



## FORMATION OF EDUCATIONAL CONTENT SUITABLE FOR MODELING THE TRAINING OF FUTURE SPECIALISTS ON THE BASIS OF DIGITAL TECHNOLOGIES

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*Annotation:* The article discusses the issue of improving the training of  
future power engineers based on digital technologies based on the modeling  
method.

*This article can be used by those who are dealing with the problem of  
improving the qualifications of future specialists.*

**Keywords:** digital technologies; training; professional activity; modeling;  
educational content; formation; innovative; staff; intellectual; education;  
system; questions; specialists; innovatively developed; directions; model;  
process; Events; software and didactic complex; pedagogical software;  
interactive; communication; interface; interactive work programs; methodical;  
supply.

**Anmerkung:** Der Artikel diskutiert die Verbesserung der Ausbildung  
zukünftiger Energietechniker auf Basis digitaler Technologien auf Basis der  
Modellierungsmethode. Dieser Artikel kann von denen verwendet werden, die  
sich mit dem Problem der Verbesserung der Qualifikation zukünftiger  
Fachkräfte beschäftigen.

**Schlüsselwörter:** digitale Technologien; Ausbildung; Professionelle  
Aktivität; Modellieren; Bildungsinhalte; Formation; innovativ; Mitarbeiter;  
intellektuell; Ausbildung; System; Fragen; Spezialisten; innovativ  
entwickelt; Richtungen; Modell; Prozess; Veranstaltungen; Software und  
didaktischer Komplex; pädagogische Software; interaktiv; Kommunikation;  
Schnittstelle; interaktive Arbeitsprogramme; methodisch; liefern.



The persistence of the dynamics of society and state development in the first century of the third millennium is directly related to the informatization of society. On the basis of them, a creative environment for the socialization of society is also emerging. That is why the training of specialists working in such a creative environment is now considered one of the pressing problems.

Currently, specialists with potential, innovative development are very much needed in various aspects of life. The solution of such an important task is one of the important issues facing the system of continuing education. To do this, it is necessary to further improve the training of future specialists on the basis of modern requirements.

In this article, it is also stated that the issue of modeling the process of improving the preparation of Future Energy Engineers for professional activity on the basis of digital technologies and the formation of educational content corresponding to it will be solved.

The results of our research and observations in this area show that the use of modeling techniques in the preparation of potential energy engineers for professional activities creates wide opportunities for obtaining optimal options for the preparation of future specialists for professional activities [1-5].

Based on the study of scientific, scientific and methodological literature on the modeling of education and achievements in this direction, we found that on the basis of digital technologies, it is worthwhile to use the method of modeling in solving the problem of improving the software and methodological support in the preparation of Future Energy Engineers for professional activities. For this purpose, four stages on the preparation of Future Energy Engineers for professional activities, the setting of the problem and the research strategy were taken as the basis. They formed the main components of the



model, which should be prepared, and also the auxiliary components were formed on them. They consist of:

- didactic support of preparation of future specialists for professional activities;
- interactive training complexes;
- algorithmic stages of training performance;
- interactive communication interface;
- didactic possibilities of pedagogical software tools;
- a set of pedagogical software tools;
- applications package;
- complex of working programs with communication;
- innovation software-Didaktik majmua;
- software-methodical maintenance for mass use.

These mentioned components are inextricably linked with each other, and the preparation of Future Energy Engineers for professional activity itself was considered to be a dynamic system. This is the ultimately achieved results of the system and by identifying and evaluating them the pedagogical efficiency is assessed. If they are positive, the research will be summarized and a suitable recommendation will be formulated to it, if the effectiveness is not positive, the research strategy will be consulted.

Taking into account the modeling of the improvement of the software-methodological provision of preparation of Future Energy Engineers for professional activities, we developed the organizational-structural model of improvement of the software-methodological provision of preparation of future specialists for professional activities in twenty-five components.

The organizational and structural model of the preparation of Future Energy Engineers for professional activities constitutes the methodological



basis for optimizing the conduct of research work in this area and it will be possible to solve the problem posed on their basis on a scientific basis, and on them it will be possible to express the following conclusions:

- the process of professional training of potential energy engineers can be viewed as a holistic dynamic system;
- systematic step-by-step implementation of improvement of software and methodological provision of preparation of potential energy engineers for professional activities can be carried out;
- there are full organizational and pedagogical opportunities for improvement of software and methodological support in the preparation of Future Energy Engineers for professional activities;
- innovation software-Didaktik majmua and innovation-through the training of integrated education, the possibilities of optimizing the preparation of Future Energy Engineers for professional activities will be further developed and so on.

