



DIGITAL VIDEO TECHNOLOGY AS A TOOL FOR TEACHING AND LEARNING

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Abstract

Digital technology has made a great impact in education in most countries in the world. Using modern technologies that implement new capabilities, teachers could support not only their subjects but also general aspects of education as collaboration, socialisation, elimination of technophobia etc. Media Literacy can be used by teachers as a new, alternative and interesting method to inspire all the above mentioned qualities to hers/his pupils. Also it can be used as a tool for expression for pupils with special needs and learning difficulties. This effort was part of a greater project that was taken place in Greece. In this case it was applied to a high school in Rhodes. The students created a short movie about their feelings in the class as part of a video document for other generations of students. The results were very encouraging and improved the relations between teacher and students and the students themselves.

Key Words: Video technology, short movie, teaching and learning tool, school.

INTRODUCTION

One of the new threats of the current era is the attempted manipulation through controlled information flow. Most young people have not developed adequately the necessary critical skills to evaluate the attempted recruitment and the possible purpose structured of information available and thus become easy prey to propaganda and cultural consumption. However, despite the general awareness of the problem, very few comprehensive proposals have been presented for the systematic teaching of audiovisual language within the official curriculum. Nowadays, film education in Greece is essentially absent from the curriculum of primary and secondary education and its presence in certain pilot "art junior high schools", only as incomplete and fragmented can be characterized.

On a global scale, studies have shown that film education can be a powerful teaching tool capable of helping students to understand their own world on a real or metaphorical level.

DIGITAL TECHNOLOGY IN TEACHING AND LEARNING

According to Immanuel Kant, art is not portraying beautiful things, but depicting them in a beautiful way.

The use of film is increasingly recognized by teachers as a valuable tool that can be integrated into the curriculum and increase students' learning motivation. It can be used to enhance learning across all teaching subjects (e.g. Foreign Languages, Science, Technology, History, multidisciplinary subjects etc). Through the improvement of the ability to understand and analyze an image, skills of critical thinking are developed which constitute an important educational goal, students' interest for creative learning can be triggered through the emotions generated by the film (Barriance & Cooper 2010).

The most important results from the integration of digital technology in the educational process refer mainly to support and assist enhancement of:



- a) Learning,
- b) Teaching,
- c) Students socialization,
- d) Incorporation of children with disabilities, and
- e) the transformation of vocational education, empowerment, creativity and effectiveness of their work (Poole, 1997).

When creating a work group of students who adopt digital technologies, according to Vygotsky (Elliniadi, Kleftaki & Balkidas, 2008), social interaction is established that can be a source of strength and development. The "collective mind" of the team captures and creates concepts, processes, skills and the individual internalizes and employs them through learning, while the role of the teacher becomes mediating.

- The importance of digital technologies in education is reflected in the term "Opening Education" EUROPA that was recently stated by the European Commission (E.C.2013).
This initiative aims:
- To encourage teachers develop innovative curricula using digital technologies that enable individuals to acquire knowledge anytime, anywhere.
- To connect the impact of technology on the environment and to seek new ways of teaching and learning in cooperation with international organizations.

The result of the action will be:

- More and better learning environments - meaning widespread use of ICT in school.
- Organizational changes in schools, universities and institutions.
- Increased demand for new content and interactive learning tools.

THE AUDIOVISUAL EDUCATION PROGRAM

The Audiovisual Education program was organized by "Karpos" institution and was attended by groups of 12-18 students with their teachers for the production of documentary film¹ footage, suggesting it as an educational tool. Each group creatively captures issues of everyday life of young people on a video of five minutes in length, in either serious or funny way, anything that in their opinion deserves to be saved and preserved in a fantastic virtual-museum for teenagers of the future (Govas, 2012). The implementation of this effort like the other programs (environmental, cultural, health education) took place outside teaching hours, and the involvement of teachers was voluntary.

Objectives and Aims of the program

Audiovisual Education program is suitable for cultural studies and sociological research yielding statistically valid and reliable comparisons, both over time and among communities having different cultural, economic and social identities. The objectives of the program are as follows:

- Children's and adult's awareness of the elements of the local culture and its relationship with everyday life.
- Encouragement of creative contacts between different ages and bodies of Greek community (authorities, teachers, adults, children, etc).
- Participation of children in activities of "information production" and resulting in development of a critical review of the media.
- Registration and protection of the natural and built environment during the process.
- Raising awareness of children in collective procedures that should govern every effort of taking decisions.
- Growing the spirit of teamwork.
- Providing opportunities for children for free expression and creative communication, especially in activities as cinema, photography, TV, recording that they rarely have the opportunity to reach out.

¹ The term "film" is used occasionally instead of the term "movie" for historic and continuity purposes



The activities of the student production should be treated as a free and open project (collective, synthetic activity), with the aim of fostering educational skills, communication, teamwork, research and presentation of data. These skills will be an important methodological asset for children in any future job in the field of science, while the main learning benefit mainly refers to social media issues and use of audiovisual tools, and less to the thematic content of a documentary.

