

**INNOVATIVE WAYS OF USING DIGITAL TECHNOLOGIES IN FORMING 4K
SKILLS IN PRIMARY STUDENTS**

Abdukhalimova Azizakhon Erkinboy kizi

International Nordic University, Master's degree in Theory and Methodology of
Education and Training (Primary Education) 1st cycle

Abstract: This article provides a scientific and practical analysis of the ways and methods of introducing new innovations through digital technologies in the formation of 4K skills in primary school students. Also, proposals and recommendations for research and analysis on the implementation of new areas of assessment, measurement and promotion of students' knowledge to a new level are put forward.

Keywords: 4K concept, Critical thinking, Creativity, Communication, 3D.

Introduction. The 21st century is a century in which the most valuable contribution is not the delivery of information, but the ability to select, evaluate, use and create new things together. In many countries of the world, the “4Ks” – Critical Thinking, Creativity, Collaboration, Communication – are accepted as the main pillars of the new generation of education. In Uzbekistan, the concept of the “New Uzbekistan Education System” also focuses on the skills of the 21st century.

In order to determine the priority areas of reforming the general and extra-secondary education system in the Republic of Uzbekistan, to raise the spiritual, moral and intellectual development of the growing younger generation to a qualitatively new level, to introduce innovative forms and methods of education into the educational process, based on the Decree of the President of the Republic of Uzbekistan No. PF-5538 dated September 5, 2018 “On additional measures to improve the public education management system”, the Republic of Uzbekistan is expected to enter the top 30 advanced countries in the world by 2030 according to the PISA (The Programme for International Student Assessment) international student assessment program rating, to raise the content of the continuous education system to a qualitatively new level, to improve teaching methodologies based on the world's advanced education system, to gradually introduce the principles of individualization into the educational process, It is mentioned about the implementation of five initiatives, which include a comprehensive set of measures aimed at introducing modern information and communication technologies and innovations into the sphere of public education, introducing modern methods and directions of out-of-school education in the education and employment of young people, as well as creating additional conditions for the education of young people.

A distinctive feature of primary education is that at this age the child's basic physical and mental processes are formed, the criteria for worldview are built, and the attitude towards educational and cognitive activities is established. At this delicate period, it is necessary to use technologies not as a means of "silent lessons", but as a "rocket course" that stimulates active, creative and critical thinking. In this article, we will consider in detail practical tools, platforms and methodologies that are very simple to implement for each of the 4K skills.

Analysis and results. Critical thinking is the process of selecting information, comparing it, determining cause-and-effect relationships, drawing logical conclusions and finding ways to solve problems. The main principle in the formation of this ability in a primary school student is “Do not give assignments without an algorithm”. That is, it is necessary to show a clear sequence of steps, not just say “think about it”.

Digital tools and the technology of their application in primary education are as follows:

1. Logical games and platforms (Trainers): Buitee (bisbee.uz): Critical thinking can be developed based on interactive examples in the “Assignments” section of the site. Example: “Find the word without a blood in the line: apple, pear, peach, car, flower”. “The teacher, without checking the answer, asks: “Why do you think the car is bloodless?”, “If you think the flower is also wrong, why?” should ask.

Practical recommendation: Open the problem in class using a projector and discuss it with students. Teach them to write down each step (1. Understand the problem. 2. Separate the data. 3. Observe the connection. 4. Draw a conclusion) in a notebook. TED-Ed Riddles (YouTube channel): Although the language is English, many of the riddles are visual. The teacher pauses the video game and asks, “What happened now? What do you think will happen next? Why?” can ask. This teaches you to think quickly in unexpected situations.

2. Analytical Projects (Working with Real-World Problems): “Expert Group” Project: Divide students into groups of 3-4. They are given different sources on the same topic (for example, “Water Conservation”) - one is a science-fiction cover, the second is an advertising video, the third is an infographic with statistical data. Each group must analyze and discuss its source and present the results to the class. The main question is: “What was the purpose of your source? What facts did it select or hide accordingly?” "Journalist" project: Students are asked to write two types of texts about one event (for example, the "Navruz" holiday held at school): the first is a factual report (who, when, what, where), the second is a "sensational" report that is not completely accurate and is enriched with imagination. That is, to demonstrate in practice the separation of fact and opinion.