So, it is possible to achieve the preparation of modern competitive future energy engineers by teaching on the basis of the above.

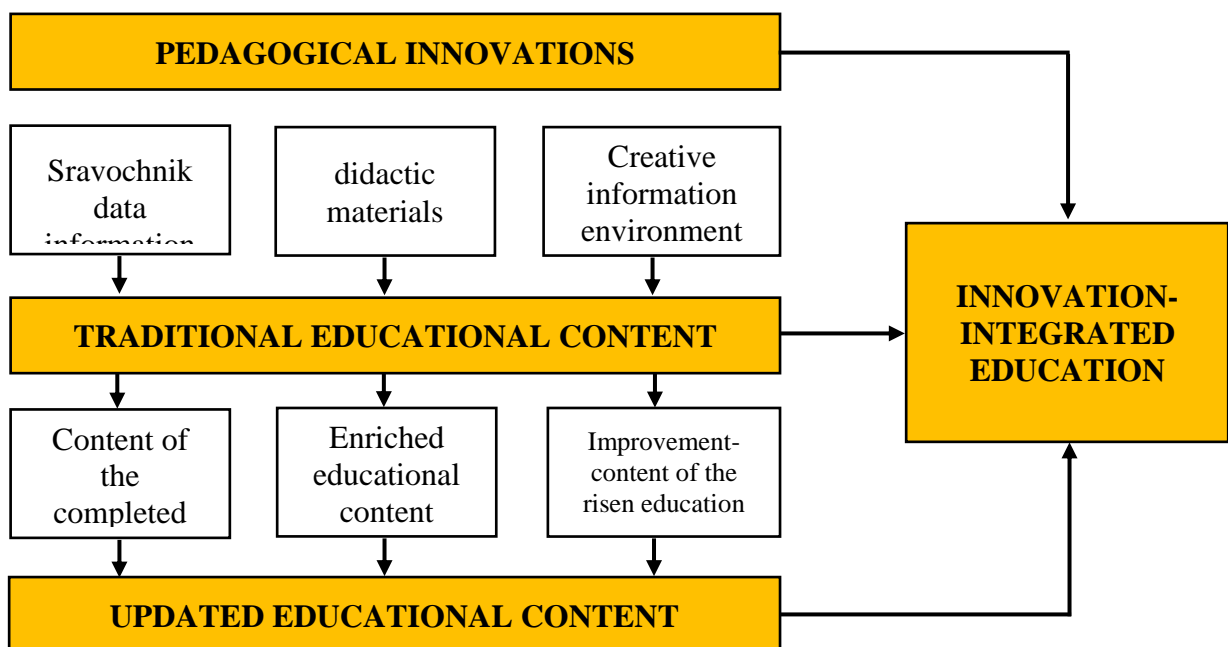
Now it will be correct to think about the formation of updated educational content on the organizational and structural model developed in the next part of our research on the preparation of Future Energy Engineers for professional activity.

In this research work, too, it was necessary to form an updated educational content. This is due to the fact that, **firstly**, the training of future energy engineers is based on digital technologies, **secondly**, on the basis of improving software and methodological issues, training of future energy engineers for intellectual professionalism is considered, and **thirdly**, the traditional content of education **fourthly**, the content of traditional education will be enriched on the basis of didactic materials, and **fifthly**, the content of



traditional education will be further improved through the use of creative information.

Taking note of this, and relying on our experience in this regard, we found it worthwhile to prepare the updated educational content in the preparation of Future Energy Engineers for professional activities as shown in *Figure 1*. we will continue to focus on the current state of the environment. In such a solution to the formation of the content of education, the content of education is constantly changing, taking into account the modern requirements, there will be an opportunity to update, and it will be possible to prepare them even in variants when it is necessary.



1-picture. Organizational structure of the formation of updated educational content in the preparation of Future Energy Engineers for professional activities.



