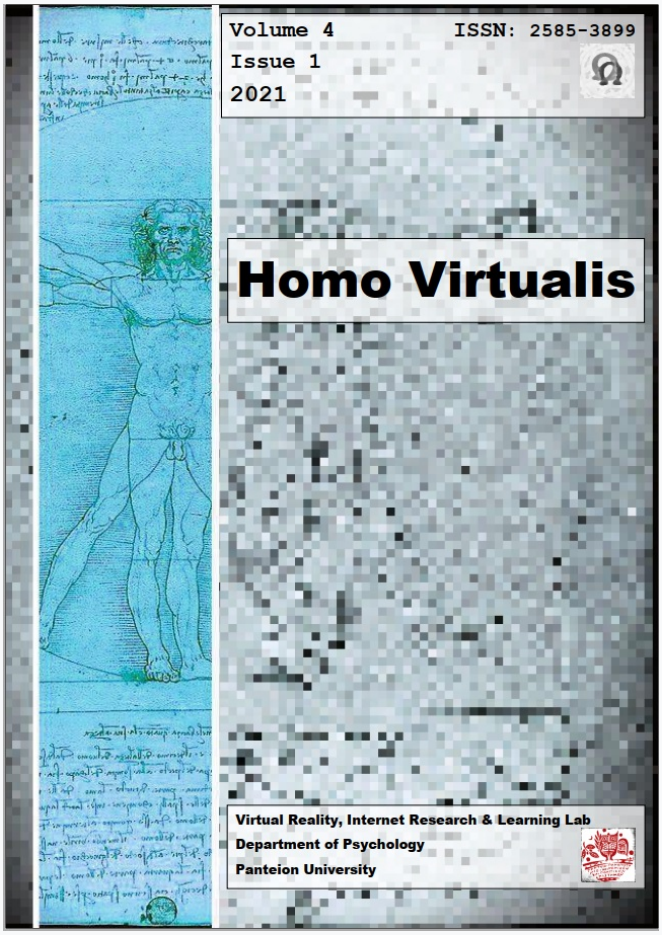
Homo Virtualis

Vol 4, No 1 (2021)

Vol. 4 No. 1 (2021)



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doi: 10.12681/homvir.27345

To cite this article:

Kaperonis, S. (2021). Media literacy in video production: An experiment with university students. *Homo Virtualis*, *4*(1), 17–25. https://doi.org/10.12681/homvir.27345

Homo Virtualis 4(1): 17-25, 2021
ISSN 2585-3899 ∫ doi: 10.12681/homvir.27345

Media literacy in video production: An experiment with university students

Stavros Kaperonis [1]

Abstract

This article describes an experimental academic e-course during the Covid-19 pandemic, in which 178 undergraduate students were asked to become video creators and narrators through a specific methodology in order to become digitally literate and produce original content. This practical e-workshop took place in the context of the "Video, Image and Audio Editing" course of the Department of Communication, Media and Culture at Panteion University and was adapted to the needs of a distance learning course. Its main aim was the students' familiarization with literacy in digital tools and techniques that until now was only achieved in an actual laboratory setting. The research is divided into two phases. The first phase concerns this article and analyzes the methodology of video production as well as the students' acquisition of digital tools. In the second phase, specific factors will be studied, from the videos produced, through qualitative research so as to determine the audience's interaction with the narrative content, as well as with the factors that students believe contributed to the interaction of that content. Students gained knowledge of digital video tools which was upgraded to the capabilities and needs of each student. The final product from each group of students included two videos the first with a specific theme and the second with a theme of student's choice. Students increased their literacy skills in both digital media and video projection on social media and gained knowledge concerning the interaction that was encouraged through these mediums. In this laboratory course, a specific methodology was used that included pre-production, production and post-production. The results of the experiment showed a very positive response of students to distance learning and production of video content, with the results of the final videos showing that the journey to their literacy through a specific methodology and repeated practice in video production techniques and theories, could help them develop skills that previously didn't had.

Keywords: Interaction; Video production; literacy; storytelling.

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Introduction

The transformation and evolution of the media environment over the years from parchments to digital media and social media have had a significant social impact through the externalization of experiences that can be shared through interaction with others (Donald, 1991). The media (MM) plays an important role in the development, evolution and communication of human experiences and knowledge as it creates a memory field where information is accessible at any point in time (Donald, 1991). Part of the externalization of the human experience is the production of video, which is a complex process of learning, application and production, whose result will have a story to tell.

