STRUCTURE AND OPPORTUNITIES OF THE III-IV GRADE "NATURAL SCIENCE" ELECTRONIC EDUCATIONAL GUIDE DEVELOPED ON THE BASIS OF MEDIA EDUCATION

GULKHAYO GANIEVA

TerSU masters

Surkhandarya region, Termez city

gulxayoganieva@gmail.com

ANNOTATION: This article is about the structure and capabilities of the iii-ivsinf "natural science" e-learning textbook based on media education. The information of today's modern high school student is that we are now living in the information age. That's why we pay more attention to visual information than to oral information. For most people, television is the main source of information. Visual images play an important role in magazines and newspapers. As a result, we can say that most of the knowledge gained is related to extracurricular activities.

KEYWORDS: *natural sciences, creativity, didactics, methodology, skills, competencies.*

INTRODUCTION: The 4th grade e-learning textbook, Natural Science, based on media education, has a hyperlink system and works offline. It focuses on science topics (media, video, audio, photography, simulation, animation, etc.) in simple language that is easy for elementary school students to understand. The e-learning textbook "Natural Science" for grades III-IV, developed on the basis of media education, has the following structure[2].

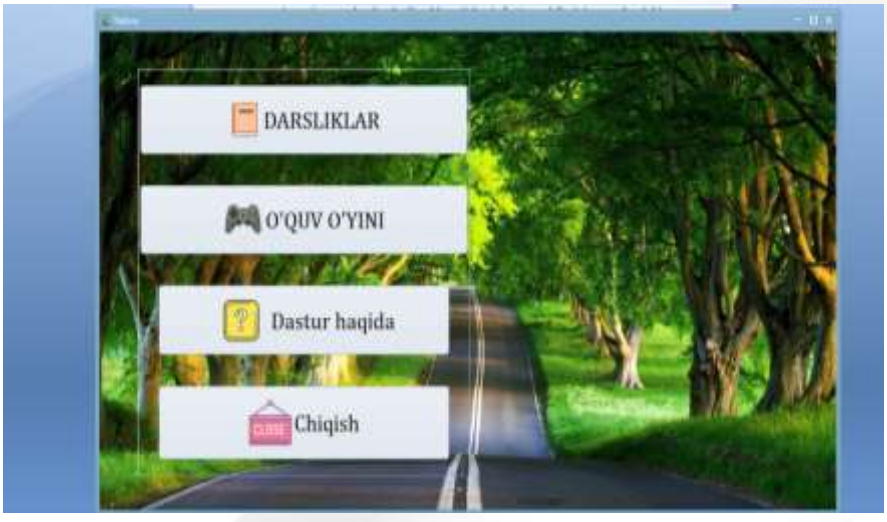

Figure 1. The structure of the electronic textbook "Natural Science" for grades III-IV.

Grades III-IV The structure of the electronic textbook "Natural Science" consists of textbooks, games, programs, speeches. Grades III-IV The e-textbook "Natural Science" has the following didactic opportunities:

to develop and strengthen students' theoretical knowledge, practical skills, competencies and competencies in the field of natural sciences; save lesson time; organization of methodological assistance to teachers; make the lesson more interesting and meaningful; students gain new knowledge through self-assessment using a test system; to develop students' skills and competencies in working with software[3]. The e-learning manual also develops students' ability to work independently, to fully understand nature, and to increase their interest in the subject.

