EJHEAA

ISSN : 3032-112

https://doi.org/10.61796/ejheaa.v1i9.898

PROFESSIONAL CULTURE OF TEACHERS OF HIGHER EDUCATION IN THE CONDITIONS OF INFORMATION

Aslanov Yorqinbek
Independent researcher of Bukhara Institute of Engineering Technology
Email: aslonovyorqinbek9494@gmail.com
Phone: +998 90 168 83 36

Received: Jul 22, 2024; Accepted: Aug 29, 2024; Published: Sep 06, 2024;

Abstract: This is it in the article information conditions higher education of teachers professional culture development according to and information conditions of students information communication in technologies use degrees increase about word held.

Keywords: High education, professional culture, information, technology, competence.

Introduction

The informatization of higher education, including engineering-technological education, began in the 70s of the last century. In that period, the first scientific and methodical studies were conducted on the problem of information systems of higher engineering education. The scientific and practical researches of that period were mainly focused on non-automated teaching systems based on standard software and methodological tools, as well as on the practical use of electronic computers in the training of future engineers and scientific and technical personnel.

The beginning of large-scale informatization of education is considered to be in 1985, and in accordance with the educational reform consensus, the subject "Information basics and computer technologies" was included in higher education institutions. On the basis of these reforms, in 1988, A.R. Ershov developed a training course on "Fundamentals of Informatics and Computing Techniques".

In addition to the inclusion of the subject "Informatics and computer technology basics" in the programs of higher education institutions, the process of improving the qualifications and training of professors-teachers in all specialties has been started.

The analysis of information sciences made it possible to identify basic informational content presented in the form of topics and sections (algorithmization of calculations, modeling and planning of technological processes), which can be implemented together in the teaching process (Table 1).

1.-j a dval

High education of the institution oh shit structure

No	Automated educational system	A set of numerical methods and programs
1	Data storage and transmission in the network	Information analysis system through the automation of constructions
2	Carrying out engineering calculations	Computational mathematics
3	Database processing	Analysis of mathematical expressions
4	Data information-search system	Automating parts and machines in a router
5	Displaying information	Theory of automatic control by means of computer technologies
6	Mathematical modeling	Automation of technological processes in the programming language
7	Automated louihing systems	Algorithmic support in the SAD complex
8	Analysis of information flow	Practical algorithm support in the SAM complex
9	Automating the construction of objects	System software in the SAD complex
10	Assessment of information flow	Application software in the SAM complex

On the basis of this fundamental information, it is possible to create a practical educational and informational environment necessary for the implementation of computer calculations, mathematical modeling and automation of the design of technological processes in teaching the basics of mechanical engineering technology. Therefore, as an option for training future engineers, it is possible to consider a hierarchical education model based on a learning and information environment, in which the content of subjects from different eras includes computer-oriented computing content (Fig. 1).

Methods

The method used in the statement above is the interactive teaching method applied to teaching Uzbek literature in higher education. This approach emphasizes active participation and dialogue between students and the teacher, ensuring that students are engaged as equal participants in the learning process. Interactive methods such as problem analysis, role-playing, and group discussions encourage independent thinking, collaboration, and practical application of knowledge. The method is particularly effective in literature classes where the analysis of complex texts, such as novels by authors like O'tkir Hashimov, requires students to explore themes, character development, and problem-solving skills through active participation. By integrating

such methods, the teaching process becomes more dynamic, allowing students to develop deeper understanding, critical thinking, and engagement with the material.

Result and Discussion

Engineering education ax borotl a push present case a ti seeing The following conclusions were reached:

1. State educational standards of higher education and requirements for students of "Mechanization of agriculture, water management and reclamation works" are analyzed. In accordance with the requirements for modern engineers, an analysis was made of the training of students of higher education institutions to carry out activities: design and production, production and technological, organization and management, as well as research. This shows that the requirements set by the State Standard of Higher Education Institutions contradict the already established structure of the educational process in technical Higher Education Institutions and require informationalization of the educational process in a number of general professional subjects;

