

METHODS FOR THE DEVELOPMENT OF PROFESSIONAL SKILLS OF COMPUTER SCIENCE TEACHERS IN THE MODERN DIGITAL ENVIRONMENT

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Abstract

The rapid development of information and Communication Technologies is bringing about fundamental changes in the educational system. Especially in the field of teaching informatics, the importance of the digital environment is growing. The modern digital environment allows teachers to use new pedagogical approaches, interactive lessons, online resources, and various innovative tools. Therefore, it is very important to constantly develop the professional skills of Informatics teachers, to deeply introduce them to digital technologies and adapt them to modern requirements.

Keywords: Modern technologies, Informatics, professional skills, knowledge, skills, education, abilities, online platforms.

Introduction

Professional skill is a set of knowledge, skills and competencies of a teacher's own profession, which serves to effectively organize the educational process, develop the abilities of students and increase the level of knowledge. The digital environment, on the other hand, provides teachers with new opportunities, provides them with modern educational tools and makes the pedagogical process more interactive. Therefore, it is necessary to study and implement methods of effective use of digital technologies in the development of professional skills of computer science teachers. One of the most basic ways to develop professional skills is through advanced training courses and workshops. These activities allow teachers to get acquainted with new programming languages, pedagogical technologies, educational platforms and digital tools. The process of professional development should be continuous and systematic, since technologies are developing rapidly, and teachers are obliged to regularly acquire new knowledge. In seminars and trainings, teachers exchange experiences, learn new techniques and discuss how they can be applied in the course of the lesson. This gives a great impetus to their professional growth. Online educational resources have become an important tool in the development of professional skills of Informatics teachers in recent years. Free and paid platforms, video cards, Webinars, E-Books and interactive tests available on the internet allow



teachers to independently improve their knowledge. The biggest advantage of online learning is that the teacher sets his own time and can receive education from anywhere. This is especially convenient for teachers living in remote areas. Online platforms also provide opportunities to interact, ask questions, and discuss issues.[1]

Joining Professional communities is important in improving the professional skills of Informatics teachers. Such communities allow teachers to quickly learn about new pedagogical approaches, innovative technologies and emerging innovations in education. Through forums, social networks and dedicated platforms, teachers exchange experiences, consult to solve problems, and together develop new techniques. This greatly contributes to their professional development and makes the educational process more efficient. The methods of Project Education are of practical importance in the development of professional skills of Informatics teachers. This method develops students ' independent thinking, creativity, and problem-solving skills. And the teacher organizes projects with the help of modern technologies, manages and stimulates the activities of students. Project Education serves to increase the teacher's methodological and technical knowledge, as it requires the use of new programs, platforms and pedagogical approaches. This in turn leads to an improvement in the quality of Education.[2]

Improving the skills of working with digital technologies is also one of the important aspects of developing the professional skills of computer science teachers. These skills not only include programming, but also cover the management of the educational process, the preparation of spreadsheets and presentations, the use of online assessment systems. A modern teacher should effectively use various tools to make their lessons interactive and fun. Therefore, it is necessary to organize constant training for teachers to learn modern software and technology. The establishment of innovative laboratories is an important opportunity to improve the professional skills of computer science teachers in educational institutions. In such laboratories, teachers will have the opportunity to test new technologies, conduct practical classes and consolidate their knowledge. Innovative laboratories allow teachers to apply modern pedagogical approaches, learn to use new programs and hardware. This serves to improve the quality of education and improve students ' level of knowledge.[3]

It is important to create and develop a system of support for the professional development of teachers by the state. Under this system, grants, scholarships, certification and incentive mechanisms should be introduced. Such measures encourage teachers to work on themselves, master new technologies and improve the quality of Education. Public policy should serve to actively involve teachers in the process of professional development. Psychological training of teachers is also of great importance in the development of professional skills. Working in a digital environment can generate many new demands and stresses. Therefore, it is necessary to provide teachers with stress management, efficient time sharing, teamwork and communication skills. These skills increase teachers ' performance and help them adapt to new conditions. Psychological training serves to develop teachers ' self-management skills. It is also necessary to apply innovative approaches to introducing teachers to modern pedagogical technologies. For example, virtual and augmented reality technologies, artificial intelligence-based



educational tools, interactive curricula, and other advanced technologies can be integrated into the educational process. These techniques contribute to the professional competence of teachers and promote students' interest in the educational process. In addition, it is also important to introduce teachers to international experience. Through international conferences, seminars, online platforms, teachers can learn pedagogical approaches, technologies and techniques from different parts of the world. This greatly affects their professional development and serves to improve the quality of Education.[4]

In the process of developing professional skills, it is necessary to encourage teachers to self-development. Working on oneself, learning and practicing new knowledge is one of the main factors in the professional growth of the teacher. To this end, it is necessary to create systems that encourage teachers to constantly update their knowledge, test new technologies and improve pedagogical approaches.[5]

CONCLUSION

In conclusion, the development of professional skills of computer science teachers in a modern digital environment requires a multifaceted and systematic approach. Techniques such as advanced training courses, online education resources, professional Communities, Project training techniques, innovation labs, government support, and psychological training should be used together. This serves to increase the knowledge and skills of teachers at the level of modern requirements, to improve the quality of Education. As a result, the younger generation will firmly get acquainted with digital technologies, acquire modern knowledge and make a worthy contribution to the digital development of our country. At the same time, the constant development of professional skills of teachers is an important factor for ensuring the stability of the educational system, introducing innovations and growing ready-made personnel for the digital economy. In the modern digital environment, teachers' passion for their profession, openness to news and commitment to improving their skills serve to increase the quality of education and make the future of the younger generation brighter. Therefore, it is necessary for educational politicians, heads of educational institutions and teachers to constantly focus on the development of professional skills in cooperation with each other.

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