THE USE OF ICT IN GEOGRAPHICAL TEACHING AND LEARNING AT SECONDARY AND HIGH SCHOOL IN ALBANIA

Engjellushe Zenelaj

[1]University Ismail Qemali Vlore, Faculty of Human Sciences, Department of Education, Bulevardi Vlore-Skele, Vlore Albania, enxhizenelaj@gmail.com

Abstract

Geography gives to humanity a lot of information about their country and the entire world. The first asset of teaching and learning geography is the map. But many times it isn't enough. Geographical sciences and geographical teaching methods have passed many changes. It has been development and the information anytime is updated. There are many topics that need more than a map, for example the physical geography, geological knowledge and geomorphology topics in different lesions. For many pupils is difficult to understand only by teacher explain and reading of books. ICT is considering part of our everyday life. It has entered in every kind of business. We live in the era of ICT. Considering the fact that is so important we can't exclude the the ITC from education, from teaching and learning process.

ICT has brought many changes in teaching and learning process. The paper has the goal to analyze the role of ICT in teaching and learning geography in secondary and high school level in Albania. The paper is a research. The research is realized through questionnaires methods that have included three groups of interviewed in some cities of Albania. The research underlines the important role of ICT and the difference when ICT is used and none used. But also the article underline some of the problems that come out during the research like the lack of knowledge for the use of ITC as for teacher as for pupils, difference that exist between rural and urban pupils, lack of technology in school etc. The paper analyses the close connection that exist between sustainable education, geography education and ITC.

***Keywords*:** *education, teaching and learning geography, ICT and geography, update information*

1. Introduction

ICT increase quality of education. One of the most vital contributions of ICT in the field of education is- Easy Access to Learning (Sharma,S., Gandhar,K., Sharma,S., Seema, , 2009) According to the UN Decade of Education for Sustainable Development 2005-2014, geography is really closed with education for sustainable for development, and ICT is the first tool that will help both, teachers and pupils. With ICT the lifelong learning will be easier. The role of ICT can be evaluated in many directions.

According to Becta 2003, five factor of influence the like hood that good ICT learning opportunities will develop in the schools: ICT resourcing, ICT leadership, ICT teaching, school leadership and general teaching. Becta 2003 also indicates that the success of the integration of new technology and information into education varies from curriculum to curriculum, place to place , and class to class, depending on the way is which it is applied in depended (Bingimla, 2009) .

Geography is a broad scientific discipline that brings different information. Geography help pupils to have infornation about the world. In geography lesson , pupils learn about the location, distribution, distance, movement, region, scale, spatial association, spatial interaction and change over time (Reinfried,S., Schleicher,Y., Rempfler, A., 2007) . Access in information is a very important asset for development and ICT can help to share information.

Contemporary learning theory is based on the notion that learning is an active process of constructing knowledge rather than acquiring knowledge and that instruction is the process by which this knowledge construction is supported rather than a process of knowledge transmission (Duffy, T., & Cunningham, D., (1996).)).

Methods of work and research in geography are developed. Currently the realizations of the geographical studies and research and geographical teaching and learning process is connected with ICT. Although the science of geography is influenced very much by ICT, the use of ICT in secondary and high level school is steel low. This is major connected with the lack of hardwares and softwares. The use of ICT is increasing its role in curriculas. Curriculas updates in last years from Ministery of Education in Albania, have included in the program the integration of teaching and learning with the use of ICT.

The use of ICT in geography helps pupils learn by providing access to large quantities of information on people, places and environments (www.teachingtime.com). According to UNESCO: ICT is a scientific technological and engineering discipline and management technique used in handling information in application and association with social, economic and cultural aspects.The integration of information and communication technologies can help teachers and students (Noor-Ul-Amin, 2009)

2. Literature review

Generally, ICT is promoting new approaches to working and learning, and new ways of interacting (Balacheff, 1993).
The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning, and (Yusuf, 2005).
A great deal of research has proven the benefits to the quality of education (Al-Ansari, 2006)
ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability

for tomorrow's workers, as well as strengthening teaching and helping schools change (Davis and Tearle, 1999; Lemke and Coughlin, 1998; cited by Yusuf, 2005).

