

THE TREND OF PENETRATION OF MULTIMEDIA IN EDUCATION: A CASE OF ALBANIA

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Abstract

In this paper we have discussed some concepts of the use of multimedia in education as an innovation in the means used to improve teaching and learning. Also a comparative analysis has been elaborated about highlighting the trend of using multimedia in Albania. The surveys carried out in this paper are intended to provide quantitative results of the level of usage of multimedia resources in teaching and learning. The study presented in this paper is structured on the basis of sampling through the implementation of two questionnaires to a population group. We consider that the target of these questionnaires is variable in terms of the level of education as the goal is to derive an extract that increasingly reflects the reality of the information provided in Albania on online and multimedia resources in teaching and learning. Finally, part of the model is the hypothesis which provides information of the trend in Europe regarding the use of multimedia and its compounds, such as the use of electronic equipment of digital data processing, the usage of blog-s, etc. These results consist in the fact that the level of penetration of the multimedia in Albania in different education categories, is more poor, comparing with the countries of European Union.

Keywords: Multimedia, Teaching, Digital technology, Albania, Trend

INTRODUCTION

Multimedia refers to a communication platform that uses a combination of different forms of influence of people in obtaining information. This actually falls somewhat contrary to media that uses computer based presentations such as text or traditional forms consisting of printed information. Multimedia includes a combination of text, sound, images, animations or an interaction of such forms (Andresen, B & van den Brink, K. 2013, p. 21).

Usually, multimedia is recorded, played, or accessed from devices that elaborate the content of the information. These are electronic devices and in addition can also be a live platform. Multimedia differs from mixed-media in the essential element consisting of the inclusion of art. The term "rich media" is also a synonym of interactive multimedia. Also the term hypermedia is regarded as a special application of multimedia.

In education, multimedia is used to produce training environments based on data transmission networks or otherwise known as CBT (Computer-Based Training). It also is an opportunity for accessing online materials. A CBT allows users to go beyond a series of presentations, texts of any particular matter and illustrations of different formats of information. For example, scientists of different fields of study use the multimedia in computer simulations designed to solve different problems (Alessi, S., & Trollip, S. 2000, p. 43).

The learning theory, in the last decade, has seen a major expansion due to the introduction of multimedia. A number of lines of research have evolved. Consequently, opportunities for teaching and learning are theoretically endless from this occasion.

METHODOLOGY

The surveys carried out in this paper are intended to provide quantitative results of the level of usage of multimedia resources in teaching and learning. On the basis of the results it becomes possible to give the advantages and disadvantages arising in the case of implementation in Albania.

The study presented in this paper is structured on the basis of sampling through the implementation of two questionnaires to a population group. We consider that the target of these questionnaires is variable in terms of the level of education as the goal is to derive an extract that increasingly reflects the reality of the information provided in Albania on online and multimedia resources in teaching and learning (DeVoss, D., 2010, p. 12).

The questionnaires include a number of 60 persons and are structured in such a way as to draw as much information about their experience in the world of multimedia as for example: how they are involved in processing the videos, audios, in websites, blogs programming, etc.

The questionnaires are structured in two models. They consist in getting the level of experience related to multimedia regarding data processing and whether or not the subjects have the ability regarding access to these resources (Ivers, K., & Barron, A., 2014 p.46).

The first model focuses specifically on the ability level of the sampled subjects regarding issues related to audio-visual processing techniques, with blogging, etc. The second model raises questions about usage of multimedia in learning and the experiences that entities have with the education to present against an auditor through multimedia resources. Also, part of the

model is the hypothesis which provides information of the trend in Europe regarding the use of multimedia and its compounds, such as the use of electronic equipment of digital data processing, the usage of blog-s, etc (Ivers, K., & Barron, A. 2011, p. 71).

From data we posses, we observe that the use of Internet penetration level is 70.5% with an increase of 454.2% from 2000 to 2014 ((Clark, R., & M, Richard., 2011, p. 122).

On the basis of these data that are part of the hypothesis will give results and trends that the achieved results have in the questionnaire.

ANALYSIS AND RESULTS

The results of the surveys are structured in two approaches. Initially, the first model is reflected which gives graphically the level of experience that the sampled subjects have regarding the aspects of multimedia usage such as experience in using Microsoft PowerPoint software, the processing of audio-visual information, the blogs programming, etc.

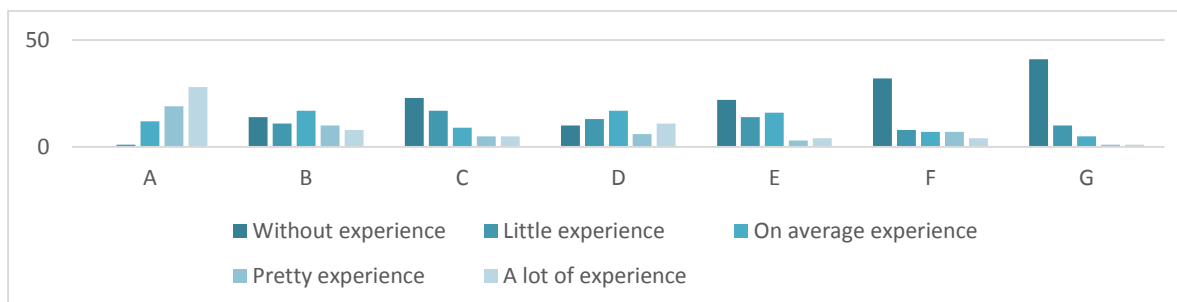
For convenience, we have shown in a specific table the subjects experiences regarding multimedia and a corresponding letter.