Online analytics tools: Mentimeter: A great tool for taking real-time surveys and seeing the results in real-time. In a lesson: “I think, on a scale of 1 to 5, reading a book is more useful than watching TV” ask a question through Mentimeter and see the answers immediately. Then open a discussion by asking: “Why did most people give 5 points?”, “Who gave 2 points, why?”. In this case, the student participates not as a corrector of his own opinion, but as a communicator based on evidence.

Creativity in primary education: the “I can create” Lego in the digital store Creativity is the ability to combine existing things in new ways, express oneself and find a solution to a problem, even if it is the wrong way. In the primary classroom, this is a natural internal need. Technology allows you to satisfy this need with unlimited means. There are three stages and tools of the creative process: Ideya yaratish bosqichi (Brainstorming & Planning): Jamboard (Google) yoki Miro: Bu – cheksiz virtual taxta. Darsni boshlashdan oldin, masalan, “Qish” mavzusida “Assotsiatsiyalar buriti”ni ochish. Har bir o‘quvchi o‘z gadjetidan yoki o‘qituvchining kompyuteridan foydalanib, stikerchaga (rasm, so‘z) o‘z ideyasini yozib qo‘yadi: Masalan “qor”, “sovuq”, “choy”, “yalpi”, “Noyob kichik qush” kabi. Ideyalar to‘planib, ulardan loyiha yaratish boshlanadi.

Creation & Production: Visual Creativity: Canva for Education: Great for elementary school. Students can quickly create their own book review poster, infographic for geography, or an Instagram post about a historical figure. Templates are available. The ability to draw three-dimensional pictures and create sculptures in 3D develops a child's spatial understanding. Audio-video creativity: Animoto or Adobe Spark Video: Create simple programs to create short (30-60 second) video reports from photos and videos to music. GarageBand (Mac/iOS) or BandLab (web): In a creative writing lesson, students can create short "musical phonics" by playing different sounds (voice, teaspoons, tambourine). Digital Storytelling: Book Creator: The beauty of this lesson is that it can combine text, images, audio, video, and even handwriting. The student

writes his own story, draws, records sounds, and creates such a “living” book. This can be done collaboratively in a group.

Displaying the work created and receiving constructive feedback is an important part of the creative process. By opening a “Creative Exhibition” page on the Padlet platform, all work is attached to it. Students learn to leave comments on each other’s work in the form of “I liked this place because...” or “If you did this, it would be even better.”

Collaboration is the interaction of individuals with different abilities, skills, and ideas to achieve a common goal. Digital tools make it possible to carry out this process not only within the classroom, but also with other classes, schools, and even countries.

Three models and technical principles of collaboration: Create one presentation on the topic “The Water Cycle”. The teacher creates slides and gives each group the task of filling in one slide. Group 1 – “Clouds”, Group 2 – “Rain”, Group 3 – “River”. Students work simultaneously, can see each other’s work and write comments. In gamified learning tools, students work as a team and try to find an answer together. In this process, they develop a strategy, understand their strengths and feel confident in each other.

Out-of-class project work (Asynchronous Collaboration): The entire project can be divided into columns such as “Need to Start”, “In Progress”, “Sent to the appropriate person”, “Completed” and tasks can be distributed. In a child’s version, for example, the “Book Exhibition” project: one student finds information about the author, the second – chooses a book, the third – is engaged in poster design. Each performs his task and shows his “stitch”.

A very convenient opportunity for Uzbek schools. Instead of writing a letter to a foreign student, implement a joint project. Example: the “Our School” project with a class in Turkey or Croatia. Uzbek students prepare a video or slideshow about their school, foreign students prepare theirs. Then they post them on a Padlet board and ask questions like “What is the most interesting thing about your school?”, “What is your class like?” This turns into the real goal of learning - communication and mutual understanding.

Communication is the ability to convey information in an understandable way, as well as to understand the other party's thinking, to ask questions and to think. Digital tools allow for communication in various formats.

