

## The Impact of Multimedia in Teaching and Learning

Fatmir AGAJ

European University of Tirana

### Abstract

The innovations that happen in education seek for great leaders and with an outstanding professional background. The innovation managers are very open-minded to the changes that occur in schools, but unfortunately there are many of them who are closed to such changes in schools, the reason to resist is the lack of knowledge towards these educational innovations and of the changes that could be made in the schools and in the classrooms. Avoiding such problems could be made through active participation of the teachers in trainings, because the development of the technology and the improvement of the educational technology influences many changes in teaching methods and forms. Based on previous research it was seen that the role of multimedia in the classroom influences a great interest in participating actively in learning. This research was chosen intentionally with the reason of playing a positive role in raising the awareness of the community, with the argumentation of the hypothesis that multimedia in the learning process has a great role in purifying students with new information. Education, as a rule, slowly accepts any implementation of innovations in comparison with business, producing, transportation etcetera. In addition to it, implementing multimedia systems, distance learning, virtual schools etcetera would definitely increase the activity of the students in advancing their skills in comparison with their former background knowledge.

**Keywords:** multimedia, innovation, change, managing, educational technology, feedback.

### Introduction

Traditional teaching is more dominated by frontal ways because there is a lack of interaction and lack of time for independent students' activities. In these cases, teaching is verbal and not that clear since it reduces the sustainability of knowledge and linking theory with real life.

Recently, teaching is being well-organized in the implementation of didactic media, in increasing the efficiency and effectiveness of the learning process. But, the educational system has not yet been sufficiently modeled as an integrated cognitive system. In the moments when students seek to quickly find the new information, some of the teachers are still not sufficiently prepared concerning the interpretation of new knowledge that students bring from home, this way students do not know what form of injustice new learning content delivers.

One reason for this situation is that teachers do not have sufficient background knowledge in the implementation of the new educational technology, this way teachers must be trained through workshops associated with the implementation and management of teaching media. There was a lack of educational technologies a few years ago but they have done a boom in every aspect of life, then teachers have become somewhat confused regarding the implementation or non-implementation of these tools in the schools.

Alongside of the development of other fields of technology such as in business, manufacturing, medicine, etc., School is unfortunately behind the advancement in the technology compared with the above-mentioned areas. This process must change and schools should be using technology in the same way to other areas of life, because the school is a basic institution by which society expects constant changes in having a better and a more advanced society and economy in general.

Contemporarily, there has been made some significant steps towards school equipment with modern teaching media with information and communication technologies, in order to have an easier and quicker new information achievement. These and other electronic tools offer the ability to create electronic text, pictures, animations, movies, mathematical calculations etc., there is also the possibility of reviewing them anytime there is something unclear. The quality of contents presented by teaching multimedia gives a much richer content to the learning process compared to traditional teaching, the massive

use of ICT and the Internet in general has enabled distance learning to be based on a system resource electronic information.

Furthermore, with the improvements of operational systems of computers by teachers and students, the users performance has begun to be easier, this way the connection among users and teaching technologies is better and there are better results shown so far. The use of cellular communication connections is providing a faster access to every information worldwide, this way the teachers are having an easier and faster approach to the new information.

By using innovative and communicative technologies, education and balance of knowledge with the rest of the contemporary world is enhanced.

Computer at school is a multidimensional strategy and as a technological-didactic and pedagogical-psychological and social project, in the first place should be applied in teaching by even starting at the elementary level of the lower elementary cycle.

The usage of the computer in teaching, which is based on staff background and training as well as of training of students for technical manipulation with these modern tools , it holds many possibilities of communication based on software by developing contemporary forms briefings, and encourages the students to be more prepared for a direct integration into life and work.

All of these high-tech devices and electronics in everyday life create incomparable opportunities in the organization of the lesson in terms of deployment of them into the so called electronic classrooms, which belong to high teaching standards, but also there are necessary requirements for preparation and professional training of the teaching staff.



**Fig. 1. Contemporary learning in computer labs.**

Electronic boards used in learning, in a modern society of the XXI century, is one of the greatest demands and what schools must be equipped with. There is a need for modern teachers who know, love and succeed through the use of new techniques and learning technologies. By using such contemporary techniques the learning process would be in a more elevated level, with a higher quality and in a very sophisticated way.

The electronic board is connected to the internet and is very efficient, fast and very specific in giving appropriate answers. Electronic boards as new multimedia strategies have a positive impact in encouraging students' activity and interest in the classroom. With the use of such boards there is an easier way in checking and assessing students academic performance even when there are large classes with more than 30 students. It also stores the previous teaching methods that were shown as successful.

The advantages of this board are:

It can be searched quickly and easily for every material that might be useful for the class (dependent on the distance once there is access to the internet).

In various situations there are chances to revise on previous materials so that students comprehend anything that they might have missed, there are opportunities to look at the visuals, films and they create favorable space in experimental collaboration.