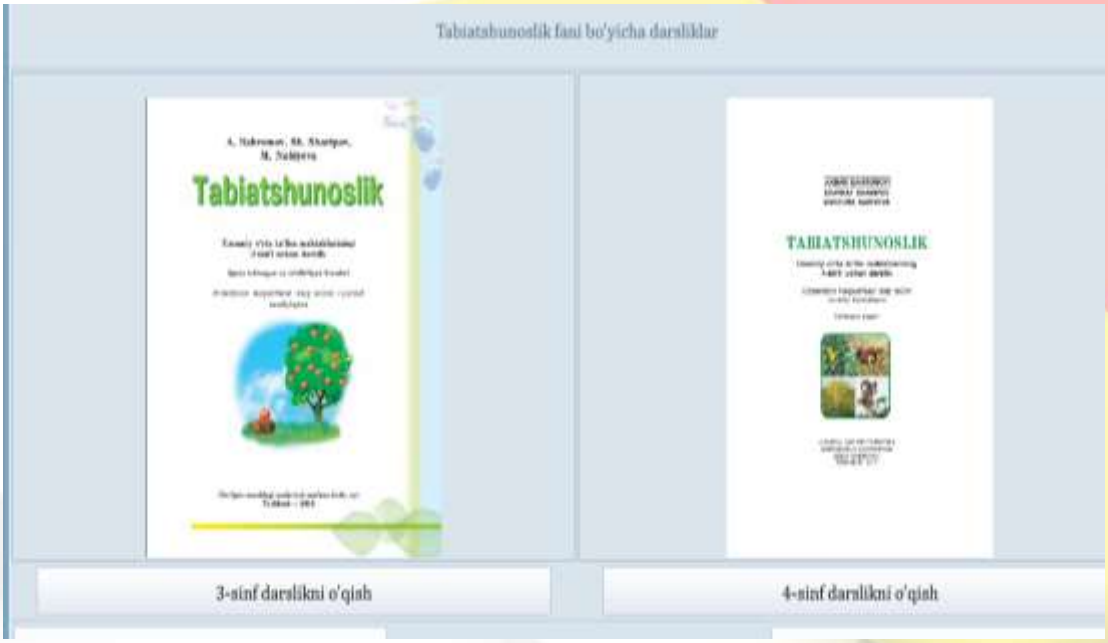

Figure 2. III-IV grades Electronic multimedia textbook "Natural Science".

This e-learning guide is based on a science textbook for grades III-IV, and you can open the book by selecting a class. This e-guide is simple and hassle-free. It is easy for students to use. It has the following buttons[15]:

"Enter the program" - start the program;

"Topics" - go to the topics section;

"Tests" - go to the tests section;

“Electronic version of the textbook is an electronic version of the textbook of III-IV grades in Uzbek in pdf format

- "Go to the next slide";

- "Go to previous slide";

- "Contents" - return to the topic section;

ANALYSIS AND RESULTS: "Menu" - go to the main menu. To exit the program, press the button on the screen. Going to the "Tests" section, there are a total of 10 tests in one variant, which is based on the whole subject "Science". The e-textbook "Natural Science" for III-IV grades has the following didactic opportunities: to strengthen students' knowledge about nature, the universe, flora and fauna; develops imagination; save

lesson time; organization of methodological assistance to teachers[4]; Develop Internet search skills and competencies; development of Internet access on various issues of science education through telecommunications; students gain new knowledge through self-assessment using a test system; develop students' skills in working with software[11].

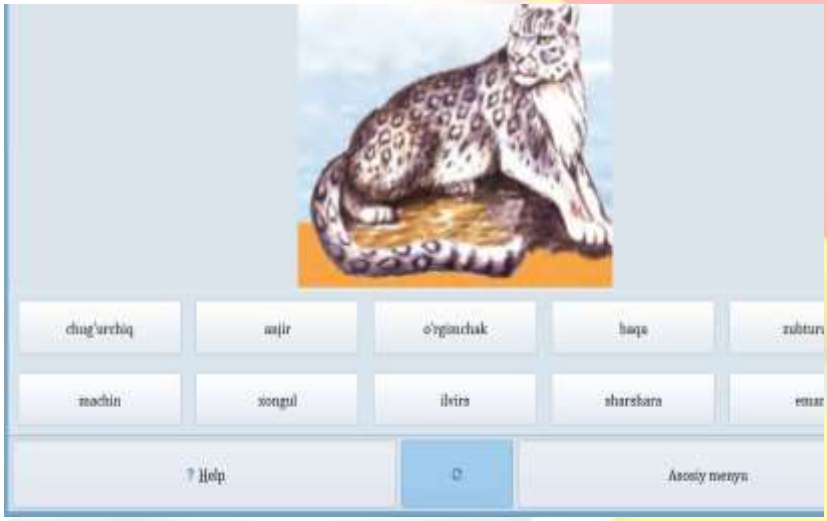

Figure 3. III-IV grades Electronic multimedia textbook "Natural Science".

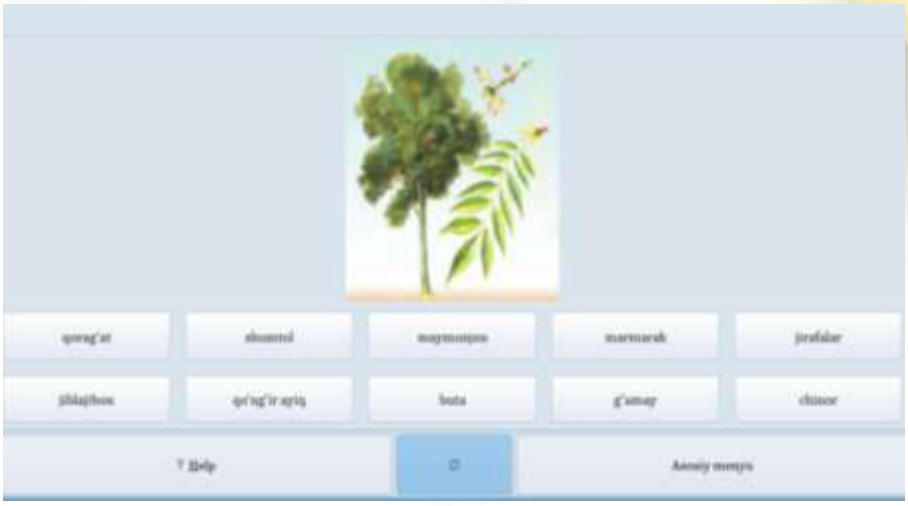

Figure 4. Electronic multimedia textbook "Natural Science" for grades III-IV.