Conducting a video conference with a class in another country or region. Algorithm: 1. Getting to know each other (your name, favorite toy). 2. Mutual question and answer (on the same topic). 3. Sharing difficulties (internet signal, incorrect pronunciation). 4. Saying goodbye. Thus, the child learns the rules of online communication in practice - punctuality, simplicity, respect and patience.

As a result of the use of information and communication technologies in the educational process, students' skills of vitality, initiative, and active learning in mathematics lessons are further developed, the lesson process is made interesting and meaningful, and the effectiveness of education is targeted. That is why we use various presentations in order to make mathematics lessons in the 4th grade productive, effective, active and increase the activity of students. For example, the use of ICT in the mathematics lesson on the topic “Speed, time, distance” was very interesting, this lesson was a practical and technical lesson. Students found answers to the problematic questions “How can I increase speed”?, “How can I save time”?, made oral explanatory and supplementary speeches. In order for all mathematics lessons to be interesting and effective, various district presentations have been developed, and we use materials prepared in the form of presentations by similar innovative teachers. Students use presentations independently outside of class, and new presentations are being prepared by creative students. The use of ICT ensures that the lesson is at a high level, understandable, and, as we think, modern. This situation leads to two-way development, firstly, the teacher's activity increases, his

scientific and methodological potential rises to a new level, he becomes a mature specialist in demand at the moment, and secondly, the quality of education increases, which leads to the effective implementation of the main task of education.

Conclusion. The teacher of the 21st century is not a carrier of information, but a conductor organizing the educational process. He has in his hands the notes of several centuries: classical pedagogy, game technologies, interactive methods, and most importantly, an orchestra of digital tools. Each instrument takes its place in this orchestra: logic games - violin, creative programs - trumpet, collaboration platforms - cello, communication tools - flute.

The main criterion is purposefulness and balance. To each question: “Which 4K skill does this technology help develop?”, “Does it increase or decrease student participation?”, “Is it connected with the real world?” should be asked.

The introduction of digital technologies in our education system is proceeding very rapidly. Our task is to manage this process not only technically, but also from a methodological, pedagogical and humanistic point of view. Preparing the student for the digital world, helping him become not only a consumer, but also a disciplined, critical and creative thinking participant. Sowing the seeds of 4K skills in every lesson of the primary school is the most important investment in the child.

References:

1. Холматова, З. (2016). Основные аспекты развития личностных структур сознания в школьном возрасте. Вестник современной науки, (1-2), 132-134.
2. Kholikova, D. M. (2019). INNOVATIVE ACTIVITY OF MODERN HIGH SCHOOL: TENDENCIES OF DEVELOPMENT. Scientific Bulletin of Namangan State University, 1(9), 215-220.
3. Кипчакова, Й. Х., & Кодирова, Г. А. (2020). INNOVATIVE TECHNOLOGIES IN MODERN EDUCATION. Теория и практика современной науки, (5), 29-31.
4. Nurbek, A. (2021, December). THE COMBINATION OF SOCIAL RELATIONSHIPS AND PSYCHOLOGICAL HEALTH. In Conference Zone (pp. 268- 270).
5. Jabborova, M. (2021). THE IMPORTANCE OF INNOVATIVE TECHNOLOGIES IN THE SOCIAL DEVELOPMENT OF SOCIETY. Экономика и социум, (6-1), 129- 132.
6. Sodirzoda, M. M. (2021). Ways to cultivate the creative thinking of beginners in the classroom through information and communication technologies. ACADEMICIA: An International Multidisciplinary Research Journal, 11(5), 955-958.
7. Sodirzoda, M. M. (2021). Techniques of using folk proverbs in the cultivation of oral speech of primary school students. ACADEMICIA: An International Multidisciplinary Research Journal, 11(10), 481-484.
8. Shavkatovna, S. R., & Gulbahor, R. (2021). THE IMPORTANCE OF MENTAL ARITHMETIC IN MENTAL DEVELOPMENT IN CHILDREN. Conferencea, 68-70.
9. Uljaevna, U. F., & Shavkatovna, S. R. (2021). Development and education of preschool children. ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL, 11(2), 326-329.
10. Shavkatovna, S. R. (2021). Improvement of methodological pedagogical skills of developing creative activity of primary school students. ACADEMICIA: An International Multidisciplinary Research Journal, 11(10), 289-292.