The Use of Video in Online Learning: Asynchronous Annotating Tools

Dominique De Guchtenaere

Het Perspectief PCVO (Belgium)

<u>dominique.deguchtenaere@hetperspectief.org</u>

Abstract

Video and YouTube are frequently used in online courses for e-learning, blended learning or for flipping the classroom. They are used in different ways: as an introduction to the content, as a simulation of real world examples, as a guided lesson (flipping the classroom), as a preparation for an in-depth discussion etc... [1] But is it always effective? What about the learning outcome?

It all depends on the way and the moment the video is used in the course. Is it a simple teaser, an introduction, or a step in the assimilation or reflection process of the learner? There is in fact a huge difference between watching a video and learning from it, between passive viewing and active learning. In order to learn something, there has to be an interaction with the learner. This interaction can occur on various levels: interaction to the content, to the teacher, to peers.

Therefore it's useful to have a tool to annotate the video and add comments and questions while watching it. Afterwards, the learner can share those notes with the teacher and with his peers. A simple text editor could be used for this annotating purpose, but switching between two screens is not very user-friendly.

In this presentation I will compare two tools for asynchronous annotation where students have a simple text field next to the video: Videonot.es (http://www.videonot.es/) and VideoANT (https://ant2.cehd.umn.edu/). Both annotation tools allow the student to identify specific parts in the video and synchronize their annotations.

1. Introduction

In my blended class of Italian, I often use videos during the distance classes, sometimes as a simple teaser or an introduction, but frequently as a guided lesson. Students who don't understand a part of the explanation can ask questions via email or in a forum or a chat, but it's difficult to explain what part of the video they have troubles with. So I let them take notes while watching the video: students can add comments, questions, remarks in a window alongside the video. These asynchronous notes can be shared with the teacher and with their peers. This presentation will compare two asynchronous annotation tools: VideoAnt and Videonot.es

2. VideoANT

VideoANT has been developed by the university of Minnesota. It is a web based tool, so it can be used on every platform. No need to download any software. No registration is needed to annotate a video, although signing in with a Twitter or a Facebook account has some advantages we'll discuss later. Users can start annotating by copying a YouTube URL to the following webpage: https://ant2.cehd.umn.edu/.

2.1 Supported browsers and videos

VideoANT supports the following browsers and YouTube videos:

	Chrome / Safari /	(b)	O	€	€
	Mobile	Firefox	Opera	IE10	IE7/8/9
YouTube	~	~	~	~	×

Fig. 1 supported browsers and video

2.2 To sign in or not to sign in?

There is no need to sign in. The only authentication required is a valid email address. This is very user friendly, but on the other hand there is a serious drawback: annotations and comments from

these users can be deleted by every other user that uses the edit link for this annotation video. Signing in with a Facebook or Twitter account, will give students access to their "ANT farm" with their previously annotated videos and will assure more control over the annotations and comments and will give the possibility to embed the annotated video.

2.3 Getting started

It is very simple to start annotating a video. Insert the URL of the YouTube video, click "load video", add a valid email address or select one of the indicated authentication services and start annotating. Students can use the URL given by their teacher or by a peer or another link related to the study topic.

2.4 Adding an annotation

Play the video. When you don't understand a part of the video or if you want to add a comment, click the button "Add an annotation". The video stops automatically at the indicated point. Afterwards, add a title and the annotation itself. Finally save the annotation.

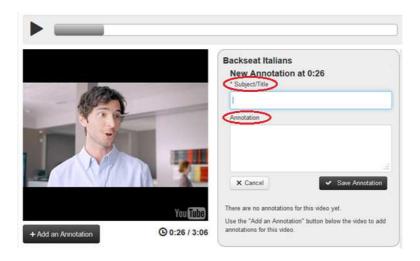


Fig. 2 adding an annotation

The annotation window is alongside the video. Once an annotation is saved, the timestamp and the email address of the student (or his Facebook/Twitter name) are visible.



Fig. 3 annotations

2.5 Sharing the annotations

Once you start annotating, you get an email with two links, one for editing and one for viewing the annotations. Both links can be used to share the annotated videos.



