THE USE OF INTERNET IN THE LEARNING PROCESS

Bojana Perić Prkosovački
University of Novi Sad, Faculty of Medicine, *Serbia*
bojana.peric-prkosovacki@mf.uns.ac.rs

Snežana Šćepanović
Medical school "7th April" - Novi Sad, Serbia

Abstract

Although the main motive of using the Internet, especially Web 2.0 tools, is to exchange entertainment content, survey results showed that young people between 15 and 24 years are of the opinion that the use of Internet is possible in the learning process.

The survey objectives were to register the content, purpose and the extent of Internet possibilities among young people and to determine their attitude regarding its potential use in the learning process according to their age.

The hypotheses of this study were that the effective application of ICT in the learning process in certain areas correlated with successful learning outcomes. We assumed that the application of the Internet`s content varies in relation to age.

The survey covered 173 students of different ages.

The prevailing use of the Internet is for entertainment. Only 50% of students aged 15 to 19 uses the Internet with the aim of learning, while the older group, for the learning process and to stay informed. Even 78% of first year students use the Internet in the learning process, while 80% of fourth year students. Only three persons have written their own blog. Also, 94% of the oldest age group are members of internet forums whereas only 6 of youngest group visit them. Chat rooms are used for dating and socializing.

These results emphasize the importance of monitoring the use of the Internet among young people and the introduction of the popular Internet space in education and provide a basis for further similar studies.

Keywords: learning, Internet, social networks, blog, chat.

Modern education technologies create preconditions for engaging all the senses in the process of acquiring new knowledge. They develop student creativity and ensure greater engagement of students in teaching and learning. Therefore, computer technologies and the Internet represent significant tools for teaching at all levels of education.

The means of mass communication represent powerful tools influencing the modern man. Through them, informative, educational and entertaining content is transmitted, thus meeting all the needs of modern man, who demands to be informed about important social relationships and processes. Education is defined as a correspondent process between the individual and society.

Younger generations receive and process information very quickly. They can perform multiple tasks at the same time. Many prefer a graphical representation of content rather than dry text, they learn better through games then through serious work and basic remembering of scientific facts. In addition, the younger generation expects frequent feedback which in fact, additionally motivates them for further work.

Many teachers and educators will use the above mentioned facts as arguments against informative-communicational technologies (ICT) and develop a negative attitude towards their application in schools. However, the school also needs to be up-to-date and follow improvement in ICT technologies in order to continue to meet the needs of the social environment and to remain relevant in education in general. Because of that there are clear reasons for continuous testing, revising and modernizing the curriculum, teaching methods, forms and work techniques. (Perić Prkosovački & Brkić, 2011)

SOCIAL DIMENNSION OF EDUCATION

Education is a process-oriented human development which is the purpose of the development of consciousness. In the wider processes of human development education refers to those processes which make a human being a reasonable person. More closely defined, education is a socio-individual interactive process of developing the skills of learning, the development of attitudes and values, and the acquisition of knowledge, skills and habits necessary for human life – autonomous and responsible participation in the human community.

The social dimension of education results from the facts that learning is always a certain social form. An environment created by human development in which students are gaining

knowledge from various culturally created ways, forms and content of learning. As an individual process, education is a lifelong process of training the personal forces needed for a meaningful life. (Grandić, R., Knežević-Florić, O. and Milutinovic, J., 2004)

Today, education is considered a basic human right. It's more and more important and plays a role not only as a factor for personal development, but also as a determinant that contributes to continuous development, peace and stability of countries and their relationships. Education is by its nature futurist, because it does not prepare man for much of the existing society as much as for society yet to emerge.

The new philosophy and strategy of education is expressed in the form of four fundamental objectives. (Milutinović, J. 2008).

