



POSSIBILITY TO USE ANIMATED PROGRAMS IN THE SYSTEM OF DISTANCE EDUCATION

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Abstract

This article discusses the benefits of introducing distance learning in educational institutions, the effective use of computer technology in the development of student-oriented development of creativity, creative abilities, the use of computer programs not only in the preparation of educational materials, but also in individual work with students, can also be used. The article includes the role of information technology in distance learning. For the quality application of distance learning, several guidelines are being developed.

Keywords: distance learning, Internet, technology, computer, methods, programs, training.

Introduction

The National Education Program, adopted on the initiative of President Sh.M.Mirziyoev, serves the consistent implementation of strategic priorities in the country, such as the establishment of a system of continuing education, achieving quality indicators in all areas of education, further improvement of education.

At present, distance education has a future and is a highly developed, organized and accessible education system for economic purposes.

As one of the obvious achievements of distance education, we can attract a wide range of people and meet the demand for knowledge, skills without compromising production. Distance learning means independent work. Independent work develops everyone's ability to think independently, assess their situation, draw conclusions and make predictions. Admittedly, the interest of young people in reading is declining. Young people are now more and more attracted to computers and related issues. In this regard, teaching is the same direction. In this case, the teacher does not waste valuable time looking for the information he needs in libraries. With the help of a computer, he can find and learn the information he needs. In this regard, it should be noted that the skills of working on the Internet should be sufficient.

It is not easy for any user with a high level of computer and Internet skills to fully understand the information written or drawn there. In this regard, it is desirable that





the electronic page or training program created on the Internet should be popular, that is, understandable to all. Websites are currently being written and created in Macromedia FLASH, HTML, Java Script, and Macromedia Director methods. Each of these methods has its own advantages. If we look at the websites and programs created using the FLASH program, first of all, the time of its creation is short and easy. Flash technology is based on the use of vector graphics in Shockwave Flash (SWF) format. Of course, this format is not one of the most powerful formats, but SWF creators have found the most convenient solution between combining graphics capabilities, graphics tools and mechanisms to add the result to Web pages. Another additional feature of SWF is its flexibility, which means that the format can be used on all platforms (MacOS computers with MacOS or IBM computers with Windows). Another handy feature of SWF is that the images created using it can be not only animated, but also enriched with interactive elements and sound. Flexibility and the ability to create interactive multimedia applications have allowed the SWF format to grow in popularity among Web designers. One type of these tools (Macromedia Director Shockwave Studio) allows you to create multimedia presentations, others (Macromedia FreeHand and Macromedia Fireworks) create graphic images, and still others (Macromedia Authorware and Macromedia CourseBuilder) create interactive teaching courses. But the most used among Web creators is Macromedia Flash, because this program allows you to create Web pages that bring popularity to any site. The animation in Flash is based on changing the properties of the objects used in the "cartoon". For example, the disappearance or appearance of objects, their location, appearance, color, and so on. can change. Flash provides three different mechanisms for animating objects: frame-by-frame ("classic") animation, in which the author creates or imports each frame of the future "cartoon" and sets the sequence of the presentation: automatic animation (tweened) -animation), in this method the author creates only the first and last animation frames, and the intermediate frames are automatically created by Flash itself; There are two types of tweened-animation: motion animation based on moving an object and shape animation based on transforming an object; script-based animation; The scenario is that in the Flash programming language (this language is called ActionScript) the behavior of the object is given. The syntax of this language is similar to other scripting languages used in Web documents (e.g. JavaScript and VBScript).

Each of these mechanisms has its advantages and disadvantages. For example, tweened-animation has two advantages: first, the author avoids the need to create each frame separately; secondly, to display such a 'cartoon', it is sufficient for Flash to





save only the first and last frame, which in turn ensures that the size of such a film is small.

However, tweened-animation can only be used to create simple plots in which the properties of an object change in one plane.

The main function of Flash is to create interactive Web pages rich in graphics and animation. But Flash is a unique standalone technology. Therefore, the creators of Flash have also developed two other options for the use of films obtained with its help. The first is to show Flash movies independently (independent of the Web browser), and the second is to convert Flash movies to other formats.

An object-oriented approach is used in the creation of each Flash movie. This means that all elements of the film are interpreted as objects of this or that type. For each of these objects is given a set of properties and allowed operations. For example, for a "Text" object, the character size, color, and other parameters must be set. Edit text, enter, copy, create text-based hyperlinks, and more. The same can be said of sound and graphics. However, when working in Flash, the term "symbol" is used instead of "object". Their main differences are as follows:

A symbol is a template that has a set of unique properties of an object. Characters are stored in a special library. The characters in this library can be used multiple times, both in one movie and in multiple movies at the same time. Each new copy of the symbol placed in the film is called an instance of the symbol. The instance inherits all the properties of the symbol itself, and a connection is formed between them: when the properties of the symbol are changed, all the properties of the instance automatically change as well. This approach reduces the time it takes to make films. In addition, the mechanism of character application also leads to a reduction in the size of the film: if more than one instance of a symbol is used in a film, information about the properties of each instance of it is ignored. The dynamics in flash films is provided by the fact that the copy changes one or another feature (for example, coordinates, color, size, etc.) over a period of time, that is, the state of the copy changes. With each position of the copy, a separate frame (Frame) of the film is linked. The frame corresponding to the change of the state of the instance is the main (key) frame (Keyframe). The main frame itself is also seen as a separate object. There are special functions and commands for the main staff.

The dynamics of film frame sharing is described using a timeline. The parameters of the time diagram can be the frequency of frame exchange, the start and end of the object movement, and other parameters.

Several different objects can be used in the film. The state of each can change independently of the other or remain unchanged at all (e.g. if one object is used as a





background). To make it easier to describe the movement of the various elements of the film, each of them is placed on a separate floor. The creators of the flash compare them to a thin shell to explain the role of layers in the film. When a few of these sheets are gathered into a bundle, a certain scene appears. Scene is another term for Flash. Each scene consists of a specific set of layers. For simple films, it is enough to create and describe a one-story scene. For complex films, you will need to create scenes of several different looks. The transition from one stage to another is done using a different mechanism rather than a time diagram. Normally, the film scenes are performed in a certain sequence, in sequence. ActionScript is used to create a more complex movie.

Another important role in the creation of complex films is a clip (Clip, or Movie clip). A clip is a special type of character. It is a kind of mini-film, for which a special time diagram and special parameters (for example, the frequency of frame changes) are set. For multiple use of the clip, the film can be placed in the library like any other element. Each copy of the clip is given a unique name. Each element of the film can also be used inside the clip. You can also create built-in clips. ActionScript language tools can be used to give you some additional conditions for activating a clip within a movie. You can also add interactive elements (such as buttons) to the clip.

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