The importance of the educational content, which is being updated on the basis of the proposed traditional educational content, is that it provides broad opportunities to take into account the achievements of Science and technology related to the preparation of Future Energy Engineers for professional activity, as well as the creative information related to this direction, and on their basis to systematize the In addition, wide opportunities are created for the selection of pedagogical innovations, taking into account the training of the updated educational content. This guarantees the acquisition of the optimal option of organizing innovation-integrated education in the preparation of potential energy engineers for professional activities. The technology of formation of the updated educational content has a positive impact, from which it can be freely used in the processes of improving the quality of education and optimizing the training of future specialists.

Therefore, it is necessary to develop innovative methods in the provision of education and training on the content of such a formed education or in the preparation of future specialists for professional activity. Without it, it is impossible to improve the preparation of Future Energy Engineers for professional activity.

Based on our research in this area, we call such a methodology a **programmed integrative methodology**. This is due to the fact that the developed innovative methodology covers all four stages of professional training of future energy engineers, in which the process of integration with programming is in constant focus.

In this part of the development of the methodology considered, it is necessary to always pay attention to the following components of programming and methodologies: pedagogical software tools and their didactic possibilities; package of applications; complex of working programs with communication; innovative software-didactic programs and the like;



These are very important in transferring the developed innovation methodology to its practical use. On the basis of them, the ultimate result of the study will be determined and evaluated.

In the place of the conclusion on this study, it can be noted that the solution to the problem of improving the software and methodological provision of training of potential energy engineers for professional activities **guarantees educational advantages** as follows:

- interactive educational technologies and didactic opportunities for programmed education will be created for the process of professional training of potential energy engineers;

- it will be possible to improve the preparation of Future Energy Engineers for professional activities on the basis of specialized training systems and tools;

- it will be possible to prepare future energy engineers for professional activities using innovative and integrated education and digital technologies;

- in the preparation of potential energy engineers for professional activities, wide opportunities are created for the use of vocational computer simulators, specialized training systems;

- broad opportunities will be created for the use of computer modeling, a complex of communicative working programs, a package of practical applications, etc. in the improvement of professional training of potential energy engineers or innovation.

It will be possible to formulate recommendations in the next part of our research as follows, taking into account the fact that these are recorded and that the organizational and structural model is in the methodological character:

- on the basis of digital technologies, the methodology for the development of software and methodological support for the preparation of



Future Energy Engineers for professional activities can be used in the training of specialists in a different direction;

- the use of software and methodological support for the preparation of Future Energy Engineers for professional activities on the basis of digital technologies in the development of innovative technologies related to professional activity gives positive pedagogical results;

- on the basis of digital technologies, the system of determining and assessing the effectiveness of the preparation of Future Energy Engineers for professional activities can be used as a regulator in the management of the process of preparation of future specialists for professional activities.

### **LIST OF USED LITERATURE**

1. Turakulov O.The X., Eshonkulov B.S. Scientific-methodological justification of the preparatory stage for the preparation of Future Energy Engineers for professional activity // innovative approaches-as the key to the development of Science: the collection of materials of the Republican scientific and technical conference on the topic of solutions and prospects. - Jizzex, 2020. - What? 276-281.
2. Turakulov O.The X., Eshonkulov B.S. Algorithmic stages of preparation of Future Energy Engineers for professional activity // reforms in the system of Professional Education: innovative ideas in the educational type of improvement of qualifications: materials of the international scientific-practical conference. - What?, 2020. - What? 392-395.
3. Turakulov O.The X., Eshonkulov B.S. Development of scientific and methodological provision of preparation of future energy for professional activity on the basis of digital technologies // conference on Science and education in Uzbekistan. - Fergana, 2020. - B 121-125.





4. O Turaqulov. The X. Scientific and methodological support of training of junior specialists in an informed educational environment. Monographs.- What?: O'MKHTTKMO and OKTI, 2010, 156 B.
5. Turakulov O. The X., Savurbaev A., Eshonkulov B.S. Territory raspredelyannaya informasionno-obrazovatel'naya SREDA I Method otsenki Eyo elektronno-obrazovatel'noy resourse bazi // Sbornik nauchnix statey po itogam raboti Mejdunarodnogo nauchnogo forum "nauka i innovasii-sovremennie konsepsii". - Full 4. - G.Moscow, 2019. - Fuck you. 124-132.