Table 1: The table linking the experiences of subjects with a corresponding letter for the first model of the questionnaire

The subject's experience	The corresponding letter
Experience in Power Point	A
Making a video	B
Video processing	C
Registration in audio	D
Audio processing	E
Experience in blogging	F
Experience in publication in newspapers / scientific journals	G

The data presented below consist as a result of sampling of 60 subjects. Let's look at Figure 1.

Figure 1: The graph which reflects the level of experience of the subjects in the use of multimedia resources



In this figure, it should be noted that the ordinate axis expresses the number of people who have a certain experience. The following table presents data of Figure 1 in percentage.

Table 2: The table that presents the data of Figure 1 in percentage

The subject's experience	Without experience	Little experience	On average experience	Pretty experience	A lot of experience
Experience in Power Point	0%	1.67%	20%	31.7%	46.7%
Making a video	23.3%	18.3%	28.3%	16.7%	13.3%
Video processing	38.9%	28.8%	15.3%	8.5%	8.5%
Registration in audio	17.5%	22.8%	29.8%	10.5%	19.3%
Audio processing	37.3%	23.7%	27.1%	5.1%	6.8%
Experience in blogging	55.2%	13.8%	12.1%	12.1%	6.9%
Experience in publication in newspapers / scientific journals	70.7%	17.2%	8.6%	1.7%	1.7%

First, note that the experience of the sampled subjects concerning the use of Power Point software is at a high level and this is demonstrated in the fact that 46.7% of them have a lot of experience in the use of this program as a source of multimedia in learning.

Regarding video resources, we observe the majority have pretty experience in making the video and it shows the visual absorption digital cameras are prevalent in the majority of the population in Albania (Tuggy, M. & Garcia, J., 2005, p.34). Also, it is worth mentioning that the introduction of smartphones, whose price falls from day to day, makes every young person being in contact with such multimedia resources. Nonetheless, as noted in the table we cannot say the same regarding processing of videos. The table noted that 38.9% of subjects have no experience regarding video editing. This happens because of the needs of preparation and other sources to create the experience in the processing of videos. Concretely, this has to do with the use of separate programs which range from the simple to professional ones used for big projects.

Further, we observe data related to treatment of audio information. Note that almost it is the same situation as in the acquisition and processing of video information. In this case we can observe that the process of audio registration is more popular the audio processing. We emphasize that the variation of the number of subjects sampled, from the initial level of experience to the advanced level regarding audio recording process, is somewhat monotonous and there are no major fluctuations and at the same time the average experience is dominant on this process. On the other hand, regarding processing of audio experience it should be noted that, as in the case of video processing, even in this case we have an overwhelming percentage of subjects without experience.

Regarding the issue of the experience of using online blogs, it is obviously at low levels. Specifically, 55.2% of persons, who have been subjected to the questionnaire, are without experience in blogging (Peters, D. 2013, p. 103). This is an important indicator which consists in the fact that even in the Albanian youth has not penetrated yet the culture of the use of online resources in learning. If the above sources indicate a penetration level which, in the developed countries is high long times ago, the source in question shows coherence the Albanian society is in this point.

Finally, it is also addressed the experience of youths regarding to the development of articles that are presented in various national or international conferences or even in different scientific journals. In this case, the percentage of people without experience is dominant and it is effectively 70.7%. In fact, this is a weak point of the Albanian education system in relation to the education of youth regarding to development of an article, a research or a project. Also, this should lead to lack of education and information regarding the state of operation of the universities of the region in relation to the development of scientific research. Here it is about the fact that developed countries create virtual environments of collaboration between members of the working group to advance a project, or research, which clearly from the results above, is at low levels in the educational system of Albania.