The steps followed by the Group are:

- Brainstorming: Exploring the theme of the film; scattered ideas from everyone, written on the same paper.
- Free connotations: Automatic writing games to release the thoughts and feelings of the group.
- Audiovisual stimuli: Watching short films created by young people both from Greece and abroad.
- Role Playing, interrogation chair, improvisations: Theatrical exercises to analyze the selected topic.
- Frozen images: Team members are asked to make a picture related to the topic with their bodies enabling team collectivity and game spontaneity.
- Photography exercises: Teaching the kids to take photographs and how to present a theme - commentary on photography.
- Storyboards: We learn how to design the scenes on paper, how to choose the angle, realizing exactly what we want to show in every shot. This simple handmade traces of future work - something like handy work of shots.
- In front and behind the camera: Everybody alternates in front and behind the camera with short interviews, photo montage, self-presentation, storyboard etc.
- Scenario: Plot, is written as a final scenario, helping the students throughout shooting.
- Filming: Contact of the group with the real space shooting. Familiarization with the procedure filmed in real time. We need full cooperation of the group.
- Editing: The final structure of the film, which puts everything in its place, image, sound, anything additional. Whatever we designed previously is now implemented frame by frame. Incomplete thoughts and actions are completed in a final artistic product, which will be our identity and our means of communication with others.

METHODOLOGY

The sample of this study was 38 high school students, who participated in filming from February to April 2014 in the city of Rhodes. During this time we had about 20 hour sessions of the film group. The coordinator of the activity worked at the school on days and hours after time.

In the first two meetings the conditions and terms of the competition were analyzed. Informative videos of the announcement were presented, short films by groups of students on previous years, as well as informative short videos about the initiation of students into the world of cinema and new technologies (sound recording, camera filming, video and audio editing software etc.).

During the third meeting the pupils were divided into groups by the method of brainstorming and recorded their suggestions on the subject of the documentary. Each group presented its proposal arguing about it and finally they voted for the final choice.

Through collective and collaborative processes, all students took responsibility and chose the roles that excited them more like actor, sound editor, video editor, contact person etc.

To evaluate the action a questionnaire was developed in semi-structured form and was distributed to students five months after the completion of the program (September 2014), The elapsed time made the answers less "fervent" as to the effectiveness of the method. For data analysis the statistical program SPSS 22 was used.

RESULTS

The most important findings of our survey were the following:

- The participating students were 12 boys and 26 girls



- On the question about the experience of their participation in the film 97.4% of students considered it positive (good to excellent).
- They mentioned as most positive aspect of their participation in the project:
 1. Collaborative - team spirit 51.6%
 2. Making of (Back stage) 19.35%,
 3. Humor in the process 16.12%,
 4. Everything 12.9%.
- None of the participants reported any negative aspect about the activity.
- The most liked aspects of their participation was:
 1. Collaboration with teachers (34.2%)
 2. Fun atmosphere (26.3%) and
 3. The Teamwork (18.4%)
- About their satisfaction with the final result, agreed absolutely 77% and agreed very much 23%.
- The participation of students in filmmaking enhanced their relationship with participating teachers: 58% completely agree, 34% agree very much and 8% agree.
- On the open question, 72% of the participants proposed to repeat the project the forthcoming school year and 29% considers the experience perfect.
- At the question about the repetition of the activity in some subjects absolutely agree 55.3%, very much 28.9% and much 15.8%.

CONCLUSIONS

Despite the fact that the group meetings were held at weekends, the students showed enviable behavior through constant and uninterrupted presence. All students participated in groups, shared roles and were active. They showed significant learning difficulties and socialization. As seen from the results, everybody characterized the experience of participation in the school film as positive and suggested a follow-up action by creating other short films in the current school year.

In evaluating the experience, the positive assessment of participants from various question was recorded: 58.82% considered the greatest aspect as: the "Collaboration climate of cooperation" 14.7% consider the "technical part" (editing, making-off) as the best, 26.47% of the respondents claimed that everything was "perfect".

No one replied on the question of the most negative act of the activity.

In addition, the positive evaluation of the action shows that the relationship between pupils and coordinator improved absolutely or very much (92%).

The acceptance of the method as an alternative teaching tool became evident from the responses of students of whom 85% suggest that it should be repeated frequently in teaching various subjects.

The teacher observed that collaborative environment facilitated group interaction in teaching courses and improved self-confidence of students by helping to improve their school performance. The pupils saw an alternate version of the school which does not grade, does not require presence, does not punish but instead composes, accepts, integrates and installs a creative in a democratic atmosphere.

Not only during the meetings, but also during the viewing of the film, many parents expressed their enthusiasm and felt helpers of any future effort or need. Given the research showing that parental involvement in their children's education results in increasing the performance of students and improve their attitudes towards learning (Stevenson & Lee, 1990), the last observation is of particular value.



During group meetings, emphasis was placed on the active involvement of students taking part in a series of decisions and actions on what is in their opinion necessary to preserve and maintain, developing arguments and a more critical look of the world that surrounds them.

A school band consisting of students from different high schools of Rhodes composed the soundtrack of the film. The song titled "My own revolution" was written in English and its lyrics adapted to the messages of the film (feelings of anxiety, excitement, suspense, love, etc.).

The activity apart from the contribution of the students had the support of the Association of Parents of the school, who covered the cost of the digital recording of the song and had an active participation in the student film festival projection of the city of Rhodes.

In the above way we presented a new approach to media education (media literacy). We combined videos with theater techniques and encouraged engagement with new technologies thus contributing to eradication of technophobia.

As further work one could suggest a similar activity including international cooperation (Intercultural exchanges) with schools in European countries and exchange of audiovisual messages. These messages will help to raise awareness and mutual understanding of the various elements of the culture of European peoples. We thank "KARPOS" and specifically Mr. Menis Theodoridis for the idea of the activity and the help and encouragement.

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