You have created a VideoANT for Backseat Italians

Editing

To add, edit, or remove annotations in your VideoANT video, use the following link: http://ant2.cehd.umn.edu/lzexqkbmgl

Viewin

To view your VideoANT video use the following link: http://ant2.cehd.umn.edu/bhdkrrfxrh

You may share these links with anyone you wish to either edit or view your VideoANT video.

Fig. 2 example of email

The view link allows users to see the annotations. When they play the video, the annotations are highlighted when the video arrives at the selected time.



Fig.4 highlighted annotations

The edit link on the other hand allows students to add their own comments and annotations to the ones made by their peers.

Students can sign in with their Facebook or Twitter account, or they can simply annotate as a guest by adding their email address.

This edit link offers a great advantage for collaboration and learning by peers as there is the possibility to add a comment. Students who did understand the video, can add an explanation to their peers. Or the teacher can add a comment to an annotation.

In order to do so, it's necessary the edit link is shared with the teacher and all the students.



Fig. 5 comment window

When a user signs in with his Facebook or Twitter account, he can cancel his own annotations or comments, not the ones of his peers. When authenticating only with the email address, any user with the edit link can delete annotations and comments made by guest users.

2.6 Embedding

After signing in with a Facebook or Twitter account, a user gets more possibilities to manage the annotated video. He can embed it, share it via a link or via email.

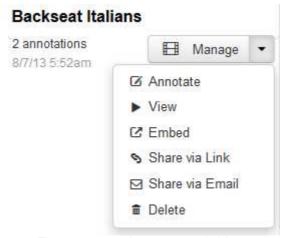


Fig. 6 manage the annotated video

3. Videonotes

Videonotes (<u>www.videonot.es</u>) has been developed by UniShared (<u>www.unishared.com</u>). It is a web based tool, so it can be used on every platform. A Google account is needed to use it, since the annotations are saved in your Google Drive.

3.1 supported browsers and videos

Videonotes works best with the last versions of Chrome, Firefox, Internet Explorer and Safari. It supports the following video formats: Coursera, Udacity, edX, Khan, Vimeo and YouTube.

3.2 Getting started

On the webpage <u>www.videonot.es</u>, sign in with your Google account.

notes, save your notes, export to Evernote or share your notes.

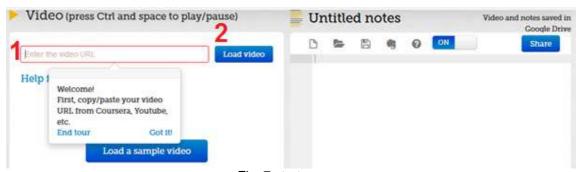


Fig. 7 start screen

Enter the video URL. After clicking "Load video", you can start annotating. The video doesn't stop when you type in the annotation window. Press Ctrl and space to play or to pause. In the annotation window, you can add a title to your notes, create new notes, browse your existing





Fig. 8 interface of the annotation window

The notes are automatically saved in a folder VideoNot.es in your Google Drive.

3.3 Sharing the annotations

This is just like sharing Google Drive documents: you can share the notes publicly or by sharing the link. You can set the permissions so others can either view or edit the annotations and comments.

4. Conclusion

Both annotation tools have their pros and cons. The interface of VideoANT and the sign in procedure are very user friendly. On the other hand, students that are used to work with Google Drive, won't have any difficulties using Videonotes. Both tools allow students to take notes, add questions or answer questions while watching the videos, in a simple interface, directly in the browser.

	VideoANT	Videonotes	
Web based	Yes	Yes	
Browsers	Last version of most common browsers	Last version of most common browsers	
Video	YouTube	Coursera, Udacity, edX, Khan, Vimeo and YouTube	
Sign in	Authentication with email or with Facebook / Twitter account	Google account	
Annotations	Author's email address or Facebook/Twitter name is visible	Author's name is not indicated	
	Video is paused automatically when adding annotation	Video is paused after pressing CTRL and Space	
	Comment window	-	
Sharing	Via an edit or a view link	From Google Drive, publicly or via link, view or edit permissions can be set	
Embedding	Yes	No	

References

[1] Willem Van Valkenburg, Using video: from passive viewing to active learning http://www.e-learn.nl/2013/06/22/using-video-from-passive-viewing