Video streaming content can be displayed on different devices with diverse capabilities and transmitted through networks that have limited bandwidths and variable video viewing resolutions. Furthermore, video streaming is increasing and has become visibly a major contributor to internet traffic ('Cisco Visual Networking Index (VNI) Forecast', 2016), by 2021, the IP video traffic is predicted to make up 82% of the world's data traffic, which is an increase from 73% in 2016 (Zhu, Heynderickx, & Redi, 2015). Thus, mobile video traffic is anticipated to reach 73% in 2023 ('Cisco Visual Networking Index (VNI) Forecast', 2016).

The process of students' literacy in video creation as well as the acquisition of users to watch and interact with these videos, help in human evolution and development as they not only enhance communication and the learning process, but also the understanding of how digital media works and is monitored.

When we talk about literacy, we first refer to skills related to reading, writing and using texts. The evolution of technology in digital media has made it necessary for many researchers to reconsider the use of literacy practices. According to Kress (Kress, 2003), the screen represents the virtual world where you encounter different text interpretation practices. More specifically, the texts on the screen are not read in a linear way as in the printed form.

Jenkins (Jenkins, 2006) introduced the term trans-media in order to emphasize media interactions with users through narratives posted on platforms. The same researcher (Jenkins, 2009), emphasizes the participatory skills and knowledge offered by the media resulting in the search of this content by users. Lemke (Lemke, 1998) argues that literacy practices in video production are a key element to human interaction with the content.

Therefore, the concept of literacy in the media, and especially in video production, is the point of analysis of the way in which people assimilate technologies for the purpose of video production. According to Gilmor, "being literate in today's world means more than just smarter consumption, however actively you do that. Being literate is also about creating, contributing and collaborating", (Gillmor, 2010). Literacy in new media and more specifically in video creation is not an easy process as it

requires time, practice and experience. It is easier to watch a video than to create it just as it is easier to read a novel than to write it.

The purpose of this article is to explore the learning features of videography and videography with mobile devices. Undoubtedly, mobile devices are an integral part of everyday communication, their position being strengthened when it comes to creation and video editing, especially on social networks. Taking into account the convenience offered by mobile devices, they are expected to be used in educational environments as well.

Video production and editing are examples of literacy practices that have to do with how storytelling is designed for different purposes. Skills related to such activities should be part of students' learning in order to familiarize them with how to portray events according to the types of communication (a story to tell).

Methodology

In this article we focus on the methodology followed for the learning and familiarization of students with video production and the skills they develop when dealing with new technologies and specifically with video production. Based on the course "Video, Image and Audio Editing" of the Department of Communication, Media and Culture at Panteion University, groups of students collaborated to produce two videos, each on different topics. The first video was about the 30 years of operation of the Department of Communication, Media and Culture and the second video was an open topic.

The whole process of the course was carried out virtually due to the Covid restrictive measures. This in fact was the challenge – to educate, produce and teach students how to communicate and use the materials needed to create the final video via online lessons. Students focused on how to create a comprehensible story and at the same time be original and interesting, using both camera angles and video production techniques. Students were introduced to learning, producing and editing videos online for the first time. This difficult challenge proved that once they were literate in video recording techniques, they could focus on the narrative aspects of the story they wanted to tell. Precisely because the course was done remotely and in order for students to practice in each technique, they were given a task for each part of the theory, and they had to deliver the final result at a specific time.

As the distribution of video over the Internet is becoming mainstream, user expectation for high quality is constantly increasing. Moreover, it is important for content creators to understand that the video quality affects user engagement and the percentage of time spent in buffering has the largest impact on the user engagement across all types of content (Dobrian et al., 2011). According to Laiche, Ben Letaifa, Elloumi, & Aguili (2021), the quality of experience (QoE) is important because it describes the degree of satisfaction or annoyance of a user when they are using a

multimedia service or application. To understand users' expectations requires to knowing the factors that influence QoE and that factors are the quality and the social context (Laiche et al., 2021).

The structure of the course had three phases. Each phase was designed so that students could enter the learning process smoothly, but it also included several practical exercises in order for students to develop the necessary skills to respond to the final delivery project over time.

