Peculiarities of Using Innovative Software Tools in the Formation and Development of Competencies of Preschool Children

Kahhorov Siddiq Kahhorovich[1], Khalikova Umida Mirovna[2]

[1]Professor, Doctor of Pedagogical Sciences, Bukhara State University, Uzbekistan
[2]Independent Researcher, Bukhara State University, Uzbekistan

ABSTRACT

In this article, the research carried out to date on the formation and development of the competencies of future elementary school students through innovative software tools, the implementation of the methodology of the rational use of information technologies, Internet resources and software tools in the educational process. and recommendations suggested by the authors are presented.

KEYWORDS: competence, software tools, information technologies, Internet resources, preschool education, innovation, linguistics, naturalism, subject, distance learning, experimental test, content, multimedia

I. INTRODUCTION

Currently, a number of efforts are being made in our country in order to raise a mentally mature generation, to develop their intellectual potential, to educate them as well-rounded individuals, and to bring them to adulthood. In this regard, fundamental changes have been made in the system of preschool education, which is the first level of education, in our republic in the last five years.

Including the President of the Republic of Uzbekistan in 2016 In the decision PQ-2707 of December 29 "On measures to further improve the preschool education system in 2017-2021", radical improvement of children's preparation for school education, modern education in the process of education it was emphasized that implementation of programs and technologies, all-round intellectual and aesthetic development of children is an urgent issue[1]. In the decision of the President of the Republic of Uzbekistan dated September 9, 2017 "On measures to fundamentally improve the preschool education system" No. improvement of the training system was envisaged[2].

II. MATERIALS AND METHODS

Accordingly, we can emphasize that there is a need for modern, innovative software tools and methodical manuals. To further improve the preschool education system, which is an important link of the continuous

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[1]Ўзбекистон Республикаси Президентининг 2016 йил 29-декабрдаги "2017-2021 йилларда мактабгача таълим тизимини янада такомиллаштириш чора-тадбирлари тўғрисида"ги ПҚ-2707-сон қарори.// lex.uz

[2]Ўзбекистон Республикаси Президентининг 2017 йил 9-сентябрдаги "Мактабгача таьлим тизимини тубдан такомиллаштириш чора-тадбирлари тўғрисида"ги ПҚ-3261-сон қарори. 1-илова 6-банди.// lex.uz

education system, to create an efficient state management system, to increase the intellectual potential of children in all aspects, mentally and emotionally, by applying modern educational programs and innovative educational technologies to the educational processes. development is envisaged.

According to many years of scientific observations and studies, 70% of all the information a person receives during his life is received by the age of 5 years. If we take into account that future elementary school students are 6-7 years old. From the age of 3, they absorb the buds of the first education in the family and in preschool education organizations.

This article focuses on the formation and development of the competencies of future primary school students through innovative software tools, the implementation of the methodology of rational use of information technologies, Internet resources and software tools in the educational process.

First of all, we begin the analysis by correcting a number of specific misunderstandings about "innovation". The first misunderstanding is the same understanding of innovation and novelty, the second misunderstanding is that innovative activity and production are the same, and the third misunderstanding is related to linguistic naturalism, and it is explained that innovation is monosubjective because it is a verbal noun. . In fact, the word innovation originated in Latin in the middle of the 17th century and means the introduction of new things in a certain field and the emergence of a whole series of changes in this field. This means that innovation, on the one hand, is the creation and implementation of innovation, and on the other hand, it is not a subject at all, but the activity of introducing innovation into a certain social practice.

Today, "Innovative education" is education that is capable of self-development and creates conditions for the comprehensive development of all its participants.

"Innovative educational technology" consists of three interrelated parts:

➢ the modern content transmitted to students includes not only the development of scientific knowledge, but also the development of competencies through multimedia educational materials using modern communication tools that are compatible with modern business practices;

➢ modern teaching methods - this is an active way of developing competencies based not only on active perception of the material, but also on the basis of students' interaction and involvement in the educational process;

➢ is a modern educational infrastructure that includes informational, technological, organizational and communication components that allow effective use of the benefits of distance education.

Currently, various pedagogical innovations are used in the preschool education system. Among them, the most characteristic innovative technologies can be distinguished. Software tools are an innovative product of today's modern education.

In addition to revealing the content of educational material, innovative software tools serve to develop and strengthen knowledge and skills.

During the experiment, the use of software tools in the educational processes of preschool educational organizations and the results of their effectiveness were studied. In the experimental work, questionnaires were distributed among about a hundred educators, and through these questionnaires, the extent to which educators use software tools in MTTs, the competence to use software tools, the availability of software tools that are suitable for training processes, and the use of software tools in preschool education We studied the role of the system in the development of the child's competence.

During the analysis of the answers to the survey questions, it became clear that educators of preschool educational organizations positively evaluate the importance of using software tools in the educational process. But the main problem is the lack of software tools created in accordance with the state program, taking into account the child's age and learning ability.