ICTs can enhance the quality of education in several ways, by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training. ICTs are also transformational tools which, when used appropriately, can promote the shift to a learner centered environment (Noor-Ul-Amin, 2009).

3. Geography education, sustainable education and ICT

The link between education and sustainable development is strong. The theory of the future for sustainable development, may not receive or find the application development and widespread support, if people are not educated and do not receive adequate information. Implementation of strategies for sustainable development is a result of the development of educational curricula.

ESD is a vision of education that seeks to balance human and economic well-being with cultural traditions and respect for the earth's natural resources. ESD applies trans-disciplinary education methods and approaches to develop an ethic for lifelong learning; fosters respect for human needs that are compatible with sustainable use of natural resources and the needs of the planet; and nurtures a sense of global solidarity.

The EU's Sustainable Development Strategy aims at bringing about a high level of environmental protection, social equity and cohesion, economic prosperity and active promotion of sustainable development worldwide. There are multiple inter linkages between the key challenges: for example between the use of renewable energy and climate change or climate change and poverty. The problems are interlinked and solutions must take this into account (EC, 2007).

The practical definition of sustainable development remains "balance between the social, economic and natural resources". To build a system for sustainable development in progress is very difficult; it should be noted that to talk about the three elements at the same time. Finding balance, adds more difficult, because, "the preservation of the ecosystem", includes in itself, human capital, making peoples an integral part of the ecosystem that we are trying to save.

Mostly, sustainable development requires major and radical changes, in particular to human behaviors and habits, connected to nature and the economy. The development of education in the context of sustainable development, promotes the correct answer of science, but a way of engaging with different perspectives on the world we live in, and share together every moment of our lives.

International Geographical Union Commission on Geographical Education shares the vision of the UN Decade of Education for Sustainable Development (UNDESD) 2005-2014, which sees education for sustainable development (ESD) contributing to "a world where everyone has the opportunity to benefit from quality education and to learn the values, behavior and lifestyles requiredfor a sustainable future and for positive societal transformation" (UNESCO, 2005)).

Education for sustainable development must continue working with environmental education which brought a new view of human relationships with the world environment – which is no longer conceived as an object, but as a living creature that shares the same destiny with human beings. Environmental knowledge is ethical and political. It isn't only a matter of understanding ecological principles, but also involves a new concept of reality (Gadoti 2003).

The most important geographical competencies implementing sustainable development are:

- Geographical knowledge and understanding of

- Major natural systems of the Earth in order to understand the interaction within and between ecosystems.

- Socio-economic systems of the Earth in order to achieve a sense of place.

- Spatial concepts – key ideas unique to Geography that help students to make sense of the world: location, distribution, distance, movement, region, scale, spatial association, spatial interaction and change over time (Reinfried,S., Schleicher,Y., Rempfler, A., 2007)

The connection between education for sustainable development, geographical education and the ICT is really close. The use of ICT helps a lot in many different meaning of learning geography. There are many benefits from the use of ITC in geographical education. But first of all the use of ITC is one asset of sustainable education.

The benefits of the use of ICT contribute to the aims and objectives of Geographical Education for sustainable development in a sense that ICT helps to update information, to have access in the latest results of sciences, and to recorrect the contradicted and wrong information that circulate.

Another important topic of the impact of ICT in geographical education for sustainable development is that ICT create the opportunity to have new point of view for many issues, and to have better understand and conceptualization

4. Improving and raising standards

The use of ICT, has a generally good impact because it brings raising of teaching and learning standards. Standards are connected with both of them, teacher and pupils. The growing use of ICTs as tools of everyday life have seen the pool of generic skills expanded in recent years to include information literacy and it is highly probable that future developments and technology applications will see this set of skills growing even more.
Improved and raised of standards has to do with improvement of writing, speaking, pronunciations. Another point of view is that ICT has important positive impact in higher quality lessons through greater collaboration between teachers in planning and preparing resources (Ofsted, 2002)

- more focused teaching, tailored to students' strengths and weaknesses, through better analysis of attainment data
- Improved pastoral care and behavior management through better tracking of students
- Gains in understanding and analytical skills, including improvements in reading comprehension (UK), 2004).