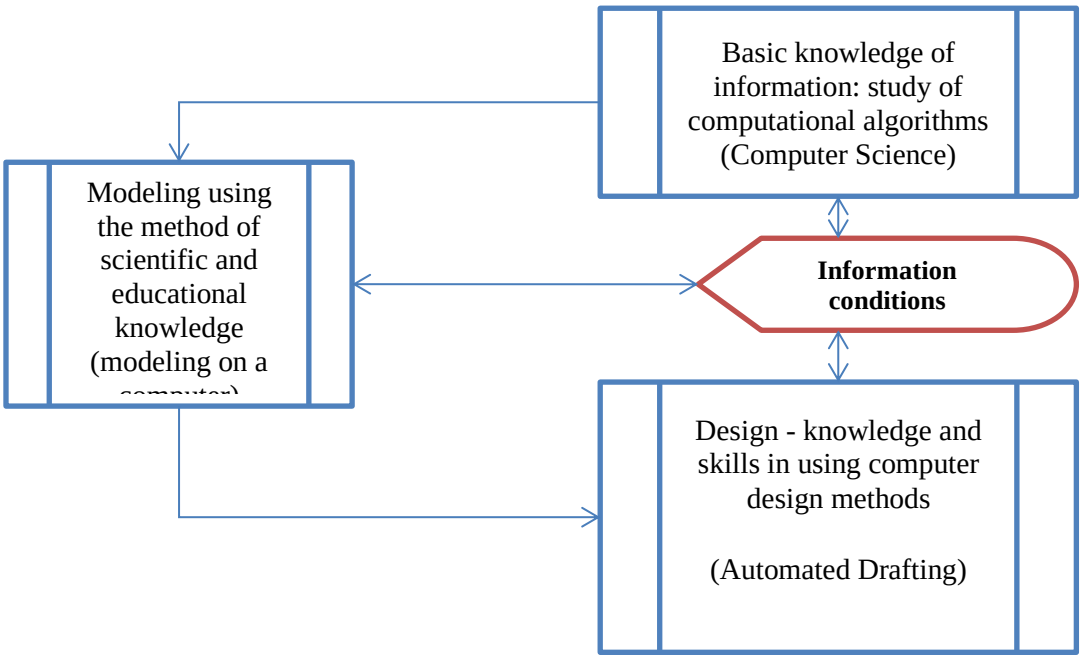

Figure 1. Meaningful directions to the router

2. The results of the analysis were as follows: the teachers did not know the interdisciplinarity of the educational material of the course of the higher education institution; if the basic algorithmic, modeling and planning and technological knowledge and skills obtained from the sciences of information technology are not effectively applied in other disciplines, including the course of a higher education institution, as a result, the competence of information technologies is not fully formed in the graduate; the lack of educational and informational environment does not allow students to use the results of algorithmic calculations, research models, technological projects in the process of teaching in higher education institutions in performing complex tasks ; There are practically no teaching-methodical sets with a professional content;

4. The basic information sciences of the curriculum for training the students of "Mechanization of agriculture, mechanization of water management and melioration works" for professional activity were analyzed. principles of structure formation should be based.

The availability of information is considered from the point of view of the information process of the selection of thematic information in the field of engineering. Dissemination of information is considered as the transfer and storage of information related to the collection and transformation

of information. The functioning of information in the information educational environment is considered in terms of its use in solving engineering problems and making decisions.

Each of these procedures, in turn, is divided into several procedures. Therefore, the process of information gathering consists of their search and selection procedures. In turn, information search is carried out as a result of registration and measurement procedures. Search methods include such procedures as formation of a "search image" (in precise or vague form), matching and comparing input data with the search image. The selection of information is carried out on the basis of its semantic analysis and evaluation of its features.

Information storage is an intermediate step between storing information and changing it. On the one hand, if it is stored in this form, the information can be considered selected, on the other hand, the process of storing information itself could not be carried out without the procedures of abstraction, coding, formalization, structure, updating.

After receiving the information, a decision is made and the student begins to implement it, as a rule, his task is fulfilled, and as a result, his need for information is fulfilled.

Therefore, in the conditions of informatization in higher education institutions, in the development of the professional culture of teachers, it is necessary first of all to develop the content of teaching, that is, to introduce additions to the qualification requirements of teacher training courses and science programs, and on this basis, information-didactic improvement of supply is envisaged.

Conclusion

The informatization of engineering-technological education, as evidenced by historical trends and current practices, has significantly evolved since the 1970s, culminating in the integration of computer-based methodologies and information systems into the curriculum. The analysis highlights the gap between traditional educational structures and the current demands for interdisciplinary knowledge and practical applications in engineering fields such as "Mechanization of Agriculture and Water Management." The findings underscore the need for the development of an educational and informational environment that effectively integrates algorithmic, modeling, and technological processes across various disciplines. This shift is essential for enhancing students' competencies in handling complex engineering tasks. The implications suggest that higher education institutions should revise their curricula to include more robust information technology training and resources, aligned with industry needs. Further research is needed to explore the development of comprehensive, interdisciplinary teaching-methodical sets that can support professional learning and innovation in technical education.

References

[1]. B. B. Turakulova, "Innovative Technologies in the Process of Higher Education," in Design, Technologies, and Innovations in Textile and Light Industry (INNOVATIONS-2022): Proceedings of the International Scientific and Technical Conference, Part 1, Moscow: FGBOU VO "RSU," 2022, p. 154.

[2]. F. Zakirova, Methodology of Using Electronic Educational-Methodical Complexes and Educational Resources, Methodical Guide, Tashkent: OO'MTV, 2010, 55 p.

[3]. O. A. Kuysinov, Technologies for the Development of Professional-Pedagogical Creativity of Future Teachers on the Basis of Competitive Communication: DSs Dissertation, Tashkent: TDRU, 2019.

[4]. B. B. Torakulova, "Education Efficiency in Improvement Professional Flexibility Skills Formation Content," Universal Journal of Academic and Multidisciplinary Research, vol. 2, no. 10, pp. 28-36, 2024.