THE ROLE AND IMPORTANCE OF TURKISH SCIENCES IN THE PREPARATION OF FUTURE TECHNOLOGY EDUCATION TEACHERS

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Annotation: This article analyzes the role and significance of subject groups in the training of technology education teachers. It discusses the integration of pedagogy, technical sciences, information technologies, and applied sciences to enhance the professional preparation of future teachers.

Keywords: Technology education, teacher training, subject clusters, innovative teaching, professional competencies.

Introduction.

The role of technology education in the modern educational process is increasingly increasing. The emergence of new professions as a result of the development of science and technology, the automation of production processes and the widespread use of digital technologies are increasing the requirements for technology education teachers. It is important for future teachers not only to have excellent knowledge in their specialty, but also to master modern innovative technologies and be able to effectively use them in the educational process. From this point of view, the role of the science subjects in the training of future technology education teachers is incomparable. These subjects play an important role in the formation of pedagogical preparation, technical knowledge and practical skills. Because technology education is characterized by the fact that it is aimed not only at imparting theoretical knowledge, but also at developing the practical skills of students. Therefore, a technology education teacher must have in-depth knowledge of various technical and engineering fields, be able to use innovative methods, and teach students to think independently and creatively. Through the disciplines, teachers are given skills such as forming technical thinking, teaching the basics of engineering, explaining production processes, and using modern information technologies. In today's globalized world, any production or service sector is unimaginable without advanced technologies. Therefore, improving the quality of technology education not only improves students' knowledge, but also has a direct positive impact on the development of society. One of the important factors in improving the quality of education is interdisciplinary integration, and technology education has wide opportunities in this regard. For example, technology education becomes more effective and productive when combined with disciplines such as physics, mathematics, and computer science. This approach allows students to apply theoretical knowledge to solve real-life problems. This article analyzes the role and importance of the subject group in the process of training future teachers of technology education. It also considers issues such as the content of the subject group, their impact on the educational process, and their integration with modern methods and innovative technologies. Based on the results of the research, important recommendations are given to improve the quality and effectiveness of technology education.

MAIN PART: The role of technology education in the modern education system Technology education plays an important role in the modern education process. Because technology education provides students with not only theoretical knowledge, but also practical skills. The role of the disciplines aimed at improving the professional competencies of teachers in this area is invaluable. Technology education also provides students with the opportunity to develop creative and critical thinking, preparing them for the future labor market.

- The role of disciplines in teacher training The disciplines play a key role in the professional training of future technology education teachers. They are divided into the following areas:

• Basic disciplines - basic disciplines such as physics, mathematics, chemistry and computer science serve to form the scientific foundations of technology education.

• Special disciplines - provide in-depth knowledge of technical drawing, mechanics, electronics, programming basics and production technologies.

• Pedagogical disciplines - through disciplines such as educational theory and methodology, pedagogical psychology, didactics, teachers acquire knowledge and skills for the effective organization of the educational process.

• Applied sciences – provide students with the opportunity to learn technological processes in real conditions through laboratory work, production practice, and technical design exercises.

-Professional competencies of technology education teachers Future technology education teachers should have the following competencies:

• Technical knowledge and skills – understanding and applying modern technologies.

• Innovative pedagogy – using modern teaching methods, including the STEAM approach.

• Information and communication technology (ICT) literacy – effective use of digital technologies in the educational process.

• The ability to conduct applied research – working on scientific research and technical design.

• Creative approach and critical thinking – developing new pedagogical methods and solving technological problems.

-Modern approaches to teaching family subjects Innovative approaches are of great importance in the training of technology education teachers. The following modern methods increase the effectiveness of teaching science subjects:

• Project-Based Learning (PBL) - allows students to gain practical experience.

• Problem-based learning - forms the ability to solve technical and engineering problems.

• Digital technologies and virtual laboratories - teach students to work with advanced technologies.

• Interdisciplinary integration - as a result of teaching technology subjects in conjunction with other subjects, the effectiveness of education increases.

Conclusion

Science subjects play an important role in the training of technology education teachers. They combine pedagogical, technical and scientific training and serve to train highly qualified specialists. The use of modern methods and technologies helps to form the future generation

as competitive specialists. Therefore, further improving the process of teaching science subjects and using innovative approaches in technology education is one of the urgent issues. Also, the combination of practice and theory is important in the process of training teachers in technology education. As a result of the continuous development of the education system and its integration with technological innovations, the professional skills of teachers increase. Research in this area, the improvement of educational programs, and the introduction of advanced pedagogical technologies will further improve the quality of technology education in the future. Thus, providing quality education through the disciplines will help improve not only individual specialists, but also the education system as a whole.

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