ICT changes the characteristics of problems and learning tasks, and hence play an important task as mediator of cognitive development, enhancing the acquisition of generic cognitive competencies as essential for life in our knowledge society. Students using ICTs for learning purposes become immersed in the process of learning and as more and more students use computers as information sources and cognitive tools (Reeves and Jonassen, 1996), the influence of the technology on supporting how students learn will continue to increase.

5. Methodology of work

Questionnaires are realized in different school of Albania's cities, as Fier, Ballsh, Tirana, Vlora, Saranda, Elbasan. The questionnaires are realized during September-December 2012. The Research consisted on the three major groups: teacher , pupils, academics.

50 teacher of geography in different secondary and high school in Albania have been answered for the questionnaire. There are asked two categories of teachers, them with many years of experience and the other category have included new teachers. The reason is to identify the professional synchrony of teachers.

The second group is 100 pupils at secondary and high school. The questionnaires are realized with pupils in eighth grade and ninth grade in secondary school, and in the three years of high school. I have chosen those pupils because they are have chosen these classes, as adults and responsible for understanding the questionnaire; But at the same time to understand the teacher-pupils collaboration in teaching processing The third group is formed by 30 Albanian and foreign academics, which have given their opinion about ICT in teaching and learning geography.

Based on the research problem, the following research questions summarized on the following objectives:

- *Identifying the role of ICT in geographical teaching and learning*
- *Discovering changes since the use of ICT in teaching and learning geography*
- *Identifying the advantage and disadvantages of the use of ICT in teaching and learning of geography*
- *Discovering the main barriers of ICT aapplication in curriculum development of secondary and higher level of education*

5.1. Questionnaire for geography teachers

- Do you use ICT ?
- Why do you use ICT?
- How important is ICT for your work?
- Do you recommend your student to search something in internet?
- Do you use different demonstration from internet to illustrate some topics of lessons?
- What has change from the time that you use ICT for yourself in your work?'
- What has change in your class from the time that you use ICT?
- How will you evaluate the chancing?
- Which are the main obstacles of using ICT teaching and learning process of Geography

5.2. Questionnaire for pupils in secondary and high school

- Do you use ICT?
- Why do you use it?
- How important is ICT in your learning process?
- Do you use it for geographical learning?
- How many years have you use ICT in learning geography?
- How will you evaluate the role of ICT in learning geography?
- Do you have any obstacles for using ICT in learning geography?

5.3. Questionnaire for academics

- How will you evaluate the role of ITC in teaching the geography?
- Which are the benefits of using ICT for geography lessons?
- Which are the main obstacles of using ICT for geographical teaching?
- Do you think that there is any disadvantage using ICT for geographical teaching and learning?

6. Results

After making all the questionnaire there are analyses the results which are as below

Table 1. Analyze of Teacher questionnaire

• Questions for geography teachers	• Answer	
How often you use ICT?	74 % answer that they use Very often. This is the group of teacher that has usually new age.	26 % of teacher replies that they use not very often the ICT. this is group of teacher
How important is ICT for your work?	68% of teachers answer that ICT is very important for their works	32% of teacher declare that the role of ICT is Important
How often you recommend your student to search something in internet?	54% recommend Very often student to search something in ICT.	46% of teacher do Not prefer to recommend very often internet searching for pupils.
How often you use different demonstration, materials, from internet to illustrate some topics of lessons or to give additional information?	42% of teachers use Very often additional materials or helps material from the ICT to explain the lesson.	58 % of teachers do not use very often additional materials or helps material from the ICT to explain the lesson
How will you evaluate the change in your class from the time that you use ICT?	100% -Positive.Even the fact that not all the teacher use at the same level ICT, or recommend it for pupils, they are together at *the same conclusion that the changes are positive*. Teachers have understood the role of ICT in teaching and learning process. For them ICT is very important in teaching and	

	learning process .
Which are the main obstacles of using ICT for teaching and learning process of Geography	Lack of technology, lack of software, lack of hardware, lack of Training courses for teacher, are the main obstacles.