It should be noted that today the world is developing rapidly. It is no secret that the XXI century is the age of techniques and technologies. We have followed this path and tried to develop a multimedia e-learning tool that will increase the effectiveness of science teaching using information and innovative technologies. We hope that this textbook will help educate the younger generation and develop their knowledge of existence. A methodology for teaching science using an e-learning tool based on media education[14]. Methods of teaching science is a process of forming a system of knowledge about nature in the system of continuing education, as well as outside the educational institution and in independent study, which includes the following pedagogical objectives: Educational: natural sciences Acquisition of knowledge of the basics - includes the following basic and specialized knowledge system in the formation of concepts of primary nature:

- Development of natural science as a science;

- know and understand its main sections, methods and tools;

Educational: To form and nurture a scientific worldview in the rising generation by imparting generalized knowledge about nature, explaining the general laws of the creation of the world, the role of man in nature, his attitude to nature through universal values[13]. Developer: To develop students' interest in science, to develop their cognitive abilities, to teach them to think independently and logically, to generalize information and knowledge, to make in-depth theoretical analysis from simple logical thinking. With the above in mind, the e-learning tool "Natural Science", developed on the basis of media education, can be used in grades III-IV of general secondary school, but also in grades I-IV. When using this software-pedagogical tool in the classroom, we need to pay attention to the following three aspects:

model planning using software and pedagogical tools;

methods of using software and pedagogical tools in specific lessons;

organizational aspects of using software and pedagogical tools.

Goals and objectives vary at different stages in the formation of students' knowledge of science. Based on the content of the main curricula in natural sciences, in the fourth grade students learn about nature, stars, the Sun, planets, other celestial bodies in the solar system, the Moon - the Earth's natural satellite, the Earth, globe, day and night, should know minimal concepts such as seasons[5]. Thus, from the very beginning of the primary school, we need to pay serious attention to the scientific approach to the science of education in terms of educational quality, the formation of basic concepts about the nature of objects and phenomena. The formation and development of students' understanding of the natural sciences is a long process. The following visual aids are used in science classes for routine demonstrations: globe, map, wind, temperature, humidity, and more[10].

The interactive models and pictures included in the science e-learning supplement complement these visual aids.

In accordance with the Decree of the President of the Republic of Uzbekistan, from February 25, 2001, the program "Natural Science", the content of textbooks was developed on the basis of the basic concepts and principles of the national idea. In order to ensure the implementation of the tasks set out in the statement of the joint meeting of the State Counselor of the President of the Republic of Uzbekistan and the Cabinet of Ministers of March 17, 2010 of the Complex of Education, Health, Social Protection, Information Systems and Telecommunications Working groups have been set up in all areas, involving professionally qualified teachers, leading scientists and specialists[6]. These working groups analyzed the continuity and continuity of general secondary and secondary special vocational education in accordance with the state educational standards, curricula and textbooks, as well as the age and psychophysiological characteristics of students[9]. According to him, a number of changes have been made in the natural sciences. The new program for 2010 was based on the content of the book of the first President of the Republic of Uzbekistan Islam Karimov "High spirituality is an invincible force" and a number of changes were identified[12].

“Cube” method: This method is also needed to motivate students to think independently, creatively and critically. To do this, make a cube with sides no larger than 20 cm. It has 6 different instructions on the 6 sides. These guidelines will cover each aspect and allow students to discuss the problem in 6 different ways. The Cube method can be used in groups or individually. The main tasks on the 6 sides of the cube are expressed orally or in writing. It will take some time.

The Six Thinking Hats Method.

This method encourages students to try multiple operations while thinking about something. They try to analyze the evidence, justify the existing objections, and do it all at once[8].

The six-pronged hat is a way to offer one thought-provoking action in one go. Instead of trying to do everything at once, students wear one hat at a time, with a total of 6 different colored hats, each for a specific type of thinking. This method is useful in integration lessons and is used by others.

CONCLUSIONS AND RECOMMENDATIONS: A model of media education integrated into school science has been developed, comparing the research conducted in this field in our country, the Commonwealth and foreign countries, the existing educational documents and textbooks.

In order to ensure the integration of media education and natural sciences, the elements of media education that need to be integrated into the content of DTS have been identified.

The structure and didactic possibilities of the electronic textbook "Natural Science" for grades III-IV, developed on the basis of media education[7].

An innovative approach to the organization of science lessons on the basis of media education and a methodology for teaching science using the electronic textbook "Natural Science" for grades III-IV, developed on the basis of media education.

There are some complex concepts in science teaching that cannot be explained in words. These concepts are interpreted differently in different media. Choosing the right one requires both the teacher and the student to have the necessary skills and knowledge. Recommendations and suggestions for choosing and responding to such concepts are provided.

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