

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	
Characteristics 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	