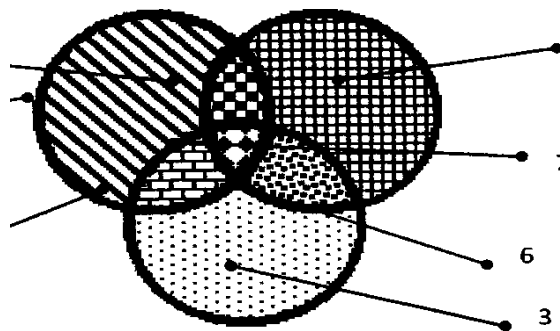
**Aims and objectives of the topic:** The Republic of Uzbekistan, like all areas, has begun to implement reforms in the field of education. The need for reforms is such that independent Uzbekistan finds its place in the world community, attracts foreign investment to the country, and trains potential personnel in line with world standards so that the transition to a market economy does not lag behind the development of science and technology. The issue of education is constantly evolving The Resolution of the President of the Republic of Uzbekistan dated March 19, 2021 QPQ-5032 "On measures to improve the quality of education and development of scientific research in the field of physics" emphasizes the need to develop interdisciplinary links. Competence is seen not only as a category of cognition but also as a category of personality. Most researchers connect the concept of competence with an understanding of the purpose and means of carrying out the activity. According to the above, different views on the concept of competence prove that this concept should be interpreted as a complex structure. This structure includes the following elements: acquisition of necessary knowledge, skills and competencies; personality traits that determine the ability to perform an activity; a set of professional characteristics; the person have the appropriate competencies.

Student Competence Model Table 1 A competency-based approach makes the student a key player in the learning process with personal goals and objectives. This approach allows the student to engage in active, conscious activities, develop information, communication, learning and cognitive skills, personal potential, self-esteem formation, self-management skills. A student's ability is manifested through his or her competence. Your studentthe combination of qualities, motivation, ability is also analyzed inthe form of a vector as a set of its composition, knowledge, skills and personal characteristics. Can apply the theoretical foundations of physics in everyday life and professional fields; can solve intermediate level problems in science. Measuring instruments, equipment and teaching aids (electronic scales, aneroid-barometer, luxmeter, Geiger counter, tribometer, calorimeter, Whitson bridge, sound generator, Thomson coil, spectroscope, diffraction grating, laser device, light sources, photodiode, photorelay, photoresistors, computer, video projector, etc.), can evaluate the measuring range and error of instruments, explain the principle of operation of physical equipment, follow safety rules in the process. Developed on the basis of a competency-based approach and improved into the national education system, these STSs



are the only solution or cannot be enforced by command. To do this, all participants in the education system must work together as a team. First of all, it is necessary to solve the following main problems in the educational process: setting course requirements based on a competency-based approach; development of professional competence of the teacher; improving textbooks based on a competency-based approach; selection and application of educational technologies for the formation of competencies in students; identification and assessment of the formation of competencies in students; ensuring the compatibility of the formation of basic and physical competencies.

Cognitive activities, skills and competencies, methods of application, which are common among different educational disciplines, are taken to develop interdisciplinary competencies. Its organization in the following table 2 on the basis of interdisciplinary links is carried out within three types: general education, general vocational and special disciplines. The integration of general education sciences (physics) with general education sciences is carried out with special sciences. One of the main problems of today is that the graduates of the educational institution are deep in their chosen profession development through knowledge, skills, competencies and a competency-based approach. Interdisciplinary integration increases students' interest in their profession, science, strengthens their knowledge, forms in them practical skills, competencies and competencies. Improving the methodology of teaching physics to solve the problem of implementing interdisciplinary integration involves solving the following problems. use of physics courses and tools for the implementation of professional disciplines; education in the process and motivation to ensure cross-side integration; improving the purpose, content, methods, types and means of education. The content of education can be divided into components in the following areas of study disciplines. The content of physics education in the 1st field is the scope of knowledge that develops in students the ability to think scientifically and philosophically. Area 2 is the scope of knowledge that forms the theoretical knowledge of the future technical profession of general vocational education; Area 3 special education content is the field of formation of professional training. These areas are limited (1-3) and consist of a set of knowledge, skills and competencies imparted in a particular subject. In this 3 knowledge is scattered and cannot explain the connection between events. Table 2.



Scope 4 The content of physics and general sciences based on PB is a range of knowledge that develops in students the ability to think scientifically and philosophically, to form theoretical knowledge of the profession on the basis of physical laws and phenomena;

Area 5: the content of education based on PB in physics and special disciplines, the range of knowledge that forms in students' understanding of the interdependence of practical knowledge about natural phenomena and their professional training;

Area 6: The content of general and special disciplines on the basis of PE - the range of knowledge that forms in students theoretical and practical knowledge, skills and competencies of the profession. These areas (4-6) are "discontinuous areas" and consist of a set of knowledge that provides the FAB within a certain range. At the same time, students' knowledge is relatively generalized and cannot always explain the connection between events.

Area 7: Physics in general, special and special subjects content-based educational content-physics in students is the scope of knowledge that shapes the interplay of worldviews, professional knowledge, practical skills and competencies. This field is a 'harmonized field' and consists of a set of knowledge that ensures the exemplary implementation of the FAB. At the same time, students' knowledge is generalized, they are able to explain the connection between events on a scientific basis on a regular basis, to explain the situations encountered in practice on the basis of fundamental knowledge.



Hence, the knowledge presented in area 7 in the context of higher educationThe scope should be reflected. This has a significant impact on the quality and effectiveness of education. The implementation of OB in physics and special sciences can consist of the following four stages: Study of the problems of PE in physics and special sciences and the underlying principles (theoretical training of teachers); Differentiation of knowledge on the basis of FAB principles (preparation for certain lessons); Integration of knowledge on the relevant topics based on the principles of FAB; Darsni FAB-based organization. The first stage involves the independent activities of teachers related to the educational process. In the second stage, the essence of FAB is studied in depth and the acquired knowledge is clearly highlighted. In the third stage, this knowledge is integrated in terms of the OB requirements of physics and special sciences. In the fourth stage, this knowledge is applied directly to practice, that is, it is given to students during the lesson.

**The object of the article.** In teaching physics based on a competency approachinterdisciplinary communication process.

**The subject of the article.** Forms, means, methods and ways to improve the methodology of interdisciplinary communication in the teaching of physics on the basis of a competency-based approach in technical higher education institutions. **Methods of the article.** Psychological, pedagogical, methodical, analysis of educational literature, observation, comparative analysis, survey, test, interview, analysis of experimental results using mathematical and statistical methods. **Reliability of article results.** Republican and international scientific-practical conferencecollections of materials, articles listed in the HAC and published in foreign scientific journals, published teaching aids, monographs, conclusions, proposals and recommendations, the results of which are approved by the competent authorities.

**Introduction of article results.** The article deals with the development of students' competencies, improving the content of education on the basis of basic and scientific competencies in the teaching of physics.b The results of research on improving the methodological training on the psychological and pedagogical basis of preparation for future technical specialization. Information and technical support of physics education, activation of didactic, interactive tools, use of modular technology, communicative, self-development of basic competencies as an individual, problem solving, increasing the effectiveness of lessons. Improving the effectiveness of the transition to physics higher education serves to increase the knowledge and competence of methodological training of future technical specialists in the institutions.

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