

Structure of Educational Video

In this manual, we will guide you through the process of creating a structure, particularly for a short educational video.

We will provide tips on how to prepare your introduction, core, and wrap-up. In the end, we will discuss how to motivate learners during your videos using ARCS model of motivation.



Structuring your video

Why to create a structure

- There is a big difference between recording a video and teaching face to face; even if you are an experienced teacher, for a video recording you can't just 'go with the flow'. Presenting in front of a camera is a different experience from presenting to a live audience. There is no-one to direct your attention to, improvisation is much more difficult, and you don't get any live-feedback or questions to direct your presentation. The presentation also needs to be much more fluent.
- Recording videos is a time-consuming process. Creating structure helps you think beforehand about what you are going to discuss, in what order you want to discuss topics, and how exactly you want to phrase your messages. A clear structure enhances the quality of instruction.

Preparation

- Start your preparation with the learning objectives in mind; what do you want your learners to learn from this video? Use a maximum of two learning objectives for one video.
- Is a video the best medium to achieve these learning objectives? If so, think about the added value of the video; why is it better than for example reading a white paper or written text?
- If you are not experienced with the content you want to discuss, start gathering information about the subject and filter what is relevant and what's not. Separate the information load and start getting concrete!
- If you know what you want to discuss, write down a list of topics that you want to include in your video. This will help you to make a structured plan of the video.
- Aim for a short, focused video. Keep a time range of 4-9 minutes in mind. If videos are brief, it motivates the learners to watch the whole video and to watch more videos.

Introduction of the video

- Welcome your learners to the video. This will give them the feeling that you're glad that they are watching (again).
- It's important to give a personal touch, to give the learners an idea of who is talking to them, and the feeling that you are really talking to them. A personal intro and

- outro can be helpful in this respect. Next to that, you could explicitly talk to the learner, by using 'you'. E.g. It's nice to have you back!
- 'Establish relevance'. Why is it important to watch this video? Establish the relevance frequently during the video but especially at the beginning and in the end. What are the applications? Give some realistic examples.
- Mention the learning objectives; what are learners able to do and understand after watching this video?
- If you expect learners to have prior knowledge on a subject, either from a previous video or as a preparation then make this clear. State your expectations, provide a quick summary or refer the learners to where they can find more information about the topic. It could also be useful to include a pop-up question so learners can activate and assess their prior knowledge.
- Provide structure. Give a clear overview of the main topics that will be addressed in the video. Keep this overview to the point. If relevant, also relate the topic of a video to the previous one or to the main topic of the module.

Core: theory & instruction

- Use functional examples to illustrate theories and concepts. For example: when you're talking about consumers in the supermarket don't jump from buying apples to cola and then to chewing gum, this is confusing for the learner. The attention grows when you keep it simple and functional.
- Use a personal touch frequently during the video, this is very motivating for the learner. For example, by addressing the individual learner directly: "It looks complicated, but if you..." or by relating personal experiences, adding anecdotes or giving your personal view on a subject: "This is what interests me...".
- Be consistent in the use of terminology. Are the learners familiar with these terms? If not, explain them. For example, give a synonym or a short definition. Additionally, if you use any acronyms, explain their definition the first time you use it.
- When using a graph to explain a process/phenomenon, first of all detail what the graph shows including what is presented on each axis, and then provide a conclusion.
- Make the video timeless. For example, when you say: "see you tomorrow", you don't know if the learner will watch the video at that time. Also, be careful with references to paragraphs in books, the edition and page numbers can change over time.
- Be sure the use of language is comprehensible for international viewers. Also be sure the examples aren't culture-bound.
- Provide structure. Make connections between sections, wrap up sections neatly when moving before moving on to something different and introduce new

subjects. Explain how one is related to the other, or why it is logical/important to move on to a certain topic. You could for example use sentences such as:

- I have so far explained (..), now let's have a look at ...
- If we talk about (..) we should also include (..), let me explain this a bit further.

It's important to do this because it enables the learner to switch between subjects and to make connections between chunks of knowledge.

- Instructors should anticipate and address common points of confusion within the topic discussed.
- Use pop up questions at regular intervals to activate learners, to enable the learners to check their understanding and to help them actively process new information. You can ask questions about what you have previously talked about or let the learner think about a topic before you start explaining it. Pop up questions enhance engagement and motivation!

Wrap-up

- Give a quick summary of what has been discussed, of what learning outcomes have (hopefully) been achieved,
- Wrap up any loose ends. Do you have any 'take-home' messages?
- Provide an outlook of the next step. Do you want to refer to the next video, the next module or an assignment?
- Try to include a teaser, to entice learners to watch the next video.
- Be careful with timestamps. For example, don't end with: "this concludes our video today". The viewer chooses if this is actually the last lecture for today or not.

ARCS Model of Motivation

The ARCS model by Keller (2000) provides us with four clear principles that help increase learners' motivation: attention, relevance, confidence and satisfaction. We explain this model because it provides a general idea on how to motivate learners during your videos.

Attention. The video should capture and attract the learner's attention. What are their interests? Think about your own learning, how would you like to learn something new? Also, use variation in your videos. People like to be surprised or like to see something different. Try to stimulate learners' curiosity by asking questions, by presenting dilemma's or counterintuitive information. A common mistake is that you should only gain the attention in the beginning of the video, but it is as important to keep the attention during the whole video! If you want to gain and keep the attention of the learner, capture their interest, stimulate inquiry, use variation and add several pop-up questions.

Relevance. Establish the relevance of each topic and each video from the start. Make it explicit why this video would be relevant for the learner, what its content will bring them. Motivation is lost if the content has no perceived value to the learner. You can enhance relevance by relating the instructional content clearly to the learning objectives, but also to learners' future job or academic requirements. The use of simulations, analogies, case studies and examples are also effective to create relevance. In summary, relate to learning objectives, match interests and tie to experiences.

Confidence. The third element of the ARCS model is confidence. Help the learner to establish positive expectancies of success. Use clear learning objectives and provide examples of acceptable achievements. Another way to improve learners' confidence is by including opportunities for small successes. For example, if the learner completes an assignment successfully there is a good chance that he or she will feel more confident when doing another assignment. In short, you can increase learners' confidence by making learners feel they are in control and have a personal responsibility to achieve successes.

Satisfaction. This last element refers to positive feelings related to one's accomplishments and learning experiences. In the videos you can complement the learners on their good work and acknowledge their progress from time to time to stimulate their sense of accomplishment. If we look at the course as a whole, it is important to make connections between the learning objectives, activities and assessments in the course (known as constructive alignment). The learners want to know when they put in an effort that it is worth their time and they will be appropriately rewarded in terms of their learning outcomes.