VIDEO CREATION AND SOCIAL NETWORKING EDUCATIONAL ENVIRONMENT

KARAGIANNOPOULOU ANASTASIA, PAPADOPOULOS ANDREAS, STEFANOS ARMAKOLAS

A case study of pre-service teacher training in ASPETE Patras.

Abstract

There is no doubt that social media and World Wide Web have changed significantly the way users communicate all around the world. However, apart from communication and entertainment purposes, social media are increasingly being adopted by teachers wishing to enhance their teaching material, develop new educational methods and make their lessons interactive. Recently, videos' use has become a common practice in the education field. This study's purpose is to examine and evaluate the procedure of creating educational videos on the YouTube social network, as it was applied at Educational Technology -Multimedia course of the one-year Pedagogical Training Program of ASPETE (School of Pedagogical and Technological Education). Study findings reveal the true dynamics of using videos at learning results of pre-service teachers' pedagogical training.

Keywords: Video creation, Youtube social network, Pre-service teacher training, learning results.

1 INTRODUCTION

ICTs value in education is of great importance, as technology use has been widely adopted in the education process. The contribution of technology, especially in elearning education, is undoubtedly a necessary factor; on distance learning programs, students derive the knowledge required through various tools supported by World Wide Web or other network technologies, resulting at a more effective learning process.

The quality of interactivity, in which new technologies are based, gives students the chance to participate at learning activities next to their teacher, to form and to express freely their perceptions and emotions. Moreover, it gets easier for a suitable psychoeducating school atmosphere to be developed, boosting the communication process among class members and obtaining equal relations, interaction and feedback (Zogopoulos, 2001). Some of the main categories of Web 2.0 tools, according to their utilisation at the educational Web 2.0, are: Blogs, Wikis Microbloggin, Social Networks, Content communities (multimedia-sharing), Online games and virtual words (Anastasiadis & Kotsidis, 2015).

Social media act as the appropriate communication tools for educational purposes, converting the social networking for educational purposes (Ophus & Abbitt, 2009; Tigkas, 2016). Through the adoption of that kind of tools, substantial educational purposes such as participation, discussion, involvemnet in procedures, creativity, develop of interests, authenticity, honesty, collaboration, providence and critical thinking are getting easier to obtain (Tigkas, 2016).

Web 2.0 most interesting and widespread services are those which allow easy distribution of images, sounds and video files. *Podcasting* is a term widely used to describe all the above file types (McGarr, 2009).

Tondeur et al. (2011) claim that pre-service teacher education should focus on how technology can be integrated in the pedagogical process, while Teo (2009) suggests that pre-service teachers in order to develop computer self-efficacy should have access during their training to all technologies that are available in school classrooms (Papadiamantopoulou et al., 2016). Interest in FOSS is growing during the recent years, especially concerning its role in education. While Information and Communication Technologies (ICTs) can assist the act of teaching at any level of education, competing demands of resources and high costs of related software impede the adoption of ICTs in educational institutions (Tong, 2004; Sakellariou, 2016; Armakolas, Panagiotakopoulos & Vyris, 2016). Especially in primary and secondary schools, which may have limited financial resources, the use of FOSS can help lower the cost barrier and support the incorporation of ICTs in classroom. This way the educators can exploit new available technologies and methodologies to reach and intrigue students (Kotwani & Kalyani, 2011).

2 THE PROCESS OF CREATING VIDEOS

Video is an effective, catalytic tool that facilitates discussion and analysis in the class and allows students to experiment with new means of information and knowledge (Duffy, 2008). YouTube network provides students with a platform that allows them to create the video content themselves and not being just viewers (Adam, & Mowers, 2007).

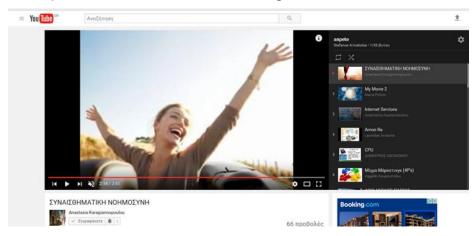
An educator can ask his/her students to find some videos related to a topic and then discuss and comment on them in the class. Another option would possibly be the students' co-operation in the creation of an educational video, or give them general instructions about uploading, sharing and commenting a video on YouTube. The teacher could do the same – upload, for instance a lecture about an educational topic, or recommend videos that could help the students understand and study their course effectively. Youtube is currently a platform of knowledge, as more and more educational videos (i.e. about new technologies) are being shared on the internet through Youtube, and many teachers use it throughout the educational process.

Recently, Youtube's network use as an educational tool has been enforced and numerous researches have been conducted with the purpose of studying the possibilities of video introduction in the education field (Arvanitidou, Antoniou & Serbezis, 2016). Youtube network is considered to be a tool of informal and autonomous way of learning; in this process, teacher's role is decreased, while the trainee takes responsibilities and decisions himself/herself, as he interacts with the platform by his own means (Tan, 2013). However, a series of basic rules should be followed before Youtube is introduced in the education process, such as total content assessment (both acoustic and visional) by the trainer, as well as the source and the creator's assessement (Burke & Snyder, 2008)

The main criteria to characterize a video as suitable for the education process is reliability, in other words the control over the video creator 's information, the source of its content, the correct evaluation and the objective presentation of the material. It is also important to have in mind the supporting information behind each video, to make sure that the learning and educational goals are being achieved and that there

is a connection between the practice material and the audiovisual content. We must also focus on the audiovisual quality, the variation of color, image and sound, and the correct use of shapes and images for the cultivation of the trainees' aesthetic taste (Jones & Cuthrell, 2011).