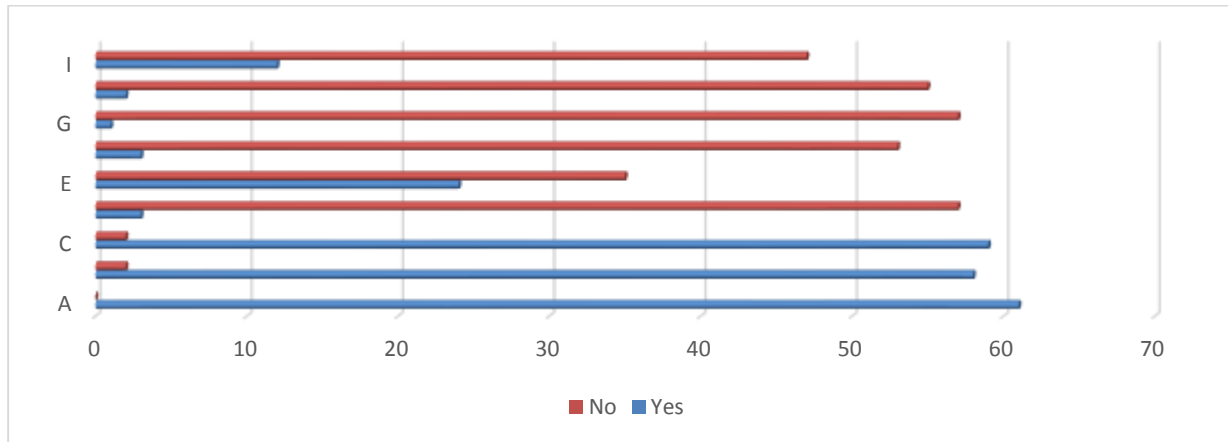
Now let us examine the second model of structuring the questionnaire, that if they have or not the ability related to the use of multimedia resources.

Also in this case, for convenience we will use a table that links the experiences of the sampled subjects with a corresponding letter. The table is shown below.

Table 3: The table linking the experiences of subjects with a letter corresponding in the second model of the questionnaire

The subject's experience	The corresponding letter
Do you have computer (desktop/laptop) at home?	A
Have you ever done presentations against a group?	B
Do you use digital camera, video camera or video-projector?	C
Do you write or have you written for a newspaper or journal to a university?	D
Do you write or have you written for a newspaper or journal to a high school?	E
Do you work or have you worked for a television station?	F
Do you work or have you worked for a radio station?	G
Do you work or have you worked for a journal?	H
Do you work or have you worked for a website?	I

Figure 2: Graph which reflects whether the sampled subjects use multimedia resources or not



Regarding to the first three issues raised in this model of the questionnaire we observe that the most asked subjects have given a positive response. This means that they are committed to the use of the computer, digital devices that serve as sources of multimedia in learning and in fact if they have presented before a certain audience. In connection with the latter, we note that their experience is not kind of the presentation of the results of a scientific research, but it comes to the presentation of liabilities to subjects developed in university, school, etc (Clark, R., & M, Richard., 2011, p. 89).

As was indicated in the treatment of the first model of the questionnaire, the experience of subjects related to the development of a scientific research is low and this was demonstrated in this model. We observe that by 60 people who were subjected to the questionnaire, only 3 of them have given positive response (Mayer, R. 2009, p. 81). However, it should be said that in terms of their experiences in connection with the engagement during high school as regards publications there are different data from the university experiences. As shown in the graph B at point E, the number of people who gave positive responses versus the negative responses does not change very much.

The last four questions of this questionnaire are aimed to get a feedback about the experience the young possess of being professional in the recognition of multimedia resources and main institutions which use these resources. Specifically, facilities such as the audio-visual media, the written one and the Internet are the most efficient where people can recognize the importance that multimedia resources have in learning.

The results obtained from this model show very low levels of engagement of youth in recognition of the impact that multimedia has in learning and even in everyday life. From the 60 subjects sampled, only 1 of them has worked for a period of time on the radio, on television 3, on a journal 2 and on a website 12. We can observe that we have a greater number of persons

who worked in a website than in the audio-visual media or in print media. In fact, this indicates a preference of young people to the Internet and at the same time a deviation from other sources of obtaining information.

CONCLUSIONS

In this paper we discussed the issue of usage of the multimedia and online resources in learning. The paper provides quantitative results of the level of the use of multimedia and based on these results it is given the comparison with the results of the use of Internet and multimedia in Europe (David, A., & Pentak, S. 2006, p. 34).

The paper is structured on the basis of sampling through the implementation of a questionnaire to a population group. The survey includes a number of 60 persons and consists of two models. These models respectively related to getting the level of experience related to multimedia data processing and whether or not we have the ability regarding access to these resources (Cheng, I., & Vicent Safont, L. 2010, p. 57).

Also, part of methodology modeling is the hypothesis that provides information to the trend in Europe of the use of multimedia and its ingredients (Mayer, R. 2001, p. 56). Based on this hypothesis, we have made the comparison and trends in relation to the level of penetration of multimedia in Albania.

The results of the questionnaire noted that 46.7% of subjects sampled have more experience in the use of Power Point software as a multimedia source and 38.9% have no experience in video editing. Also, 55.2% of the sampled subjects are without experience in blogging.

Comparing the results of hypothesis where 70.5% of the population has access to the Internet, we observe that the case of Albania represents the growing trend of this indicator. This means that the trend is growing but there is still room for improvement. Also, the data of the hypothesis suggest that a level above 75% of the population in Europe have a lot of experience in the use of portable and mobile devices for accessing the Internet. Also, this indicator gives realize that the trend goes towards increasing but still work to do.

The limitations of the paper consist in the fact that the questionnaire should be more extended in the number of samples and it should be more comprehensive in the questions included.

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