Hi. Welcome to Content for eLearning. My name is Christopher Karachristos, and I am an instructional designer for Hellenic Open University. In this video we will discuss about the educational content types for eLearning. There is a very wide range of media available for teaching and learning. Text, audio, video, graphics, and animations all have unique characteristics that make them useful for teaching and learning. By the end of this video, you will be able to determine the different types of available media and their main characteristics.

00:33

Even in a digital learning environment text remains an important representation form and still plays a major role in formal education, training, and distance education. Many fully online courses still make extensive use of text as educational resource. Text is a powerful teaching medium because it is ideal for explanation in case of abstraction. Written text is important for communicating course content.

Great attention should be given to its graphic display and integration with images. In addition to words, text may contain static visual material, such as photographs, diagrams or tables, mathematical symbols and expressions, and hyperlinks to external sources. It can be accessed in a linear or hierarchical manner.

Some of the key characteristics of text are: text is words and symbols in any form, spoken or written and it is the most common system of communication, text is used in the most multimedia eLearning resources, text enables the linear sequencing of information in a structured format, it can be combined with other media in a powerful and meaningful way, it is very easy to manipulate it, like create, update and delete, text is particularly good at handling abstraction and generalization, mainly through written language. It can present empirical evidence or data from the abstractions, conclusions or generalizations, still graphics such as graphs or diagrams enable knowledge to be presented differently from written language, either providing concrete examples of abstractions or offering a different way of representing the same knowledge.

02:12

In this image you can see the main text-creation software tools that exist nowadays, and some of the universal text presentation formats that are acceptable for the delivery and presentation of educational resources.

02:26

Graphics or visuals include illustrations, pictures, diagrams, and icons. They can be divided into seven categories and have different functionality to represent the various types of training content. According to Ruth Colvin Clark, writer of the book "Graphics for learning", the seven categories of graphics are decorative, representational, mnemonic, organizational, relational, transformational, and interpretive visuals.

02:52

Decorative visuals which are pretty pictures, or images that are added for aesthetic or other non-educational reasons. An example is an image of 3 water drops discussing with an oil drop in a lesson about water molecules. The image doesn't help anyone understand water molecule's structure.

03:10

Representational visuals are the most common graphics seen in educational modules. They are intended to depict the actual appearance of content. The goal of representational graphics in eLearning is to illustrate onscreen objects or scenes, thus helping learners relate to the subject quickly and easily. They can be real photographs or screen shots of any concept.

03:32

Mnemonic visuals are memory retrieval for cases where students must recall information. They capture the meaning of complex concepts or facts and encapsulate them as another concept that's similar and easy to remember. A mnemonic visual helps learner to remember an idea with a pattern of numbers, letters, or relatable associations such as images, acronyms, or rhymes.

03:55

Organizational visuals are typically represented in the form of maps, or tree diagrams, and help learners to understand qualitative relationships among content.

04:05

Relational visuals include bar graphs and pie charts and are basically establish quantitative relationships. Instead of using text filled with numbers and percentages to show information, relational visuals can be effectively used to present the same in a clear and precise manner.

04:22

Transformational visuals are graphics that show changes in objects over time or space. They are often used in combination with representational visuals to illustrate procedures and processes. Animations can also be included in this category, but they have some features that we will talk about separately later.

04:41

Finally, interpretive visuals help learners in understanding the concepts or principles. When explaining an abstract concept, visuals are used to make the concept clear and understandable.

04:55

Video is the technology of capturing, editing, storing, transmitting and playing a series of images to display moving scenes. Additional data may be added during editing, such as comments or subtitles and various external sounds. Videos are the most used multimedia resource in the creation of content for eLearning. It is the only media that makes it possible to reproduce behavior, processes, or procedures the way they appear in real life.

05:24

Videos can be developed in a variety of formats. Examples of video formats are mp4, mpeg, avi, mkv, flv, etc. A suggested format for all browsers to play is mp4.

05:39

In this image you can see the minimum requirements for video developing.

05:48

Different educational video functions. An interview is defined as a discussion of speakers using questions and answers. A speaker asks predefined questions and the speakers who are asked to answer, have a specific time at their disposal in order to answer. During the speech, slides in the form of a presentation or images can be inserted.

06:09

Free discussion is defined as the discussion between speakers on a specific topic. As in interview, during the discussion, slides or images can be inserted.

06:19

A lecture is an oral presentation intended to present information or teach people about a particular subject. Video lecture is a video which presents educational material for a topic which is to be learned. It might be a video with a teacher speaking to the camera and a number of images and text or mixture about the topic.

06:39

A video of a directed script could be a demonstration, a documentary etc. on a subject. Most of the times the participation of actors or speakers is needed.

06:50

A video made from excerpts is the procedure of combining multiple video excerpts from different resources, about a subject, in order to create a final educational video.

07:00

Screen recording a.k.a. screencast, is the digital recording of the screen content of a computer used by the narrator, with the use of special software.

07:10

According to multiple researches in the field, an important aspect concerning videos for eLearning, is their technical adequacy, regarding the quality in the image, the graphics, the sound, and the lighting. So. it is crucial to follow the suggested technical specifications mentioned earlier.

07:27

In conventional education, a lecture usually lasts about an hour, for the presentation of a subject. In online courses, a good practice is to create short autonomous videos. In the case of long videos, it is proposed to divide them into smaller ones, maintaining a consistent sequence between them. For example, the presentation of an object could be divided into smaller videos, where each would present a different concept or view of the object. To this end, leading eLearning providers recommend creating 3-to-7-minute videos. Transferring information with short video presentations helps learners, while showing videos longer than 10 or 15 minutes presents a risk of losing their attention. There is a case for some objects to be more difficult to present them in the suggested time period, so in these cases it may be necessary to exceptionally exceed the suggested time.

08:20

Starting a video should include an insertion interval, in which the main points of the video will be presented. During this period, a retrieval of previous experiences and knowledge can also be done, using introductory questions and activities. In the main part of the video, the Principle of Segmentation should be applied, and pauses should be used. It should be clear when the description of an object begins and ends and the connection of the individual objects in the video should be attempted. Finally, corresponding to the beginning of the video, in its last period it is considered important to briefly describe the basic elements of the presentation.

08:57

Regarding the presentation style of the videos, this should be characterized by immediacy, be authentic, possibly with humor and radiate enthusiasm. In addition, the vocabulary used should not be repeated in the pictures, while there should be synergy between words and images. The language used by the video speaker should be colloquial, simple polite and

friendly, the voice should be clear with changes in its rhythm, while short sentences should be used in moderation or relatively fast pace.

09:26

Video tutorials should be accompanied by their subtitle files. Subtitles must be written in at least the audio language of the video, and similar subtitles can be created in other languages alternatively. Subtitles must be created and offered in .srt which means "Subrip format text". Supporting subtitles in more than one language requires the creation of an equal number of different .srt files. Learners will be able to save the subtitle files, using them as part of the training material.