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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.

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Recorded audio is a very powerful educational medium and the effective use of it, increases the effectiveness of a course component. Audio can be used in combination with on-screen text to summarize or expand key points. Audio narration is more effective than text when providing comments on animations or videos. A narrator's voice can provide information that remains in the learner's memory, helping him to retain and retrieve it later. Benefits of using audio components in eLearning include: Vocal expression & content quality: Even the most well-written and artistically designed texts and graphics may not be able to capture the essence of a concept or theory in the same way that speech does. The differentiation in the tone of voice, can offer an additional content in the educational material through the different style of voice. The sound of the speakers' voice, the pitch, the pace, the pause, the power, and the pronunciation, are all features of the voice that must be used accordingly. Encourages critical thinking: A text may be accurate, but a speaker's voice can encourage learners to process not only the content but also the context in which it is described, that is, how it is expressed and what it implies. Emotional engagement of the learner: Listeners find it easier to connect with a voice, especially when it is clear, articulate and persuasive, rather than connecting emotionally by reading a text. This feature can be a critical factor in retrieving and retaining information. Accessibility: Visually impaired learners usually have easier access to lessons with audio content than with text. However, there should be a subtitle text with the content of the audio material, so that learners with hearing loss can read any material they may not be able to hear.

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According to Wikipedia, podcast is an episodic series of spoken word digital audio files that a user can download to a personal device for easy listening. Streaming applications and podcasting services provide a convenient and integrated way to manage many podcast sources. Unlike traditional radio or other Web-based streaming media, podcasts give listeners control over when they hear the recording. Educational podcasts are for anyone who wants to learn through audio lectures, discussion, and interviews. Podcasts are a unique innovation in eLearning content publishing, based on its inherent simplicity and ease of use.

All the tools needed to create, modify, and distribute podcasts are within reach of anyone with a reasonably well-configured laptop or even smartphone. Podcasting demonstrates the power of listening audio over text reading, allowing podcast users to listen and learn while they walk, jog, or are otherwise away from their computer screen.

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Here you can see some of the most known podcast service providers, where you can find many podcast educational resources.

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Animation is defined as the rapid display of a series of two-dimensional or three-dimensional graphic images in order to create the illusion of motion. The moving visual material has been produced through special software and its purpose is to represent events that can not be easily shown using a static image. This digital material is either a video or an executable file generated by a graphics application. It can therefore consist of image, sound and text. Educational animations are animations produced for the specific purpose of fostering learning. It is associated with educational technology with the way it supports teaching and learning using technological tools to facilitate learning and to improve performance. Well-designed animations may help students learn faster and easier. They are also excellent aid to teachers when it comes to explaining difficult subjects. With the aid of computer animations, learning and teaching might become easier, faster and amusing. According to Williamson and Abraham, animation helps students learn in two ways. It facilitates the creation of mental representations of concepts, phenomenon, and processes and it also replaces difficult cognitive processes like abstraction and imagination. There are also studies that revealed that learning is facilitated as animation create positive attitude among the learners, leading to positive learning outcomes. Because animations and simulations are difficult to produce due to the cost and difficulty of learning the software, the use of animations available as Open Educational Resources is recommended. Such examples of simulations in science subjects such as biology and physics can be found at PhET, or at the Khan Academy for mathematics, but there are many other sources as well.

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There are five types of animation that can be used for instructional purposes, including: 2-D animations which are animations where the illusion of motion is created, by the rapid display of a sequence of static images or frames that minimally differ from one another. 3-D animation which means animations where is created the illusion of moving objects rendered from 3-D wireframes. Based on mathematical algorithms, the objects can be rotated and moved over time.

Motion graphics which means moving graphical elements and text across the screen. This is what we create with certain authoring and presentation tools. Transformations which are animations that depict changes without movement, such as color transformations or lines changing from thin to thick. And finally, stop-motion animation which are photographs of an object shown in a quick sequence to create the illusion of movement.

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Animations are the best option for educational content when: explaining a dynamic process, visualizing things what cannot be seen with the naked eye, or simulating a system, making abstract concepts more concrete, depicting hosts and agents that explain, telling a story, creating a learning game or elements in a game, constructing knowledge in mathematics and visualizing quantitative data.

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Here you can see software for creating animations.