Table 2. Analyze of pupils questionnaire

Questions for pupils	**Answer analyzes**
Do you use ICT?	All the pupils use ICT.
Why do you use it?	The main part of them use for information, communication, social webs, music, movies,
How important is ICT in your learning process?	The main parts of pupils have created a strong connection with ICT. Based on the result they spend much time on the ICT.
Do you use it for geographical learning?	The entire pupils use ICT for geographical learning; They usually use ICT when they want to see something about the lessons that had explained the teacher in class; Curiosity to see concretely images of the destination or the natural phenomena, to have additional information;
How many years have you use ICT in learning geography?	The main parts of student are new as ICT users. They have 2-4 years.

Table 3. Analyze of academics questionnaire

Question for academics and specialist	**Answer analyzes**

How will you evaluate the role of ITC in teaching the geography?	Generally in all the questionnaires the same is one: *Positive evaluation*.
Which are the benefits of using ICT for geography lessons?	• Is useful for teacher, make simply their work, to transmit the knowledge to the pupils. • Through the ICT the teacher and the pupils have the *opportunity to see more than one simply map*.
Which are the main obstacles of using ICT for geographical teaching?	• The first obstacle is the lack of ICT, especially in rural areas. • Another obstacle is the fact that for the *old teacher is difficult to update with new technology*.
Do you think that there is any disadvantage using ICT for geographical teaching and learning?	• In generally way there are not disadvantage but is better to say some risqué. • For example during the searching on the internet, pupils *can learn wrong sciences thoughts*. • Is really difficult to control the information in the internet. • The other risqué is that students can leave the books and for some of them is enough only with internet information, without reading the book, or without working or thinking for their homework. • More attention to quantity and more speed in education instead of quality and training

7. Discussion

Albania has entered later in the way of using ICT compared with other countries in the region. ICT in general terms, is still a new concept and a little difficult for everyone. However marked progress in recent years has been the fast time. ICT is closely associated with the process of education and educational development. Integration of ICT in education, except comes as a necessity; it is also an obligation for the entire process, and the development path, which entered Albania.

Device with Internet and Information and Communication Technology for all primary and secondary schools in Albania is an integral part of national priority to address the problem of digitizing and represents a critical investment in human capital. In a world increasingly oriented towards technology, use, understanding and culture of Information Technology represents a critical factor in creating a workforce prepared to meet the challenges of the 21st centuryFramework of the reform of the Ministry of Education and Science in Albania, for

equipping schools with ICT, and at the same time, the combination of pedagogical ICT education programs, has already started several years. According to the program of the Ministry of Education and Sciences in Albania, The program "E-school in Albania", supported by UNDP, during 2005-2009, will enable the provision of primary schools in 1749, and 376 secondary schools with modern computer labs by the end of 2008, to connect schools to the Internet in 2125 with reliable technology and fast, to train all teachers of informatics administrators and computer labs for teaching information Technology and educational management processes, create information technology curriculum for elementary schools and to review and improve the curriculum for secondary schools, provide a suitable environment and sustainable operation and maintenance of the computer labs and provide local communities with access to the computer labs in schools

However, this program is not yet widespread throughout the country, and to a large proportion of schools have difficult and impossible adaptation of teaching practices related to ICT.

This is information that comes from teachers who have worked for some time in the village and are now teaching in schools as the city. They are the first to highlight difference. In addition the presence and the opportunity to have access to ICT is the largest urban area students.

The absence of the necessary hardware and differences in the development between rural and urban areas damage pupils, because bring deficiencies in their training and education.

Another problem is the fact s the fact that out of teacher training for new teaching practices and educational programs with the combination of ICT.

It is difficult to do immediate changes to teachers who have many years of work, and are used with one working method.

Removing the classical methods of teaching, accompanied by difficulties, which lies in the fact of their age and knowledge for ITC, or the recognition of foreign languages; therefore arise as a necessity of continuing training of teachers.

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