

DEVELOPMENT OF TEACHING METHODOLOGY FOR GENERAL SECONDARY SCHOOL TEACHERS BASED ON VIRTUAL TECHNOLOGIES

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Abstract

This article covers the development of teaching methodology for general secondary school teachers based on virtual technologies. The influence of virtual technologies on the educational process, the need to improve the digital competence of teachers, and the introduction of modern teaching methods are analyzed. Ways to increase the effectiveness of using virtual platforms and electronic resources in pedagogical activity will also be considered. The article presents scientific reflections on the advantages, challenges, and development prospects of the teaching methodology based on virtual technologies. Based on the research results, recommendations are given for teachers to master modern educational technologies.

Keywords: Virtual technologies, teaching methodology, general secondary education, digital competence, electronic resources, pedagogical activity.

Introduction

UMUMIY O‘RTA TA’LIM MAKTABI O‘QITUVCHILARINI VIRTUAL TEKNOLOGIYALAR ASOSIDA O‘QITISH METODIKASINI RIVOJLANTIRISH

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Annotatsiya:

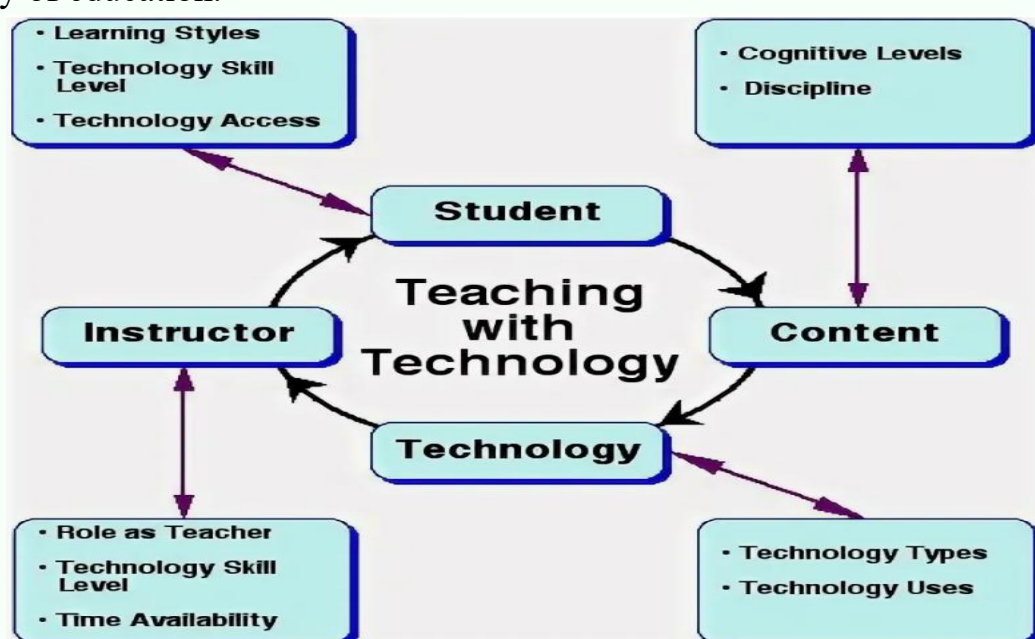
Ushbu maqolada umumiy o‘rta ta’lim maktabi o‘qituvchilarini virtual texnologiyalar asosida o‘qitish metodikasini rivojlantirish masalalari yoritiladi.

Virtual texnologiyalarning ta'lim jarayoniga ta'siri, o'qituvchilarning raqamli kompetensiyasini oshirish zaruriyati va zamonaviy ta'lim metodlarining joriy etilishi tahlil qilinadi. Shuningdek, pedagogik faoliyatda virtual platformalar va elektron resurslardan foydalanish samaradorligini oshirish yo'llari ko'rib chiqiladi. Maqolada virtual texnologiyalar asosidagi o'qitish metodikasining afzalliklari, qiyinchiliklari va rivojlantirish istiqbollari haqida ilmiy mulohazalar bildirilgan. Tadqiqot natijalari asosida o'qituvchilarning zamonaviy ta'lim texnologiyalarini o'zlashtirishlari uchun tavsiyalar berilgan.

Kalit so'zlar: virtual texnologiyalar, o'qitish metodikasi, umumiy o'rta ta'lim, raqamli kompetensiya, elektron resurslar, pedagogik faoliyat

Introduction

The rapid development of modern information and communication technologies is also having a significant impact on the general secondary education system. Virtual technologies are increasingly being used to improve the quality of the educational process, ensure its convenience, and stimulate students' interest in learning. Today, teachers are required not only to know traditional teaching methods, but also to have the skills to effectively use digital tools. Teaching using virtual technologies expands teachers' knowledge, increases their pedagogical skills, and improves the quality of education.