The presence of the electronic board in the classroom makes other tools unusable which means that all of other tools are substituted or can be found in only one place (in the electronic board).

Electronic boards are multimedia tools that possess general and daily school preparations. All the data can be received quickly and easily by just typing with a finger or using a special pen for such boards, by minimizing and maximizing the figures, modifying or changing anything. In overall every request by a teacher or a student can be materialized as quickly and easily as possible.

The use of electronic board in our schools, provides numerous opportunities for educational enrichment of our culture, so first of all, it must be taken into account the professional skills of teachers in the manipulation of this new educational technology. Teachers according to some psychological tests, firstly define problematic situations that may be encountered when working with electronic boards, taking into account the compatibility of learning content with the searched material in electronic board. There should be suitable brightness of the classroom when using such boards and a proper formulation of the learning process.

In this case, the teacher organizes the lesson in accordance with suitable methods, by collecting didactic tasks, creates concrete strategies for the lesson as well as prepares questions and particular assignments which are given to the students before ending a lesson.



Fig. 2. A visual image of an electronic board.

During a survey conducted in some schools where electronic boards were present, it was obvious that the students were monitored during their presentation. It was claimed that they found such boards very interesting and very attractive as well. Students have proven that by the use of such boards they tend to remember longer. There is a possibility of repeating the material explained by multimedia and participate actively in the process of learning new content.

Acquiring knowledge through multimedia, offer the students the opportunity to think, analyze and seek new information, this means that students cannot learn only in schools. If they have retained enough information associated with the manipulation of these tools, they can even use them at home which would help in gaining new skills that are related to the school curriculum and beyond.

Programs for interactive learning enable students to monitor exposures, to ask questions, provide answers and communicate with one another with all those schools which have installed cameras, so that communication can be performed in real time by exchanging experiences among them.

Didactic media can help a teacher especially when there is no possibility to take objects, phenomena, any plants or species to be presented to the students in regards to any specific subject. This way due to the lack of such conditions, didactic media can help in presenting them through images and videos.

In relation to this issue, it should be mentioned that didactic media are not always powerful to give us information without putting any effort on using them by anyone, that is why there should always be a need for a teacher to solve any problem that might be faced when obtaining a new information.

A good teacher can successfully adjust students' background knowledge, their interests, learning styles, their skills and pace of work by applying them on individual bases and encourages students to be active in every phase of teaching and learning. Additionally, simultaneously can be provided new information in the classroom allowing two-way communication to the students.

The conditions for having active students in the classroom in each phase such as organization, implementation, verification of knowledge can be created by didactic media through them innovative teachers can:

Enhance active attention of students in the classroom,

have a clear picture of the explained material,

encourage different activities and use different sources of knowledge both from within and outside the school,

enable students to understand more deeply the lesson contents and to correct and repeat anytime they want all issues that students might have difficulties with.

- Didactic media will not only contribute to the methods of oral presentation, discussions and work with the text, but they will also contribute to methods such as demonstrations, laboratory work, exploration and discovery, project work and also there will no longer be a domination of frontal forms, but it will be adjusted depending on the situation that may arise such as: organizing group work, individual work, pair work etcetera.

- Didactic media are an important factor in the process of design, realization and in having a successful conclusion of the teaching process.

- The future of innovative schools cannot be imagined without the presence of didactic media. The school and the society in general would be 'illiterate' if not using such media. That is why there is a need in having a closer approach to such media in very early stages of school.



**Fig. 3. An image of a smart board in the classroom.**

The appropriate usage of didactic media:

Encourages the students to work independently and to expand the already acquired knowledge in the classroom.

Encourages the students to discover and solve problems and to make decisions.

Allows them to develop their critical thinking

Active state towards the living and learning environment

Allows the students some movement in having interaction and active relations in the classroom.

Gives the students the ability to learn better when they are aware of the aim of learning.

Raises students' awareness that they are learning the appropriate content in having a better personality etcetera.

- The function of the teacher can be changed if using didactic media, so there will not be the teacher centeredness, the teacher will be less on the role of a lectures or examiner, his/her role would be much more of a researcher, developer, strategist of teaching and learning, organizer of teaching and learning, counselor and educator of new generations.

- Due to the enrichment functions of teachers with new teaching technology, teachers' commitment to teaching is in a better position to develop its sensitivity to education problems, to their personal problems, questions of their life, education in general etcetera.

- In better circumstances, didactic media can meet the needs, interests and desires of students, can also enhance more enthusiasm and creativity to do their work so that they feel happier due to the media to bring more meaning in their learning process.

- Didactic media have an impact in activating many senses in the learning process, they encourage students to learn by doing things.

- Universal didactic media correspond on the way people want to be connected to the reality, they support and adjust his desire to learn something that could be useful in everyday activities.

- Some of the most important media that could be used and practiced at school and at home would be: multimedia systems, computer, smart phones, electronic boards, cable and satellite TV, VCR, etc.

