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EFFECTIVE ORGANIZATION OF DISTANCE LEARNING

The article discusses technologies and methods of distance learning. Distance learning is a new phenomenon in pedagogy. Distance learning is the interaction of a teacher and students with each other at a distance, reflecting all the components inherent in the educational process (goals, content, methods, organizational forms, teaching aids) and implemented by specific means of Internet technologies or other means that provide interactivity.

The authors consider online services and programs for effective distance learning Genially, iSpring Suite, Canva, Pictochart, Crello, Glogster, etc. Camtasia Studio, Sony Vegas Pro, Adobe After Effects, etc. are recommended for developing video lectures.

Distance learning as one of the forms of education is developing in the mainstream of the scientific and technological revolution and the informatization of public life. A new surge of interest in distance education has arisen against the background of the rapid development of telecommunication technologies, the emergence of the global information network Internet.

The present period in the development of distance learning methods can be called a period of experience accumulation. Teams of teachers, creating distance courses for different areas, gain experience in conducting classes, find the most effective forms of training.

Key words: distance learning, internet, technology, software, mail, video.

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Қашықтықтан оқытуды тиімді ұйымдастыру

Мақалада қашықтықтан оқыту технологиялары мен әдістері талқыланады. Қашықтықтан оқыту - бұл педагогикадағы жаңа құбылыс. Қашықтықтан оқыту - бұл білім беру үдерісіне тән барлық компоненттерді (мақсаттар, мазмұн, әдістер, ұйымдастырушылық формалар, оқу құралдары) бейнелейтін және Интернет-технологиялардың немесе басқа құралдардың көмегімен жүзеге асырылатын бір-бірімен қашықтықтағы өзара іс-қимыл. интерактивтілікті қамтамасыз ететін.

Авторлар Genially, iSpring Suite, Canva, Pictochart, Crello, Glogster және т.б. тиімді қашықтықтан оқытудың онлайн-қызметтері мен бағдарламаларын қарастырады. Бейне дәрістер әзірлеуге Camtasia Studio, Sony Vegas Pro, Adobe After Effects және т.б. ұсынылады.

Қашықтықтан оқыту білім беру формаларының бірі ретінде ғылыми-техникалық революция мен қоғамдық өмірді ақпараттандыру ағымында дамып келеді. Қашықтықтан білім беруге деген қызығушылықтың жаңа толқыны телекоммуникациялық технологиялардың қарқынды дамуы, ғаламдық Интернет желісінің пайда болуы аясында пайда болды.

Қашықтықтан оқыту әдістемесінің дамуындағы қазіргі кезеңді тәжірибе жинақтау кезеңі деп атауға болады. Мұғалімдерден құралған командалар әр түрлі бағыттар бойынша қашықтықтан курстар құра отырып, сабақ өткізуде тәжірибе жинақтайды, оқытудың тиімді түрлерін табады.

Түйінді сөздер: қашықтықтан оқыту, интернет, технология, бағдарламалық жасақтама, видео, электронды пошта.

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Эффективная организация дистанционного обучения

В статье рассматриваются технологии и методика дистанционного обучения. Дистанционное обучение - новое явление в педагогике. Дистанционное обучение - это взаимодействие преподавателя и учеников друг с другом на расстоянии, отражающее все составляющие, присущие образовательному процессу (цели,

содержание, методы, организационные формы, учебные пособия) и реализуемое специфическими средствами Интернет-технологий или другие средства, обеспечивающие интерактивность.

Авторами рассматриваются онлайн-сервисы и программы для эффективного проведения дистанционного обучения Genially, iSpring Suite, Canva, Pictochart, Crello, Glogster и др. Для разработки видео лекции рекомендуются программы Camtasia Studio, Sony Vegas Pro, Adobe After Effects, и т.д.

Дистанционное обучение как одна из форм образования развивается в общем русле научно-технической революции и информатизации общественной жизни. Новый всплеск интереса к дистанционному образованию возник на фоне бурного развития средств телекоммуникационных технологий, возникновения мировой информационной сети Интернет.

Настоящий период развития методов дистанционного обучения можно назвать периодом накопления опыта. Коллективы педагогов, создавая дистанционные курсы для разных областей, нарабатывают опыт проведения занятий, находят наиболее эффективные формы обучения.

Ключевые слова: дистанционное обучение, интернет, технология, программное обеспечение, видео, электронная почта.

