

MODERN TEACHING USING ANIMATED LEARNING MECHANISMS

Kamolov Bakhtiyar Khasanboevich

Doctor of Philosophy in Geography, Ph. D

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Abstract: The article discusses the issues of using modern pedagogical technologies for the development of continuous ecotourism education in secondary schools, and the mechanisms of wide use of modern methods in the formation of ecological knowledge and skills in the minds of students are highlighted.

Key words: Continuing education, pedagogical technologies, general education schools, infographics, ecotourism culture, nature protection, environmental protection.

ПОДХОД К СОВРЕМЕННОМУ ОБРАЗОВАНИЮ И АНИМАЦИИ МЕХАНИЗМЫ ИСПОЛЬЗОВАНИЯ

Аннотация: В статье рассматриваются вопросы использования современных педагогических технологий для развития непрерывного экотуристского образования в общеобразовательных школах, а также выделяются механизмы широкого использования современных методов в формировании экологических знаний и умений в сознании учащихся.

Ключевые слова: Непрерывное образование, педагогические технологии, общеобразовательные школы, инфографика, культура экотуризма, охрана природы, охрана окружающей среды.

Introduction

Ensuring continuity of continuous education in our country, providing education and upbringing to the young generation, raising the level of knowledge of primary school students in training qualified personnel for the development of our country serves as one of the main factors in the development of society. In this regard, expansion of knowledge and skills based on information and communication technologies is an important factor of development. In order to achieve progress, we need to acquire knowledge in the field of digital economy and modern information tools. This gives us the opportunity to take the shortest path to progress. After all, information technology is deeply penetrating all areas of the world today. In particular, although Uzbekistan has risen by 8 places in the world community according to the "Index of Development of International Information Communication Technologies" in 2019, we are still far behind [p.1,4].

Materials and Methods

In order to fulfill the tasks in the President's Addresses in a timely manner, it is necessary to strengthen knowledge by using media knowledge in the educational process with the help of information media. One of the urgent tasks of today is to develop knowledge and skills on the basis of information technologies with the help of advanced methodological instructions. is one. In this regard, it is characterized by the fact that scientific research works have been carried out by the scientists of the field.

Research scientists such as S.I.Vasenina, B.S.Gershunskiy, YU.M. Gorvis, Y.V.Zvorigina, I.O.Ivakina, Y.V.Ivanova, Y.E.Lisenko, V.Y.Lyauks, Y.I.Mashbi, V.M.Monaxov, S.L.Novoselova, I.Yu.Pashilite, G.P.Petku, T.K.Smikovskaya, O.K.Tikhomirov were engaged in the issues of using electronic methodical games based on animation approach in modern education.

Results

Information and communication technologies help people to learn about the environment and how to improve and protect the environment in which we live. Animation is derived from the Latin word *animare* - to animate, images of selected subjects move at high speed. An optical illusion is felt as a result of the eye moving continuously through the images, and the images are perceived as a single movement.

Animated cartoons are now being created in three-dimensional formats. The different images of the animation program are quickly achieved. Films on a given topic are prepared by a special program programmer based on phenomena and actions. The analog mechanical animation environment based on quick view includes phenechrist, zoetrope, flip-book, and praxinoscope.

Our television and radio channel, similar to video tapes, were originally analog, and the famous electronic animation is still widely used today. Techniques such as animated GIF and Flash animation for computer display are being developed by inventors and programmers. The methods of creating images or frames for animation items depend on the artistic style and skill of the animators. Computer animation means creating animated images. Computer generated images include scenes and dynamic images, while computer animation refers only to moving images. Computer animation is essentially a digital successor to traditional animation techniques using stop-motion styles of 3D models and frames of 2D images. Computer-generated animations are more controlled than other physically-based processes, creating miniatures for effects or extra work for crowd scenes, allowing for images that other technologies cannot. It can also allow a single graphic artist to produce such a composition without actors, expensive set pieces, or props.

To create motion pictures, an image is displayed on a computer monitor and repeated with a new image similar to it, but advanced in time (usually at 24, 25 or 30 frames per second). This phrase differs from television and movies in that the movement has an illusory character. Objects for 3D animation are built on a computer monitor and surrounded by a 3D virtual skeleton. 2D animations use separate images and separate transparent layers, with or without skeletons.