- The use of didactic media during educational activities enable an organizational learning by establishing teaching at a higher level, by motivating students in their learning activities and making the student to succeed more in the learning process.

### **Conclusion**

There are many didactic rules and convincing evidence of what has been achieved if applying didactic media in innovative schools. The educational value of using such media was evidenced through the school results which showed that through their use students feel much more determined, more sophisticated, and show great academic performances.

It has been seen from the teachers, students and from the students' parents that didactic media has an important role in harmonizing what was learnt at school with the real life, the theoretical part with practice as well as making some connections with previous knowledge background, advancing them even quicker with the main purpose of having an advanced knowledge.

Additionally, it is important that the function of this media enhances the activity of many senses showing curiosity towards retaining new knowledge and desire for an active participation in learning and its development. Independent work, transfer of knowledge and the application of them in a didactic way is allowed by multimedia.

Based on the research done, it is obvious that there is a need in using didactic media. In addition to it, 93% of the students claimed that they are pro using didactic media and only 7% stated to be against such multimedia. It has been proved that students feel really interested in methodologies of this kind, because the lessons are well- understood, are more satisfied when learning and that what they learn remains as a long term memory.

Nowadays, there has been a great development of technology, which has led in developing in many other social fields as well, this way didactic media are such methods which have a great role in helping the students to manage their classes better and to make the school environment even more adorable for the students.

Real situations are connected through interactive systems in a way that students show more interest in learning. Students are educated in various subjects and show interest, are more motivated and this way even the teaching is more effective.

### **Recommendations**

Students, teachers, parents and the community, all together should be coordinated and motivated in implementing didactic media into learning, as great factors of achieving better results in the school and in the overall society.

A teacher should know how to work with such didactic media in the classroom-school.

Students should be informed about the objectives of using such media in the classes by their teachers.

Teachers should show the students about the positive effects that these media play on students' academic performance.

Children should be allowed by their parents to use such techniques even at their home.

Students must be informed for the pros and cons of using such media by the professionals.

The schools which express an interest on having didactic media in their educational processes should be supported by state institutions.

The schools which lack on having multimedia systems should try to have such media in enhancing some particular data and systems for distance learning in the service of the students who might have health problems and for those who cannot go to schools and vise versa.

Students should be offered a variety of learning methodologies rather than still continuing with the traditional system of both teaching and learning.

The school which has been advanced from the society, for its particular interests must seek for innovations continuously with the main purpose of advancing students' essential needs. On the other hand, there should be a systematic support and help by the institutions about choosing the activities for students, the type of teaching, and they should offer many new technologies in maintaining a better and a more attractive learning environment.

## References

- [1] Danilović, M. (1996). *Savremena obrazovna tehnologija*, Beograd. Srbija.
- [2] Dika, A., Rodiqi, S. (1998). *Kompjuterët dhe informatika*, Prishtinë. Kosovë.
- [3] Korthagen, F. (2010). *Situated learning theory and the pedagogy of teacher education: Towards an integrative view of teacher behavior and teacher learning*.
- [4] *Teaching and Teacher Education*, 26(1), 98–106.
- [5] Likaj, R. (2008). *Informatika në edukimin fillor dhe parafillor*, Prishtinë, Kosovë.
- [6] Mandic, D. (2010). *Knowledge Based Multimedia System for Teacher's Education*,
- [7] in the book 9th WSEAS International Conference. on ARTIFICIAL INTELLIGENCE,
- [8] KNOWLEDGE ENGINEERING AND DATA BASES (AIKED '10), University of
- [9] Cambridge, Cambridge, United Kingdom, 2010, pp.221-226.
- [10] Mandic, D. (2003). *Didactical and computer supported innovations in education*,
- [11] Beograd. Srbija
- [12] Mandic, D., Lalic, N., Bandjur, V. (2010). *Managing Innovations in Education*, in
- [13] the book 9th WSEAS International Conference. on ARTIFICIAL INTELLIGENCE,
- [14] KNOWLEDGE ENGINEERING AND DATA BASES (AIKED '10), University of
- [15] Cambridge, Cambridge, United Kingdom, 2010, pp.231-237.
- [16] Nikša Šojan, N. (1972). *Nastave i učenje uz pomoće kompiutera*, Zagreb. Hrvatska.
- [17] Osmani, F. (2008). *Teknikat dhe teknologjitë mësimore*, Tetovë. Maqedoni.
- [18] Rosen, A. J., et al. (2010). *Noncognitive Skills in the Classroom: New Perspectives on Educational Research*. RTI Press. September 2010.
- [19] Zylfiu, N. (1985). *Aspektet didaktike të kompjuterizimit të punës mësimore*, revista „Pedagogu”, Nr. 1, Prishtinë. Kosovë.
- [20] Zylfiu, N. *Ditura 1-2*. (1976). *Të mësuarit shikuar nga aspekti i komunikimit*, Prishtinë. Kosovë.