Different methods of education are emerging in line with modern trends. One of them is the system of distance education. Distance learning is a new phenomenon in pedagogy.

Distance education is organized in both developed and developing countries and in the new millennium it will play an increasingly important role, demonstrating its flexibility and variety of forms.

Distance education is organized in both developed and developing countries and in the new millennium it will play an increasingly important role, demonstrating its flexibility and variety of forms. Distance education - three generations of development. Looking at the history of distance education from a certain angle, one can see that the success achieved in the process of its development belong to several "generations".

The first such "generation" was handwritten and printed material. For centuries, manuscripts have been used to convey information, but with the advent of typography, it became possible to produce inexpensive textbooks. The beginning of the "second generation" is associated with the founding of the Open University in Great Britain in 1969. It was then that for the first time in distance education, an integrated approach to learning began to be applied.

Bilateral interaction was carried out with the help of face-to-face consultations, short-term courses and, of course, correspondence. Such a model was quite expensive at the preparatory stage, but with the creation of all the necessary materials and programs for the training of each new student, it no longer required such costs. The "third generation" of

distance education is based on the active use of communication and information technologies. With the advent of these technologies, new opportunities have emerged for two-way communication, both synchronous (video or audio graphic conferences) and asynchronous (e-mail, Internet, teleconferences).

The essence and content of the concept of "distance learning"

Distance learning is a new phenomenon in pedagogy.

Distance learning (DL) is the interaction of a teacher and students with each other at a distance, reflecting all the components inherent in the educational process (goals, content, methods, organizational forms, teaching aids) and implemented by specific means of Internet technologies or other means providing interactivity [1].

Distance learning is an independent form of education, information technologies in distance learning are the leading means.

The concept of "distance learning" (from English, distant) is widespread in the educational environment of Western countries and Russia. The term "remote" from the English, (distance - distance, distance).

Distance learning - learning using telecommunications, in which the subjects of learning (students, teachers, tutors, etc.), having spatial or temporal remoteness, carry out a general educational process aimed at creating external educational products and corresponding internal changes (increments) of subjects education.

Distance learning is a new learning technology, i.e. the training system with its component composition: goals, content,

methods, organizational forms, teaching aids and a component of the lifelong education system along with other technologies [2].

Distance learning can be defined as a purposeful, organized process of interactive interaction between learners and learners between themselves and with the means of learning, invariant to their position in space and in space.

The technology of distance learning is focused on the didactic application of scientific knowledge, the scientific organization of the educational process with the account of empirical innovations of teachers - developers of courses and tutors, and the direction of achieving higher education. It presupposes the management of the learning process, and it includes in itself two interrelated processes: the organization of the activities of the learner and the control of this activity [3].

Another common technology of distance learning is case technology. Most of the case study technology of distance learning is similar to what is called distance learning. Case technology involves the completion of educational and methodical materials in a special set - a case, which is sent to the student for independent study. For the appearance of questions, it is recommended to periodically refer to teachers-consultants in the corresponding educational centers.

TV technology is more extravagant: the talk goes about television lectures. Today, this direction is becoming more popular and seems to have finally given way to a position that is rapidly evolving with information technology. Moreover, the development of educational courses in compliance with the standard of digital television, certified, in particular, by the American Federal Commission on Telecommunications. Soon it is planned to use WebTV technology, allowing decoders to receive educational programs directly from the Internet on home TV.

In general, it should be noted that the use of distance learning technology, built into the use of Internet technology, displaces all other technologies of distance learning. This is due to the fact that Internet technologies are gradually being included in other information technologies. For example, telephony is becoming more and more part of the Internet [4].

The current demand in the field of education also requires an increase in the level of education of students.

That is why we want to offer online services and programs for distance learning in the effective organization of distance learning.

Services for the development of interactive educational content

Additional services for the development of interactive content in distance learning can be obtained from the following platforms: Genially, Canva, Pictochart, Crello, Glogster, etc.

Genially is one tool for creating all kinds of didactic resources, presentations, games, interactive images, maps, illustrated processes, resumes, and more.