During Educational Technology – Multimedia laboratory course, Youtube network can be used in numerous ways. The teacher can project the course's videos on the laboratory's YouTube channel. All videos can be sorted out in categories and form a special playlist at the YouTube channel of the laboratory course. Students, on the other side, can produce videos, according to their education field, through the use of Movie Maker software and then upload the videos on youtube. The content of the video must be a part of a genaral teaching planning with a specific goal setting. They should also include explanation terms or parts with a mobile or a steady image, for the best possible students' understanding.



Pic. 1 - using youtube in classroom



Pic. 2 - using youtube in classroom

3 METHODOLOGY

The present work is a case study in which a "non-participative observation with content analysis" research methodology has been followed (Bell, 2005). More specifically, the content has been collected at the Youtube channel. The sample is comprised of 198 videos created in the context of the course "Educational

Technology-Multimedia", requiring 3 hours of laboratory lesson and as much time as each student chooses to work in home. Videos have been produced according to each student's field of interest, followed by the respective goal-setting. The main criteria taken into account during the assessment procedure were the following; Teaching planning, Choice flexibility, Content, Technical adequacy, Suitability, Utility and Security (Panagiotakopoulos, Pintelas & Pierrakeas, 2003; Roblyer, 2008).

4 RESULTS

As for the teaching planning, the majority of videos have been planned so that they cover and support the teaching needs of the educators. During the educational process, two ways of video use have been noticed: a) Constant presentation of the digital educational material until the end of the process, and b) Non-constant presentation with simultaneous remarks on the main points from both the trainer and the trainees. During the video analysis, creators had the chance to propose additional activities and involve their students in the projecting material's research, aiming to develop their critical thinking and their active participation.

With reference to flexibility, videos are mostly appealing to students who attend the same course/educational field, so there was no need for much different approaches, as each of them has its own specific characteristics.

As for the content, information included at educational videos is precise and complete, without being too much. Material from other videos was used too, with the necessary reference to their creator. The material is educational-oriented and structured in a way that draws the student's interest. The material information does not reproduce stereotypes, nor accept false ideas about the subjects.

Regarding technical aspects, in most of the videos a substantial effort was made in sound, image, video quality, friendly colors and image transition.

Mostly, they are thought to be suitable for the target audience, as they are designed to adjust at different interests and prior knowledge, as well as with the fixed requirements derived from the analytical programs.

The utility grade of the educational videos is considerably high, as all of them had been uploaded at the universally popular website of Youtube, which is quite easy to use a means of communication the user can learn to handle quickly and easily.

To sum up, one could say that Youtube use can contribute to adults' education for all the following reasons:

- It helps adults to absorb the knowledge through videos and their content, giving them the possibility to watch them at any time, any place, and as many times they want.
 - It enables adults to get involved in their own videos' production.
- It helps the newest techniques' and scientific achievements' to reach the public.
- It boosts e-learning education via channels' creation which promotes knowledge.

As we can see, we get multiple benefits using youtube in adults' education, as it is an age group with developed perception ability, responsible about knowledge and thus more than suitable to learn from youtube.

5 CONCLUSION

It is a common fact that ICTs use in the education process offers both educators and students new possibilities, with the introduction of new and innovative elements which constantly draw the interest of the students. Web 2.0 applications' contribution in the field of education is great because of their accessible nature, easy use and support of the dynamic participation and collaboration (Yuen & Yuen, 2010). The net –especially the social software– is the right place for the development of a dynamic and flexible learning environment (Manousou & Hartofylaka, 2011). Collaboration is generally one of the main reasons that social media networks can be used in the education in various ways (Zhang, 2010; Manousou & Hartofilaka,2011). The standard participation of the trainee in the social software applications leads to innovative constructive practices in which trainers can produce use their own educational material (Karasavvidis &Theodosiou, 2010). Youtube network is a web platform that is widely be used as a learning source by teachers and students. It works as a reliable add-on of traditional teaching methods and provides a huge range of really educational videos that can be chosen to be watched in the classroom.

Social software applications offer dynamic characteristics which are expected to play a catalyst role in the education field, for the following reasons;

- a) They change radically the knowledge quality and the ways to access it.
- b) They convert the learning frame, offering multiple opportunities for autoadjustable, co-operative, ubiquitous, lifelong learning.
- c) They enrich possible options that learning is taking place, changing the strict limits between school and home, affecting various learning types (formal, nonformal and informal education), trainers and trainees, education and entertainment (Jimoyiannis, 2010).

