

Using visuals



The way in which we design educational videos can either help or hinder our students to make sense of the presented material. We want students to focus maximally on the message we want to convey. We don't want them to waste valuable cognitive capacity on processing irrelevant material or on trying to figure out a confusing design.

The following research based guidelines (based on Richard E. Mayer's multimedia principles) will help you to produce videos that enable students to focus on your core message.

download factsheet: <https://onlinelearninghub.tudelft.nl>

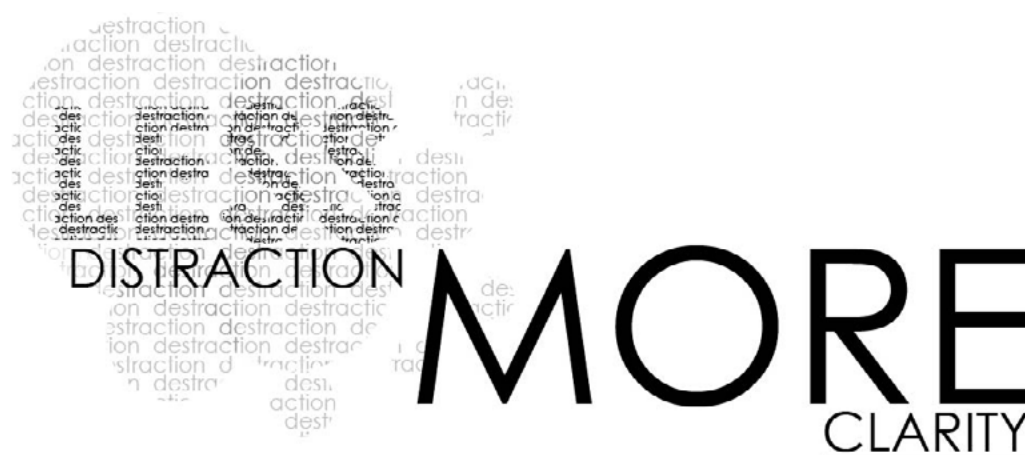
1 Keep it simple

Avoid adding anything that does not support your instructional goal. Do not include entertaining yet unnecessary words, pictures, sounds etc. They may seem to spice up your video, but they actually distract students from your core message.

2 Less is more

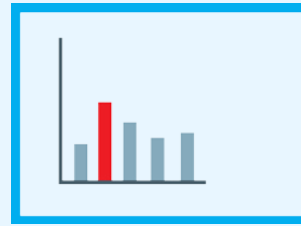
When explaining graphics using spoken word (for example a screencast + audio), don't include written text as well. Students tend to pay too much attention to the printed words, while we want them to pay attention to the graphic and listen to the explanation. If you feel it's necessary to add text to a graphic:

- keep it short: use key words instead of whole sentences
- show the text simultaneously with the spoken text
- integrate the text in the picture

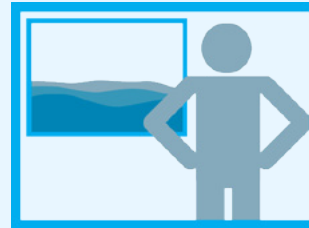


3 Guide attention

When explaining a complex graphic, use signalling so students know where to look at which moment. You can use arrows, zoom in, vary the focus of the image, highlight, etc.



Many educational videos show a 'talking head' and slides. However, it is not necessary for students to constantly see both you and the slides. Alternating head+slides, head only and slides only, is also a way to guide students' attention to where you want it to be.



[This video](#) illustrates the principles mentioned before (5 min).



[This video](#) explains how to create effective slides for education and science (63 min).

Need help? Contact online-learning@tudelft.nl