Teaching methods based on virtual technologies allow teachers to organize lessons in innovative ways, deliver educational materials in an interactive form, and also use distance learning opportunities. This methodology plays an important role in developing students' independent thinking, encouraging them to research, and forming independent learning skills. Therefore, the mastery of teaching methods based on virtual technologies by teachers remains an urgent issue.

In the process of changes taking place in the education system and the introduction of innovative technologies, the need to improve the skills of teachers and adapt them to modern technologies is increasing. In this regard, the effective use of virtual platforms, e-learning programs, online courses and digital resources is emerging as an important factor in increasing the professional potential of teachers. In particular, the widespread popularity of distance learning during the pandemic has practically proven the importance of teaching based on virtual technologies. As a result of the reforms in the field of education of the Republic of Uzbekistan, in particular, the implementation of the “Digital Education” programs, extensive work is being carried out to master modern technologies in secondary schools. This requires teachers to thoroughly master virtual technologies and effectively use innovative approaches in education. The development of teaching methodologies based on virtual technologies for teachers ensures their compliance with modern educational requirements and increases the ability to provide students with quality education.

From this point of view, studying the issue of developing teaching methods for secondary school teachers based on virtual technologies, identifying existing opportunities and problems in this area, as well as developing effective methodological recommendations is extremely important for today's education system. This article analyzes current issues, practical experiences and proposals in this area.

Main part

Developing teaching methods based on virtual technologies expands the possibilities of interactivity, flexibility and individual approach in the educational process. Mastering and effectively using virtual technologies for teachers is becoming an integral part of pedagogical skills. Organizing lessons through virtual



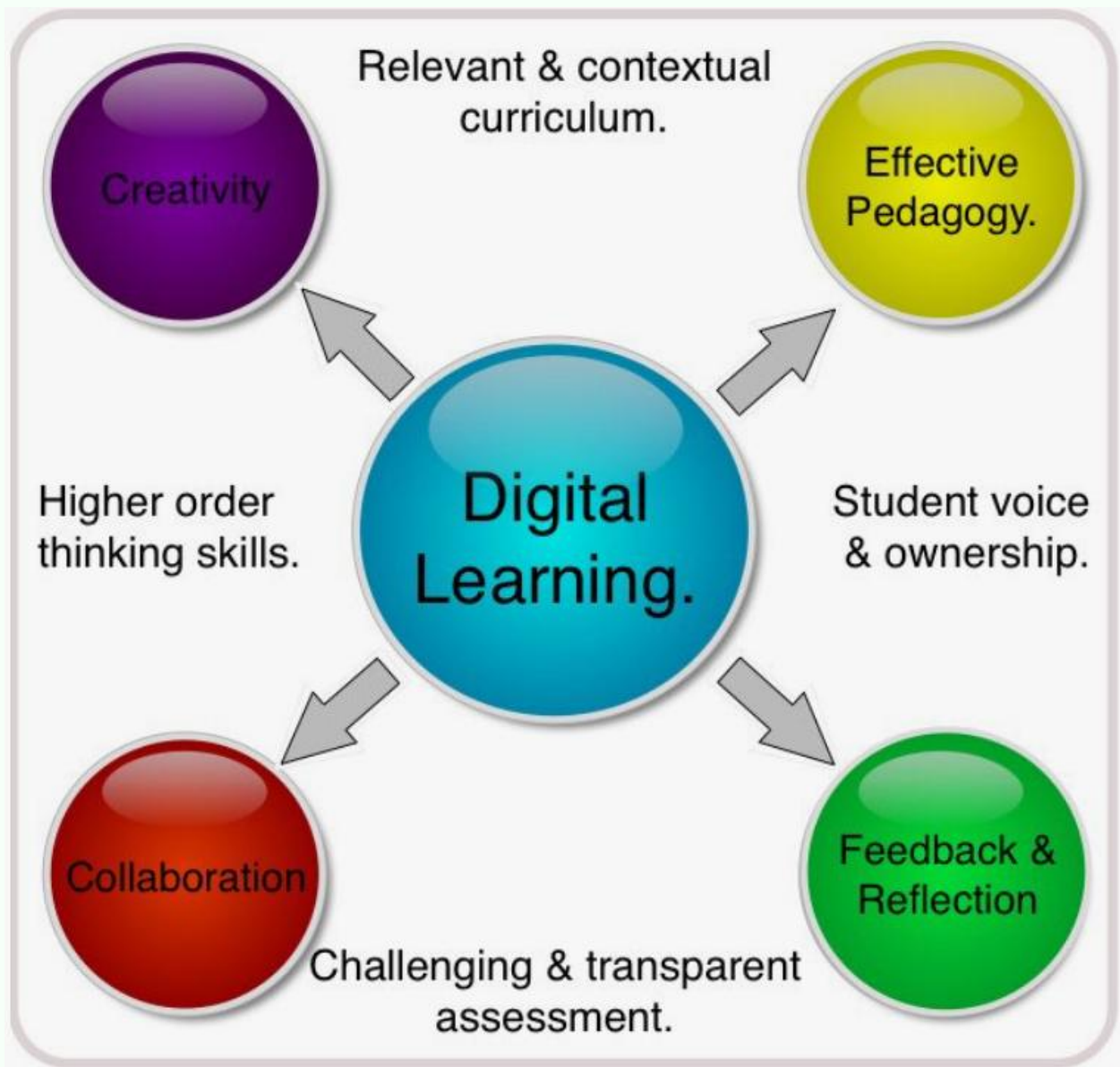
educational tools allows students to deepen their knowledge, develop their independent work skills and stimulate creative thinking.

