

Supplementary

File S1: Interview

Introduction

General questions

- Tell me, how did the idea of creating educational videos come out?
- How has the concept of the videos evolved until now?
- How many people are involved?
- Do you have a multimedia design team?
- Do you have a team or an educational expert?

Content questions

General characteristics of the videos.

- How would you define the distinctive element of your content?
- What elements do you think make an educational video successful?

Creation process

- What is the process to create a video?
- Do you consider a different process according with the theme/season?
- How do you define or decide they way to present the content in a video?
- Do you have any important rule or considerations for the edition process?

Elements and learning principles for the videos

- What technical, aesthetic, or expressive aspects (images, animations, texts) do you consider when developing videos?
- Do you prefer any didactic technique or pedagogical theory to make the videos?
- Do you have any theorist's influence or any philosophical consideration about knowledge or learning while making videos?
- Do you think is important to formalize or be awareness about theoretical elements in the videos?
- What didactic aspects (motivation, organization, content about audience) do you consider in the production?
- Do you use any kind of learning style to make your videos?
- What resources do you regularly use in a video and why (whiteboard, drawings, etc.)?
- Do you make any distinction when you use some resources depending on the type of the video or the topic?
- What elements are mandatory in your videos?

Audience considerations

- What element is the most important to you when delivering a video to your audience?
- What considerations do you consider regarding your audience when making a video?

- What type of comments have you received that have helped you change your strategy, content, or topics?

Close

- Do you feel part of the movement or culture of Edutubers?
- What is your vision for this movement?

Table S1: Observation guide

General information of the video	ID VIDEO	
	Number of Views	
	Nombre de video	
	Link	
	Edutuber	
	Classification	
	Comments of the analysis	
	Audience	
Characteristic s of the video	Interactive	
	Collaborative	
	Consider socio-cultural processes	
	Consider prior knowledge	
	Interpreting information for meaning construction	
	Learning through one's own experience (dissonance)	
	Consider information sources	
	Include technology	
	Accurate and current knowledge	
	Consider the changeable reality	
	Concrete experience	
	Abstract conceptualization	
	Active experiences	
	Reflective	
	Community of practice	
	Belonging (consider social structure)	
	Active participation in collaborative learning	
	Knowledge as utility	
	Reflection	
	Evaluation of information	
	Use of mental representations	
	Problem solving	

	Creation of a culture product	
	Logical and hierarchical structure	
	Representations	
	Associations	
	Fragmentation	
	Preference of words and images	
	Preference of pictures and narration than text	
	Preference of words and pictures integrated	
	Same information in different format	
	Avoid irrelevant resources	
	Use of animation when representing Dynamic phenomena or user interaction	
	Adequate aids (heading, indexes, graphics, icons)	
	Avoid blocks of information	
	Colloquial language	
	Problems with free solution	
	Examples of solved problems	
	Complete problems	
	Images + text + explanation	
	Replace written for spoken explication	
	Avoid less effective source of information	
	Increase help for novices and reduce help for advanced students	
	Scaffolding fading	
	Avoid transit information	
	Mentally review what has been learned.	
	Fragment information	
	Collective working memory for complex content	
	Memorization of concepts	
	Expects behavioral change	
	Active modeling	
	Emotion facilitates behaviors	
	Direct reinforcement	
	Vicarious reinforcement	
	Self-reinforcement	
	Consider a positive/negative behavioral reinforcer	
	Attempts to develop new behaviors	