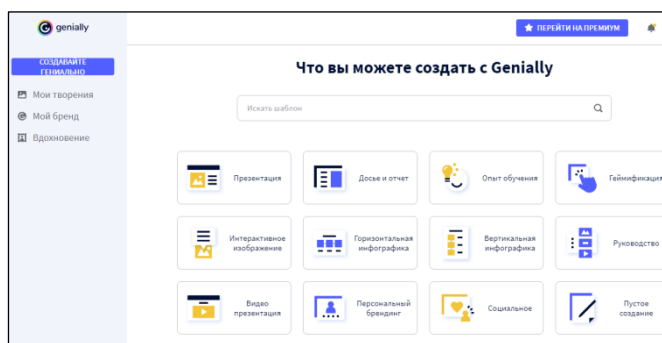
Ideal for all levels of education and e-learning.

You can work in it simply and quickly, because it offers a variety of templates for creating resources, a large selection of interactivity. Interactivity allows you to comment on objects, open pop-up windows, make hyperlinks to project slides and external resources.

Genially saves all the content you add to the cloud storage, so you can leave unfinished work on a project and continue it on another computer (Pic 1. Genially programm).

Also, the platform supports collaboration, which means that you can work on the same project with other people at the same time, together transforming content based on common ideas.

Excellent tool for all levels of education and distance learning [5].



(Pic 1. Genially программ)

Canva is a cross-platform service for graphic design, based in 2012. The creation of images in the service is based on the principle of reproducing ready-made elements and varying variable templates. The graphic editor gives access to the built-in library of templates, stock photos, illustrations and fonts. Canva is a very convenient design platform in the education system. An important advantage of this tool is that it is free for any user, students and teachers can work together in real time and edit their design.

On the platform you can create images for publication on the Internet, as well as layouts for printing products [6].

Edpuzzle.com is an online service for creating video clips with the ability to add voice comments and questions on the material covered. You can create an interactive quiz based on videos or videos from YouTube, Videoing do the Internet sites, add voice comments to the video with open-ended questions or choose one of several answers. Edpuzzle allows you to create a group of students and track which of them watched the video and how they performed the suggested tasks [7].

H5P is a convenient constructor for creating interactive tasks based on templates. All H5P components are made in modern HTML5 format. It is possible to study the work done in this service on any device. H5P constructor - interactive video, blank filling tasks, placement of elements by moving, question-answer sheets, quizzes, etc. creating an intuitive interface tool. To use the service, you must first register and then select a template. All created materials can be posted on websites or other Internet resources [8].

Software for recording screen images (screenshots)

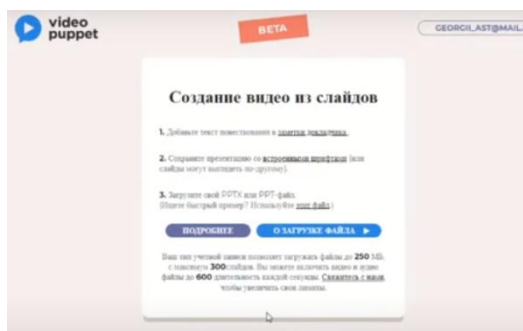
The following programs can also be used to record screenshots: Bandicam Screen Recorder, VideoPuppet, Loom, RecordCast, FlipGrid, FreeCam, Screencastify.

Bandicam Screen Recorder is a simple recording program that can record the entire screen or just part of it. She allows you to easily record streaming videos and more. The program has several modes, such as screen recording mode or recording mode with the device [9].

Pros:

- saves all recorded videos in AVI or MP4 formats;
- offers voice recording in real time to create screen broadcasts;
- suggests drawing in real time during recording time;
- allows you to overlay watermarks and overlap webcams during recording.
- allows you to add effects to the click of a mouse or animation during recording;
- optimizes the recording process with the help of hardware acceleration (in the presence of support).

Video Puppet converts the finished presentation into a video file, which allows you to add audio to the presentation. To do this, insert the required text in the comments section of the presentation slide. You can download the presentation to Video Puppet, set the required parameters (sound type, etc.), and when the conversion command is executed, you can get the finished material (Pic 2. Video Puppet программ).



(Pic 2. Video Puppet programm)

Programs for video lessons.

Video lectures can be prepared using the following programs: Camtasia Studio, Sony Vegas Pro, Adobe After Effects, etc.

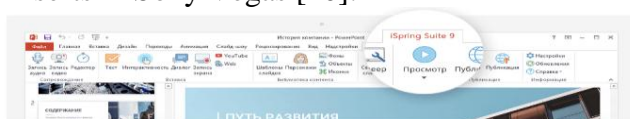
Sony Vegas Pro is a professional program for creating and editing videos. Unlike Camtasia Studios, Sony Vegas can be offered to users with video editing experience, and they have the ability to add various effects and animations when creating a video. The advantage of the program is that it includes many video filters that can significantly improve the video quality or give the video its own look. You can also make animated inserts in Sony Vegas [10].

