

Characteristics Of Teaching Specialties In Technical Higher Education Institutions

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Annotation.

The article describes the essence of the ongoing reforms in the higher education system of Uzbekistan, the institutional framework for the development of higher education, the purpose and objectives of the establishment of the University of Transport. Also, based on the requirements of the higher education system, the main tasks facing teachers in the teaching of special subjects are analyzed content, important conditions for improving the efficiency of the educational process, the optimal combinations of teaching specialties are shown in structural and functional terms. In addition, in order to ensure that theoretical training in the educational process is inextricably linked with practice, the organization of student internships in organizations in the field of transport, the establishment of targeted cooperation for the employment of graduates.

Keywords:

phenomenon, institutionalization, complex competence, combination, function, structure, method, didactic tool, effectiveness of training.

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INTRODUCTION

In order to ensure national development, each country develops an educational model that takes into account the needs of the global and domestic labor market, the products produced and their needs, scientific and technical, demographic, intellectual resources. The prospects of our national development and ensuring the well-being of the population depend on the personal and professional development of the younger generation. This, in turn, requires them to become mature professionals in any field and use their abilities (mental, physical, creative, etc.) to ensure a prosperous lifestyle in our country. From a pedagogical point of view, this requires taking into account, first of all, the content, quality and competitiveness of vocational education, the relevance of educational information and the formation of personal and professional

qualities in the labor market. From this point of view, it is important to study the requirements and needs of professors and teachers in the teaching of subjects taught in technical higher education institutions. After all, scientific and technological progress has created enormous opportunities to meet the material needs of humanity and society. This, in turn, has allowed new high technologies to provide the lives of members of society with any product, to create conditions for the rapid development of industrial services. Today, the development of science and technology shows that the process of changing the political, social, economic, spiritual and cultural spheres of the world landscape is in full swing. Therefore, it is necessary to study the educational-methodological, theoretical-methodological, scientific-

methodological aspects of teaching special subjects in technical universities.

MATERIALS AND METHODS

The development of education, science and technology is at the heart of the development of society. The creator, manager and perfecter of all this is a human being. Therefore, in ensuring the life of society, the phenomenon of perfection performs such functions as developing, unifying, mobilizing, regulating, exemplary. Among these functions, the cognitive-social functions of science are of special importance, as it is the provision of nominative, orientational and content-forming and attitudinal functions of social cognition[4.7]. Therefore, in the coverage of the topic of the article, attention was paid to its institutional basis, structural-functional aspects, retrospective features and educational-theoretical-scientific-methodological aspects, and the analysis of their cause and effect unity content.

RESULT AND DISCUSSION

Given the growing trend in the world experience to connect specific disciplines with different specialties, it is necessary to create special curricula for certain categories of disciplines, with a differential approach to their characteristics. According to the principle of transition from simple to complex, in order to ensure the continuity of the educational process, it is necessary to create special programs for each link of the education system[6.14]. Based on this demand, a number of reforms have been carried out in recent years in the education system of Uzbekistan, including the higher education system. In particular, the radical improvement of the system of training highly qualified personnel for the transport sector on the basis of advanced foreign experience and international standards, the widespread introduction of innovative forms and methods of teaching and modern pedagogical and information technologies, as well as strengthening the material technical base and scientific potential. The adoption of the Resolution of the President of the Republic of Uzbekistan dated May 4, 2020 No PP-4703 "On measures to radically improve the system of training in the transport sector" became an important institutional basis for the development of the industry. Then:

"Training, retraining and advanced training of competitive higher education specialists, scientific and pedagogical staff, as well as mass professionals, based on the needs of the transport sector;

Carrying out fundamental, applied and innovative research and studies on topical issues of development of the transport sector, the development of proposals for their results, including the widespread introduction of digital and other modern technologies;

Development of cooperation with leading foreign higher education and research institutions in order to implement joint educational programs and research projects, improve the skills of university professors and organize the study of graduates in master's and doctoral programs abroad;

creation of a continuous system of training for the transport sector, ensuring the continuity of educational programs of academic lyceums and professional educational institutions in the system;

In order to ensure that theoretical training is inextricably linked with practice in the educational process, the organization of student internships in relevant organizations together with organizations in the field of transport, the establishment of targeted cooperation on employment of graduates. Of course, the practical exercises and self-discipline skills that emerge from the student bench play an important role. We have looked at some aspects of this problem".[16.53-55, 17.73-76].