Phase 1

The first phase included the basic theoretical background that one should know before attempting to make a video. In the theoretical part, the basic types of video formats, the structure parts of a video file, what a coder is and what a decoder is were first analyzed. They also learned which video format is right for each medium.

We distinguished between the importance of high-quality video and poor audio and vice versa, and how this affects the viewer. We analyzed and experimented with the angles that were captured on mobile phones and the light when filming, the types of shots as well as the types of cameras moves. We discussed and worked with shot sizes and motion, and how the proper use of them can create an interesting result that can keep the viewer interested.

We analyzed Hollywood movies and focused on scenes that students had not noticed before. Initially, the goal was to see if they could understand the theory, and then be able to perceive and analyze scenes from movies in terms of the technical part of video recording. The constant practice / training, projection and analysis of specific scenes from movies not only helped them to gradually acquire the ability to perceive the angles, types of shooting, lighting and camera movements, but also to pick up on dissimilarities if the scene had been shot differently.

In the next phase, students learned the golden rules of video recording, such as the correct placement of the mobile phone when shooting, that is, in a horizontal position and not in a vertical one, how to hold the mobile phone properly if they do not have a tripod so that the recording is stable and the operation of the mobile in airplane mode when they record. They immediately became aware of the rule of thirds and how this simple rule creates a sense of motion and does not make it boring as well as many examples from movies. We also experimented a lot with light both outdoors and indoors.

Students were given a task to complete with their mobile phones within a certain period of time and upload it to the platform they used during the course. The students experimented with recording audio from a mobile phone and realized the differences between the sound quality of outdoors and that of indoors as well as the importance of using hands free on mobile phones during video recordings of interviews. For each

task handed in by the students, there was a discussion about the possible mistakes that could have been avoided and the possible corrections that could have been made. So, for each part of the video production, they realized how to do it better next time.

Phase 2

Since the students were deemed capable as amateurs to know and understand the basic rules before and during filming, they then were divided into groups of 4-6 so that they could begin the second phase of their literacy in the production of video content that concerned pre-production, production and post-production.

Starting the familiarization of the students with the pre-production process, they were given the theme of two videos they had to create. Specifically, they were asked as a group to produce a video on the theme of the 30 years of the Department of Communication, Media and Culture at Panteion University and another video with an open topic to enable students to express themselves freely on something as creative as creating a video. The next step was to find ideas for each of the videos and each video to have a story to tell.

After the ideas were thoroughly discussed with each group and the necessary interventions were made so that their ideas could be feasible despite the Covid restrictions of movement, they were asked to create a storyboard for each video, the angles and size of each shot, lighting, camera moves, and so on. The storyboards of all the teams were presented, commented on and corrected collaboratively by everyone, until we reached the final product. Before students could produce the videos assigned to them, they had to become literate and develop their video editing skills. The challenge here was that the lessons were conducted virtually, and the needs of each group were different, meaning that all digital tools had to be online, free and have an adequate number of video editing capabilities. Students were initially asked to install Davinci Resolve which is a free software with near professional capabilities.

However, the installation requirements of the program were high, and as a result, many groups could not install it. This forced us to abandon the program in order for everyone to have access to learning. Afterwards, suggestions were made to the students about other free programs, but with every new suggestion came different problems for each group so, we came up with an online platform where it did not consume computing power, since it worked with cloud computing services and provided all members of each team with the ability to work at the same time.

It was also possible for any team that wished to record a video to do so by using a mobile phone and editing through the cloud platform. Distance learning and the development of students' skills with the cloud platform lasted three months. During these three months the students got to know and experiment with all the possibilities of the program for editing and sound editing. Along with learning video editing online,

they were given several resources for free video templates, and for using royalty free music.

They also learned techniques and specifications before creating videos for social media such as Facebook, Instagram, YouTube. When it was deemed that the vast majority of students were sufficiently trained to start creating the two videos assigned to them, we moved on to the third and final phase.

Figure 1. The logo of the class

Phase 3

The last phase concerns the production and post-production of videos. Before the students started the production, they were given specific instructions that they had to take into account during the production. Specifically, the duration of each video could not exceed 3 minutes. All videos had to be shot in 16: 9 format and had to have English subtitles if the videos have been shot in Greek.