The program for creating video courses **iSpring Suite** also creates educational games, dialogue simulators, electronic courses.

The peculiarity of the program is that it is embedded in PowerPoint, ie. you will be able to assemble the training video without leaving PPT.

After installing iSpring Suite in PowerPoint, an additional tab appears:

By the way, in this tab there is a video editor, with the help of which you can record screenshots with pop-up tips, video presentation for the presentation, edit the lecture (Pic 3. Window iSpring Suite).



(Pic 3. Window iSpring Suite)

Possibility of video editor iSpring Suite

The video editor is able to glue and cut fragments, reduce the volume, add watermarks, text captions and different video effects. But there are features that make the iSpring Suite video editor different from others.

- Record video from your PC screen and webcam at the same time. You can show video parts together or alternately.

- Video and audio processing from different lanes. The number of lanes is unlimited - you can add as many layers as you need.

- You can cut out all the failures of the sound and combine the video from different fragments.

- work with the crm-system with the help of the lecturer's explanation.

- Text additions. Infographics, tables, captions can be added anywhere in the video.

- Artistic integration. You can add animated transitions between video scenes to make the lesson more interesting. You can adjust the transition effects so that the next frame appears after the flash, or from anywhere.

- Video lessons with tips. When recording a screen cast, the program automatically accepts shortcuts, clicks, types text, and adds visual hints that can be edited into a video lesson.

- Videos are recorded in Full HD. The finished video can be immediately uploaded to YouTube [11].

Camtasia Studio - a program designed to capture images from the monitor screen and create them on the basis of video files: video tutorials, presentations, demonstration slides for lectures, etc.

Camtasia Studio is a program designed to capture images from the monitor screen and create video files based on them.

In the process of editing you can add to the project multimedia files (images, sound, video), use different visual and audio effects (highlighting, scaling, titles, etc.) [12].

Made with the help of Camtasia Studio video can be exported in one of the supported software formats:

- **MP4/FLV/SWF;**
- **M4V;**
- **AVI ;**
- **WMV;**
- **MOV;**
- **RM;**
- **GIF;**
- **MP3.**

It also allows you to create an exe file with a built-in video player. Camtasia Studio is developed by Tech Smith Corporation, the world's leading screen and video recording software company for personal and professional use. The 30-day free version of the program can be downloaded from the company's website <http://www.techsmith.com/camtasia/>.

Methodical support of distance learning

The subjects of distance learning technology are trained and pedagogical workers.

Distance learnings are based on conducting distance learning activities in on-line and / or off-line mode.

Educational classes in the "on-line" mode provide the process of educational interaction in real time (video conferencing, chat, telephone conversation).

Educational classes in the "off-line" mode provide the process of educational interaction, in which the communication of the teacher and the student asynchronously (e-mail, the work of the student with the textbook on the assignment of the teacher with the next counterpart).

Necessary conditions for the organization of the educational process by distance learning technologies are available at the organization of education:

- educational Internet portal with pages containing educational-methodical and organizational-administrative information for students;

- equipment that has access to the telecommunications network (Internet, satellite television);

- various terminals: multimedia classrooms, electronic reading rooms;

- educational content (own and / or purchased) on CD, DVD;

- network educational multimedia content (own and / or purchased);

- teaching, auxiliary and technical staff, corresponding training;

- multimedia laboratories for the creation of own content (local and network);

- network testing complexes;

- Learning Management System (LMS);

- Learning Content Management System (LCMS).

The distinctive feature of distance learning (DL) is the emphasis on self-study of educational material. In the educational process DL are used as traditional, as well as innovative means of training, based on the application of computer technology and telecommunications and other new information technologies. DL technology is based on the application in the educational process of various types of educational and methodical literature - printed materials, electronic textbooks, audio and video products [13].

Distance learning as one of the forms of education is developing in the course of the scientific and technological revolution and the informatization of public life. A new interest in distance learning has emerged in the context of the rapid development of telecommunications technologies and the global Internet. The current stage of development of distance learning methods can be called a period of experience. Teams of teachers gain experience in conducting lessons, creating effective courses in different areas, find effective forms of teaching.

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