Differences in appearance between keyframes are automatically calculated by a computer in a process called morphing. And then, finally, the animation is shown. For custom 3D renders, all frames must be rendered after modeling is complete. Frames can also be displayed in real-time as they are presented to an audience of end users.

Low-bandwidth animations broadcast over the Internet are often created in end-user computer software for real-time display as an alternative to streaming or preloaded high-bandwidth shows. The animations were originally created by hand with pen and ink on tracing paper. Initially, they used large computers, which were called mainframe software.

Then the creators of cartoons used powerful graphic dimensions [p. 2.6]. Today, programmers are using the power of a simple personal computer to create a simple animated film.

Computer animation is visual animation created with the help of a computer, unlike the general concept of "CGI graphics" which refers to still and moving images, computer animation refers only to movement. Today, this program is used in some areas of production, science, business and education. It is a common derivation in computer graphics, and the same methods are used to create animated images. Computer animation can also be divided into types: Flash-animation, time-shifting classics, 3D animation, etc.

Flash animation - Flash animation is based on the principle of keyframe animation. The arrangement of key frames is done by the animator, and the intermediate frames are created by the program. This method is the closest to traditional hand-drawn animation, only the role of the space

is taken by a computer instead of a person. The process of creating cartoons consists of several stages:

The technology of the animation approach - currently there are various technologies for creating animation: animation - each of them refers to the sequential change of drawings drawn separately. This is a very time-consuming process, as animators have to create each frame individually.

Puppet animation - objects placed in space are fixed with a frame, their position changes and is fixed.

Sprite animation is done using the programming language. Transferring one object to another by creating a given number of intermediate frames.

Color animation - with it, not only the position of the object changes, but also its color.

A motion picture is the first line of animation that allows you to convey real-time, real-time action. Sensors are attached to the live actor at locations corresponding to the control points of the computer model for motion input and digitization. The actor's coordinates and orientation in space are transmitted to the graphics station, and the animated models come to life. Motion capture is used in the modern film industry to animate virtual models of people or people, such as in the movie Avatar.

Application animation - small images from periodicals and other ready-made images can be used.

Theme animation - inanimate images turn into customized movements, and they often use household objects - clocks, candlesticks, etc.

Plasticine animation - animated films prepared on a certain topic are filmed using modified shots of plastic objects in the frame interval, and filming is carried out.

Powder technique - casting sand animation is rarely used. An artist paints with dust on a backlit mirror. A denser cast layer gives dark "hits", and a thin layer is almost transparent. In this technique, sifted sand, salt, coal, metal and graphite powders, coffee, spices are often used in a special way.

Oil painting on glass - in terms of the power of impact, the presence of air and light, comparable to the paintings of the Impressionists, it is clear that something like a picture copied on film. Each frame is unique: when captured on film, it is immediately erased and replaced by another. In addition, there are cases where the artist decorates with a brush, but also with his fingers.

Needle screen - long thin needles evenly distributed through the screen, showing a vertical plane. The needle can move perpendicular to the plane of the curtain. The number of needles can be from several tens of thousands to millions. Needles pointing at the lens are invisible, but unevenly extended needles cast shadows of varying lengths. Filming of the fully retracted needles on a white sheet without shadows was completed by the director, and the light source was captured by moving the needles. As a result, animation projects are presented on high-quality photo films.

The method of rotoscoping - the technique was invented in 1914, but is still characterized by its popularity. Based on the frame of the cartoon, a full-length film was created with real actors and sets. This technique is also used when a fully drawn character requires a very realistic, vivid and lifelike interaction with real actors and props. Short films depicting heroes of their time such as "Nights on a Farm near Dikanka", "The Tale of a Fisherman and a Fish", "Crimson Flower", "Golden Antelope" were filmed through rotoscoping.

Discussion

Nowadays, the development stages of education cannot be imagined without the above programs. In particular, the "Ja" program is unique in world experience[p.3,10]. On the basis of this program, during extra-curricular activities, students gain practical experience in nature and economic knowledge and skills, and by organizing their activities in a practical way, they get acquainted with the complex aspects of the economy. Today, this program is used as a software module in more than 100 schools of developed countries and in 34 cities of Russia.

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