BIBLIOGRAPHY

- 1. ADAM, A., & MOWERS, H. YouTube Comes to the Classroom, *School Library Journal*, 2007, 53(1):22, Retrieved 13/03/2017 from *http://www.schoollibraryjournal.com*.
- 2. ANASTASIADIS, P. & KOTSIDIS. Pedagogical utilisation of Web 2.0 applications at educators' training; emphasis in cooperative creativity. *International Conference of Open and E-Learning Education*, 2015, 8(1A).
- 3. ARVANITIDOU, V., ANTONIOU, P., SERBEZIS, G. E-learning teachers training with YOUTUBE use, In Anastasiadis P. (eds), E-learning educators training with the use of advanced internet learning, 2016, pp.175-212, Gutenberg editions.
- ARMAKOLAS, S., PANAGIOTAKOPOULOS, S. & VIRIS, D.:EL/LAK integration in school class: A study of trainee educators' opinions. In T. A. Mikropoulos, N. Papachristos, A. Tsiara, P. Chalki (eds.), Proceedings of the 10th Panhellenic anfd International Conference "ICT in Education", 2016, pp. 647-654. ISSN 2529-0916, ISBN 978-960-88359-8-6.
- 5. BELL, J. How to compose a scientific study. A research methodology guide, 2005, Metaichmio Editions.
- 6. BURKE, S. C. & SNYDER, S. L. YouTube: An Innovative Learning Resource for College Health Education Courses. *International Electronic Journal of Health Education*, 2008, vol 11: 39-46.

- 7. BURKE, S. C., SNYDER, S., & RAGER, R. C. An assessment of faculty usage of YouTube as a teaching resource. *Internet Journal of Allied Health Sciences and Practice*, 2009, 7(1): 8.
- 8. DUFFY, P. Engaging the YouTube Google-eyed generation: Strategies for using Web 2.0 in teaching and learning. *Electronic Journal of E-learning*, 2008, 6(2): 119-130.
- 9. JIOYIANNIS, A. Designing and implementing an integrated Technological Pedagogical Science Knowledge framework for science teachers professional development. *Computers & Education*, 2010, 55(3): 1259- 1269.
- 10. JONES, T. & CUTHRELL, K. YouTube: Educational potentials and pitfalls. *Computers in the Schools*, 2011, 28(1): 75-85.
- 11. KOTWANI, G.; KALYANI, P. Open Source Software (OSS): Realistic Implementation of OSS in School Education. *Trends in Information Management*, 2012, 7.2.
- 12. MANOUSOU, E. & HARTOFYLAKA, T. Social Media and Social Media Networking at elearning tertiary education. ICTs integration and use at the educational process, *2nd Greek National Conference*, Patras 28-30/04/2011, pp. 497-510.
- 13. MCGARR, OLIVER. "A review of podcasting in higher education: Its influence on the traditional lecture." *Australasian Journal of Educational Technology*, 2009, 25.3.
- 14. OPHUS, J.D. & ABBITT, J.T.. Exploring the Potential Perceptions of Social Networking Systems in University Courses. *MERLOT Journal of Online Learning and Teaching*, 2009, 5(4): 639-648.
- 15. PANAGIOTAKOPOULOS, X., PIERRAKESAS, X. & PINTELAS, P. Educational Software and its evaluation. 2003, Athens: Metaichmio Editions.ISBN 960-375-579-6.
- 16. PAPADIAMANTOPOULOU, M., PAPADIAMANTOPOULOU, C. ARMAKOLAS, S. & GOMATOS, L. Pre-service and in-service teacher training: the use of technology in the greek educational system. *Proceedings:konference Olympiáda techniky Plze*, 2016. ISBN 978-80-261-0620-3 Západoĉeská univerzita v Plzni.
- 17. ROBLYER, M.D.. Educational Technology and Teaching., 2008, Athens; Ion Editions.
- 18. SAKELLARIOU, P. Free and open source software in computer education: exploring the current situation in greek secondary schools. *Proceedings:konference Olympiáda techniky Plzeņ*, 2016. ISBN 978-80-261-0620-3 Západoĉeská univerzita v Plzni.
- 19. TAN, E. Informal learning on YouTube: Exploring digital literacy in independent online learning. *Learning, Media and Technology*, 2013, 38(4): 463-477.
- 20. TEO, T. Modelling technology acceptance in education: A study of pre-service teachers. *Computers & Education*, 2009, Vol. 52 : 302–312.
- 21. TIGKAS, I. Social Media Networking as communication tools at e-learning education; Hellenic Open University students' opinions. *Open Education: a journal for Open and E-learning Education and Educational Technology*, 2016, 12(1): 106-119.
- 22. TONDEUR, J. ET AL. Preparing pre-service teachers to integrate technology in education: A synthesis of qualitative evidence. *Computers & Education*, 2011, pp. 1–11.
- 23. TONG, T.W. Free/open source software education. *United Nations Development Programme's Asia-Pacific Information Programme*, Malaysia, 2004.
- 24. ZOGOPOULOS, S. New Technologies and Communication Media in the Education Process. 2011, Klidarithmos editions.

Contact person

Armakolas Stefanos

ASPETE, Achaikis Sympoliteias 20, 26223, Patra, +302610461412,