ELEARNINGNEWS ARTICLE

Year 6 - number 225 Wednesday 23 november 2022

How to edit the audio of your eLearning courses

One of the main components that should not be underestimated when working on a new eLearning course is the audio stream.

We have already talked about the **tricks to use when making an audio content recording**, in this article we will focus on optimizing the audio stream we already have on our content development timeline.

The importance of good audio

Managing a good audio stream is not only one of the main skills of a content creator but is the essential activity of an eLearning course producer.

Increasingly, especially in microlearning course production, audio content and podcasts are relied upon to convey a message, a best practice or, if you will, a complete set of information for business use.

Structuring pleasing audio content becomes, in this sense, a critical activity to achieve excellent results and, above all, to scale and industrialize a process that, over long distances, could cause management and, above all, quality problems.

As we anticipated in our previous article devoted to audio, when we talk about video or multimedia course too often we think of the visual component and images. Of course, they play a key role in the success of an eLearning product but, speech, music and sound effects are also particularly important.

If you are taking your first steps into the wonderful world of content creation for eLearning products you should know that there are different types of audio that you can implement within your creations.

Audio recorded by a camera or microphone

This is the type of audio that you will need to process most frequently. It is an audio stream recorded by a more or less professional instrument (we will also understand why) and will be provided in different formats. The most used video formats in eLearning are .mov and .mp4 at a rather low bitrate (ranging from 0.4 mbps to 5 mbps so as not to burden the scorm weight and space of an enterprise LMS) and contain audio that can have different compressions and formats: the most used in elearning are .mp3 and .aac with a compression between 92 and 128 kbps.

To simplify the concept: imagine the audio recording as a set of points that, when processed, allow a given sound to be reproduced. The greater the quantity of those points, the better the sound output.

In addition to the sampling of the audio stream, there are additional elements at play such as the recording technology and the presence of any background noise or recording noise.

Basically, to get a good sound you will have to work on a good recording: if that is not possible you will have to have some tricks in **post production**.

Music

Think about the last movie you saw, whether it was action or set in a magical realm, what would it have been like without the soundtrack? Music is a very important element of a good audio mix for an eLearning course, and you need to know how to take advantage of it.

Always use royalty-free music, there are many sites that offer subscription plans with immense libraries and save a lot of time in research while achieving excellent results in terms of both quality and originality.

Silence also takes on an important value when it comes to creating a good audio mix. Often we need the music to liven up the content a bit and make it more usable but, in other cases, it will be necessary to turn down the volume of the music or turn it off to ensure focus on a particular topic.

Does the sound of silence ring a bell?

Clients often ask to use the same jingle (often on a loop) in all training units, essentially for two reasons: to make a course recognizable and to create an imprint in the learner's mind.

Personally, I find this choice unfortunate: the user experience improves if we are able to create variety while maintaining consistency in our choices. I would not choose death metal and acid jazz tracks in the same production but, in agreement with the content production team, I would choose a series of tracks capable of keeping the concentration high and daring more in the moments when there is no vocal recording such as, for example, in the intro or closing of a training pill.

It is therefore important to know how to dose the audio level and, through editing or authoring software, manage the volume of the music wisely: higher in moments not commented by a voice over and, definitely lower, when the learners will have to address a topic with ears...open!

Sound effects

Sound effects are a real icing on the cake. You can create your own sound effects or download hundreds, if not thousands, using the free or paid service of some sites you find online. My advice is to buy a quality package that you can then use in all your productions creating a real stylistic signature.

Thanks to sound effects you can enhance your graphics, insert impacts, swooshes and whatever you want when transitions or elements to click or select appear on screen. Your job is, in short, to enliven content that, presented as is, might be a bit boring to the learner. By using sound effects to combine with editing or narrative gimmicks, you will be able to create interesting results.

Be careful, however, it is really easy to overdo it and get carried away: in these cases it is always best to have good taste and decide when to stop including sound effects to avoid a...boomerang effect!

How to set up the audio mix?

In order to create the right mix for your eLearning content you will, of necessity, have to use audio or video editing software. Every multimedia editing software also contains an audio mixing system that allows you to edit sounds, adjust volumes, apply EQ and set other effects as well as cut audio tracks to your liking.

There are many professional editing software products, but depending on your needs, you can choose to use a free-licensed product or invest in one with a broader range of features.

The first type of editing you will be required to do is **cutting audio tracks**, so you will need to split different audio streams onto different tracks on your timeline. To each track you will assign a type of audio: at the top the voice over, right after the sound effects, and finally the music.

You can **adjust the volume** using the audio stream editing tool, which is always present within editing software. This tool gives you control over each track, choosing where you want to intervene and which sound element you want to emphasize most.
My advice is to always use headphones when dealing with this aspect: the greater the isolation from external environmental factors, the better the final sound performance will be.
Fading effects are a great narrative ploy when it comes to sound. You can mix your audio by having the audio tracks go in and out with a certain smoothness; this trick is really useful for improving the style of your production-.

The **Equalization** phase allows you to create an optimal balance of sound by correcting timbre, eliminating recurring hiss and noise, and setting the stage for proper listening with mastering operations.

Equalizers are divided into graphic equalizers and parametric equalizers: graphic equalizers divide the entire musical spectrum into several slider-adjustable portions; parametric equalizers are more complex but allow more settings to be adjusted.

A book would not be enough to describe the possible equalization and audio editing operations, but in general, there are numerous audio editing plug-ins available on the market and in major software that make use of artificial intelligence algorithms and machine learning to optimize the sound of your content.

If your sound is not usable you can try using anti-pop filters to remove annoying "pops" in the sound, you may need a filter to reduce background noise, or, which happens often, you may need to insert a filter that semi-automatically enhances the voice you used for your course.

Using voice and music enhancement filters will give you greater sonic presence, dramatically improving your productions.

Take special care is also required when exporting: when you have finished creating your course, try not to settle for the default settings of the authoring software. Rather, increase the sound compression quality to get a better result in terms of output, even with the latest generation of headphones and earphones.

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