Videos also had to bear a course logo on a smaller scale (video studio R: storytelling creators), either throughout the video or at the end (Figure 1). All videos were to be uploaded to both the course's YouTube channel and its Facebook page. Each video on social media had to be accompanied by a short description in English. In addition to producing the videos, they also had to prepare a video story for posting on Instagram and Facebook. Much emphasis was placed on the storytelling of the video they had to create as in addition to being creative they had to have a story to tell through their videos. The aim of all of the above is to investigate in the future how a group of students who had no experience in video production and editing, was able to become literate in this process through virtual lessons and produce videos that were creative and managed to engage the audience watching them. Therefore, the whole process that is summarized in the following figure (Figure 2) includes online access and its steps, its production and steps and the subsequent analysis. The analysis will be part of a future study where plenty of videos will have been created to measure the interaction, creativity and message of a given video.

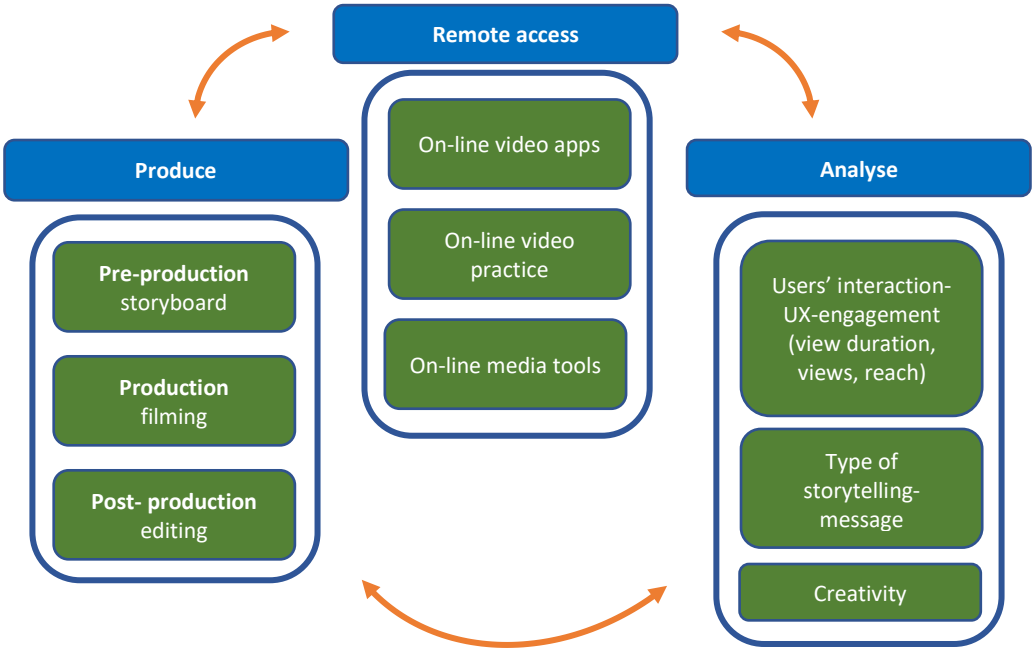

Figure 2. Media literacy model for video production

Conclusions

The first conclusions from this effort to literacy students in distance learning video creation have been very encouraging, showing that students with the appropriate methodology in both theoretical and practical part can produce videos of very good quality in content. This article draws the steps of students developing literacy skills related to video production.

The students worked as a team to overcome problems related to their familiarity with the technology and the creation of a storytelling. Their dedication, passion and creativity began with the proper construction of the working steps and the freedom they felt through the creation of the videos were the main ingredients for their literacy. In this learning journey they were confronted with pieces of the process, such as the development of the idea, the creation of the storyboard, the production of the scenes and the editing.

But all these issues that arose were also the main component of discussions, analyses and solutions that had to be provided in order to produce videos that would be of interest to users. All of the above helped to develop skills that, compared to more traditional learning methods, had a distinct interpretive quality (Säljö, 2010). According to Kress (2003) learning is done by studying and drawing rather than by reproducing and video production literacy is such a case. Concluding, we would say that the attempt to literacy students using the distance learning method has had very positive

results and is a very good guide to further literacy efforts in other technological instruments and tools.

The next research effort is to analyze the interaction of the audience with the videos of students that will be uploaded to YouTube & Facebook, combined with the users' views duration, the comments, the viewing, the audience reach, the received message and the sharing. All the collected quantitative data will be analyzed and will be able to help us to understand better all the factors that are playing an important role in the interaction with the audience and the viewing.

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