In this regard, it is advisable to ensure that the young science teacher who comes to teach from each technical specialty learns a number of psychological, pedagogical and general methodological disciplines during the internship, which will help him to carry out his professional activity as a teacher. The introduction of such programs should be aimed at the formation and improvement of pedagogical competencies in the teacher of special subjects, the improvement of his professional skills. Creating conditions for the creative potential of a young specialist should be the key. In the learning process, he should be able to demonstrate his uniqueness in research activities, choose a unique method and create opportunities for his development. [15.49-52].

The adoption of the Law "On Education" in Uzbekistan on September 23, 2020, as amended, also contributes to the development of education. In particular, Article 45 of the law states that "the development and implementation of author's programs within the curriculum, the development of teaching methods, as well as the use of relevant disciplines, courses, modules, creative activity; free choice and use of modern pedagogical forms, teaching and educational tools, methods; The legal protection of the rights of a number of pedagogical staff, such as "requiring the creation of the necessary conditions for them to carry out their

professional activities”[1], undoubtedly has a practical significance in raising the country's higher education system to a new level.

Based on a retrospective approach to the higher education system, “for a long time, the higher education system based on traditional teaching methods has trained specialists with strong theoretical training”[10.17]. However, today the requirements for graduates have changed. The conditions of a market economy and the basic demand in the labor market show that graduate students should have not only knowledge, skills and competencies but also a set of competencies. “Because competencies are complex and multidimensional in structure, it is difficult to effectively shape them within traditional education” [3.32-37]. Therefore, “in the system of vocational training, professional competence is considered as one of the main conditions for the management of the process, which forms the professional knowledge, skills, qualities of future professionals, revealing the individuality of future professionals and constant readiness for professional self-improvement”[11.134]. The competency-based approach should also be seen as a teaching method aimed at mastering key competencies that require students to be able to use tools appropriate to the evolving situation, with a universal character for the development of different types of activities[5.59-63]. A concept for the further development of higher education in Uzbekistan has been developed, which provides for “the introduction of advanced standards of higher education based on international experience, including the gradual transition from education to the formation of practical skills in education”[2] In this regard, in the context of modernization of the higher education system, it is important to further improve the mechanism of training specialists working in the field of transport, to introduce them to the labor market as qualified personnel through the effective use of modern pedagogical methods and technologies.

This, in turn, imposes the following requirements on professors and teachers of specialty subjects:

- be able to organize distance learning courses, work with information and communication technologies and multimedia;

- to have a positive attitude towards students during the training, to have a certain psychological stability and to be able to work with them;

- to work effectively during training;

- develop a clear schedule of classes and all types of tasks in accordance with the curriculum,

- require prior knowledge and completion of the necessary components;

- readiness to actively exchange data with students using information and communication technologies;

- actively encourage students to complete assignments;

- provide students with information about control tasks and their results;

- the content of the subject being taught changes frequently, and the willingness to deliver new content to students[7.41-42].

In this regard, the researcher, O.F. Piralova points out the need to pay attention to the following aspects as criteria for optimizing the teaching of professional subjects in technical and transport universities:

- the effectiveness of training in professional disciplines as a result of the successful application of the acquired professional and qualifications, as well as personal competencies in production;

- as the quality of vocational education, the degree to which learning outcomes meet educational standards and the requirements of employers;

- the level of psychological comfort of teaching professional subjects as a result of taking into account modern teaching and production conditions[9.44].

The main goal of optimization is to form a qualified specialist who is as close as possible to modern industrial production standards. Achieving this goal and implementing the proposed system of criteria is possible in the formation of a competency model of the graduate based on the subjective-functional training and personal qualities of the subject of future professional activity.