The integration of virtual technologies into the educational process provides many advantages. First of all, teachers will have the opportunity to convey educational material in an interesting and understandable way through electronic textbooks, video lessons, interactive tests and game exercises. Secondly, online platforms monitor the level of students' knowledge and accurately assess their level of mastery. Thirdly, virtual laboratories and simulations facilitate the formation of practical skills.

There are several important areas for developing teachers' competence in working with virtual technologies. First of all, they need to be taught the basics of using digital technologies, skills in working on virtual platforms, and methods for effectively using online educational resources. At the same time, it is necessary to develop a methodology for planning and conducting the pedagogical process using virtual technologies.

Today, the use of Learning Management System (LMS) platforms, such as Moodle, Google Classroom, Edmodo, is becoming widely popular in the educational process. Through these platforms, teachers have the opportunity to post lesson materials, give assignments, monitor and analyze student activity. In order to conduct lessons on virtual platforms, teachers are required to be able to correctly select and use modern pedagogical technologies, as well as didactic tools.

To increase the effectiveness of teaching based on virtual technologies, it is necessary to organize regular seminars, training courses and practical exercises for teachers. In these processes, attention should be paid to issues such as improving the digital literacy of teachers, designing and organizing virtual lessons, and using innovative methodologies in online education.



The effective use of virtual technologies increases the motivation of students, increases their interest in lessons, and encourages self-study. At the same time, the opportunities for communication between teachers and students expand, and opportunities for extracurricular contacts and advice arise. However, there are also difficulties that may arise in teaching based on virtual technologies, which may be associated with factors such as a lack of technical equipment, low internet speed, or teachers' lack of experience. Therefore, providing teachers with technical capabilities and constantly informing them about technological innovations is also important.

In general, the development of teaching methods for secondary school teachers based on virtual technologies will serve to raise their professional activities to the level of modern requirements. This will lead to an increase in the quality of education, the effectiveness of the learning process for students, and the innovative development of the entire education system.

Conclusion

The development of teaching methods for secondary school teachers based on virtual technologies is one of the integral and relevant directions of the modern education system. In today's globalization and digital transformation, teachers need to master not only traditional pedagogical skills, but also modern digital technologies. Virtual technologies open up new opportunities in education, expand the interactivity of the educational process, and the ability to develop students based on an individual approach.

Research shows that teaching based on virtual technologies helps to increase the level of knowledge and motivation of students, develop their critical and independent thinking skills. At the same time, through virtual technologies, teachers have the opportunity to present lesson materials in a visual and interesting way, encourage active participation of students, and regularly monitor educational results.

For the effective use of virtual technologies, the development of digital competencies of teachers is of great importance. To do this, it is necessary to systematically organize advanced training courses, online trainings and practical exercises for them. It is also necessary to strengthen the technical and technological base of educational institutions, create opportunities for teachers to use modern digital resources.

At the same time, for the successful implementation of virtual education, teachers' readiness for innovative pedagogical approaches, openness to the adoption of new methods and tools are important factors. It is necessary to constantly update their knowledge and skills in the field of digital didactics, and pay attention to the effective planning and conduct of lessons based on virtual technologies.

In conclusion, the development of teaching methods for secondary school teachers based on virtual technologies plays an important role in the formation of an innovative and effective educational environment that meets the modern

requirements of the education system. This, in turn, creates the basis for improving the quality and competitiveness of students' knowledge, and for the development of digital literacy and innovative thinking in society.

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