Today's modern children living in an information society cannot imagine them without computers, tablets and phones. Today's children spend their free time only playing games on the phone, if instead of these games, the child uses innovative development software tools, his level of knowledge will increase, mental competence will develop and self-confidence will increase. is formed. Because through innovative software tools, the child acquires basic knowledge in a specific field and tests his knowledge by completing game tasks in order to strengthen his knowledge. Therefore, in accordance with the requirements of the time, as a result of the rapid introduction and development of information technologies in modern education, many software tools were created and they

began to be used in various fields.[3]/[4]/[5]/[6]/[7]/[8]/[9]/[10]. When using innovative software tools in the educational process of preschool educational organizations, first of all, it is necessary to learn the basic concepts of pedagogical software tools. Below we will consider the concepts of pedagogical software tools.

Pedagogical software tools are computer programs used in the educational process. Pedagogical software tools have their own data warehouse, as well as modeling, management, teaching, and control qualities, provide visualization of education, quick analysis of the activities of educational subjects and intended to control. Examples of pedagogical software tools are "Software tools for monitoring and evaluating the level of knowledge", "Multimedia tools", "Automated teaching systems", "Electronic textbooks", "Intelligent teaching systems".

Examples of pedagogical multimedia tools are materials in the form of text, graphics, pictures, sound, animation, videos.

Automated educational systems are automated information environments that include a teacher, a student, a system that receives and automatically processes teaching-methodical and didactic materials.

Intelligent teaching systems belong to the highest level systems and are formed based on the ideas of artificial intelligence. Such systems start from formulating and searching for an educational problem, control it at all stages of its solution, end with the assessment of the optimality of the solution, taking into account the principle and characteristics of the solution, and provide interactive interaction.

The role of multimedia software is incomparable in developing the competencies of future elementary school students through innovative software tools. Because children of preschool age can be interested and attracted only through animated, sound, colorful frames. All kinds of software tools for preschool children will be interesting and effective for children only if they are created on a multimedia basis. So let's see what multimedia is.

Innovative software tools are a new concept and can be interpreted as a complement to the concept of multimedia. Therefore, to date, if we quote the definitions of the concept of "Multimedia" given in the literature: "Multimedia means a set of tools that process information in various forms."[11], "Multimedia is an embodiment of delivery of educational materials to students based on traditional and original types of information based on software and technical tools of informatics"[12], "Multimedia is a rapidly developing modern information technology. [13].

Speech, communication, reading and writing skills in the areas of development and the development of the cognitive process of future primary school students based on the First Step State Curriculum , the role of modern information technologies in the development of knowledge and skills in the areas of intellectual-cognitive skills, elementary mathematical skills, critical knowledge and effective reflexive activity is incomparable. A child's cognitive competencies are formed on the basis of the educational process, daily lifestyle, the influence of the environment, and modern technologies. Today, modern children cannot be imagined without electronic devices such as tablets, smartphones, and computers. It is an effective tool for using electronic educational tools in the educational process and effectively spending the child's free time. Software educational tools not only create an opportunity to connect the theoretical knowledge of the child with practice, but also create an opportunity for independent thinking.

Animated information has a great impact on a person, and its use in the educational process of MTTs has the feature of attracting children's attention more. It has

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already been proven in real life experience that multimedia education is effective for both visual and auditory learning. After all, the saying "it is better to see once than to hear a hundred times" is not for nothing. In psychology, it is emphasized that providing knowledge through the use of the child's visual and auditory organs at the same time, is a guarantee for their high mastery of materials. Academician S.S. Bulomov and others noted the following in this regard. If students receive the given materials on the basis of viewing (animated video), the retention of information in memory increases by 25-30%. In addition, it was noted that if educational materials are presented in the form of audio, video and graphics, retention of materials in memory increases by 75%.

In addition, in multimedia computer technology, the principles of consistency, sequence, and agelessness are fully implemented. Duration of video clips for 3-4, 4-5-year-old children in the preparation of computer multimedia programs, necessarily following medical instructions

No more than 10-15 minutes, and no more than 15-20 minutes for 5-7-year-old children. After mastering the topic for 15 minutes, the child takes a 10-minute break and can use 10-15 minutes of topic consolidation exercises. In addition, children can improve their knowledge by using modern multimedia programs independently after acquiring computer literacy. This process is carried out whenever the child wants and the child wants. This condition encourages the development of the individual intellectual potential of each child.

III. CONCLUSION

The principle of comprehensibility of the educational material is implemented on the basis of the output and display of the materials related to learning on the monitor screen, which are included in the computer memory. When preparing an electronic educational resource, the programmer should pay special attention to the principle of the educational material being comprehensible to the child during the teaching process. It should be taken into account that the selected educational material should not be complicated, it should be implemented step by step from easy to difficult. Taking into account that using a computer for a long time has a negative effect on the child's body, it is the responsibility of parents and educators to control the time the child uses the computer. Although in the e-learning resources that are created, each lesson is created based on the standard, the subsequent use of the next lesson is in the hands of the user.

The use of modern computer animation excellent software tools is a modern tool that serves the education of the third-year student in accordance with the requirements of the times, the formation of independent thought, the increase of the range of thinking, the acquisition of computer literacy, and the rise of mental capacity.

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