Another important condition for increasing the effectiveness of the learning process is to determine the optimal combinations of these different teaching methods. In this case, it is advisable to use visual aids, depending on the nature of the acquired knowledge, the imagination, understanding, life and work experience of students, the specific objectives of the course. They can serve as a source of knowledge, as well as a picture that the teacher uses during narration, explanation, conversation. Often, these two tasks can come in a complex way. The use of instruction in the teaching of general subjects has certain features in relation to the teaching of general subjects. These features are related to the specific features of the content of general education sciences and the methodology of their study[8.35]. If the trainer helps to better master the guiding principle,

the main idea in the study of general sciences, in the study of technical sciences, the concrete structure of the object, the scheme of work, the interaction of details and mechanisms come first. A special role in the study of specialty sciences is played by the study of the origin of machines, tools, devices, etc., as well as the opportunity for students to disassemble and assemble them. Didactic tools used in the study of general sciences can be divided into conventional (natural) and pictorial manuals[12.42].

Original instruction manuals can be used, for example, handles, cutters, control and measuring instruments, samples of materials and items, instruments, parts, mechanisms, transport and equipment assemblies that can be found or can be stored in cabinets and laboratories for display and exercise. Equipment (lathes, devices, apparatus, etc.) can be used unprepared or in working condition. In order to increase the level of visibility, the original objects used as instruction manuals are often specially prepared or processed: cuts are made, some details are painted in a special color, observation windows are opened in casings, lids, housings, interior cavities are illuminated, most characteristic places (lubrication, inspection) in places of forgiveness) signal-lights are installed, enclosures, covers, protective barriers, etc. are removed. The miniature is also used as a guide for collecting original items of the same type in boxes or special stands as a collection and showing them to the student or handing them out[8.34].

The fact that an object, event, and process are actually tracked is ideal from a pedagogical point of view. But only some of what needs to be learned can and should be used in the lesson. Therefore, visual aids are widely used in the learning process. They are used in the following cases:

- when the origin of the object under study is too large or too small (wagon and open-hearth furnaces, clockwork, etc.);
- when it is impossible to see the origin of the object or event (electric current, the structure of molecules, crystal lattices, etc.);
- when it is not possible to directly observe the nature of the object or event under study (the internal structure of the equipment, the processes that take place in chemical apparatus, furnaces, etc.);
- when a graphical representation of the concept is required (characteristics of the engine, transmissions, cyclogram, etc.);
- when it is necessary to simplify or demonstrate the principle of operation of complex

objects (device diagrams, kinematic diagrams of machines, schematic electrical diagrams, etc.);

- when it is necessary to record and indicate the location of the mechanism or machine parts at the most characteristic moment of movement (end points of internal combustion engine crankshaft and distribution mechanisms, position of arms, legs and torso at different points of movement during drilling, etc.).

Due to the use of technical means of teaching, the methods of organizing and directing students' learning activities change in the course of the learning process. The teacher's opinion is not the only source of information, although it is of great importance in the learning process[13.21]. Therefore, the use of visual aids is one of the important factors in strengthening student knowledge.

CONCLUSION

Based on the above considerations, in teaching psychology in technical universities, from a psychological point of view, it is advisable for professors to pay attention to the following tasks during lectures, seminars, laboratories or practical training:

1. To teach to follow the norms and principles that must be followed in the system of social relations during the teaching of the specialty;
2. Facilitate the formation of the image of "I-specialist" and a model of the specialist model by teaching in a specific specialty and justifying how and where to use it in life;
3. To teach students to express their views on the universe and man as a whole, a system of ideas, the relationship of cause and effect of various processes in real life, taking into account the "charm of colors";
4. Improving professional competence by teaching each student the balance between ability and interest in the teaching of the specialty, and influencing them in the form of "What will you achieve in the future by mastering this profession?";
5. During teaching, professors and teachers should give instructions to the student on the basis of educational purpose. In this case, the socio-psychological process, while seemingly simple, is in fact complex and multi-layered. This in turn

means that professors do not apply invectivism to students*;

6. It is of significant importance teaching students goal setting and helping them identify the best ways to achieve it. To do this, in the educational process, professors must teach the student to form a goal. At the same time, they should say that the goal does not have a big "appearance" at once, and justify that the goal is different from the dream, the imagination. It is expedient to teach on the basis of real-life examples that "small" goals come together and form a single goal.

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* Invektiva (lat. Invektio (oratio) - special speech) - a strong thought, provocative speech, hysteria, directed against this or that person.