1) Learning for knowledge is including knowledge that enables people to understand their environment and also enable them to independently have critical evaluations. In this framework, training   for   lifelong   learning   is   a   general   objective   of   education.
2) Learning to work is closely linked to learning for knowledge, but in fact just represents a link to professional advancement. The goal of education is to develop skills for practical use of knowledge in changing conditions for work and life, as well as to develop skills to cope in many different situations and the ability to work in teams.
3) Learning to live together is one of the most important goals of education. It consists   of adopting the values of pluralism, tolerance of differences, multiculturalism, mutual understanding, peace and development of skills of non-violent conflict resolution, joint action, etc.
4) Learning for being is the objective of education consisting of and contributing in the overall development of each individual - their mind and body, intelligence, sensitivity, sense of aesthetics, personal responsibility, spirituality. The basic role of education is to give everyone the freedom of thought, reasoning and imagination that is necessary for the expression of personal talents and the management of our own destiny.

THE ADVANTAGES OF USING THE INTERNET
IN THE LEARNING PROCESS

ICT (Information and Communication Technology) learning systems are solutions for the integration of computers and telecommunications, which allowed simultaneous presentation of more medial sources: texts, video images (static and dynamic), sound (speech and music), graphics, animations, as well as storage for memory, searching and data processing. The revolutionary development of these technologies made it possible to digitally integrate voices, music, texts, graphics and video-image information. The creation of the information highway enabled placement, transfer, access, exchange and flow of information in an unlimited form and for unlimited distances.

- According to Vlahović (2001) ICT learning enables:
  Individualization of learning and students' progress,
- Receiving information, both audio and visual ,
- Unlimited repetitions of given contents,
- The organization of cooperative and interactive learning,
- Managing the learning process,
- Timely feedback,
- Easier access to various sources of knowledge,
- The possibility of access to different views of a problem,
- Improving the quantum and quality of knowledge.

Learning by ICT promotes intellectual development. Teaching and learning through ICT require a high level of intellectual activity by students. Learning with the use of computers and the Internet the student is informed to independently search for the unknown, to search databases and other sources, to compare, analyze, investigate, solve problems and to productively learn and think. (Kennewell, Parkinson & Tanner, 2000)

In this process a number of other intellectual qualities are developed, such as: the habit of engaging in intellectual work, intellectual curiosity, various intellectual skills, development of creativity, sensitivity to problems, abilities of recognition and solving of problems. In general,

teaching / learning using a computer contributes to more efficient intellectual development and greater motivation to learn.

Using this means of mass communication in the classroom, and use of the Internet in the process of learning in particular, allows the individual to become the master and creator of their own cultural improvement. By using the Internet the student acquires knowledge which they can then use and by that, change and be in a position to educate themselves. Possibility of interaction between students and computers have been created and the formation of a program whose contents consist of the following elements: problems, prerequisites for solving them, interpretations, questions, answers, warnings, instructions, explanations and more. These types of learning give students the opportunity to take over the functions of management and gain insight into the process of monitoring, evaluating and assessing the results of their learning. In addition, students are trained to work independently, their motivation and activity in the learning process is increasing. (Lorimer, 1998)

RESEARCH OBJECTIVES

The overall research objective was to determine the attitudes, use and purpose including the possibilities of ICT learning among young people. We observed ICT learning according to different ages and different levels of education (school or faculty). The hypotheses of this study were that the effective application of ICT in the learning process in certain areas correlated with successful learning outcomes and we assumed that the application of the ICT learning varies in relation to age.

RESEARCH METHODS

Sample:

Within this research, young respondents have been clustered into 3 different groups. The survey covered a total of 74 young people aged between 15 and 19 years, then 64 young people aged between 19 and 21 years, and 35 young people aged between 23 and 24 years.

The instruments and procedures:

To obtain data, subjects were interviewed by an anonymous questionnaire, designed for this study. Questionnaire which was used had open type questions, as well as questions with alternative choices. The questionnaire consisted of 16 questions.

RESULTS AND DISCUSSION

In total, this study presents analyses results of 173[1] interviews. The survey results show that respondents of all age groups use the Internet. However, the purpose of using the Internet is different. From descriptive answers we extracted 4 response categories that described the purpose of using the Internet. From Table 1 we can see that the group of young people from 15 to 19 years uses Internet mainly for entertainment purposes. The situation is similar in other groups. It is interesting that only 50% of young people aged between 15 and 19 use the Internet for learning purposes, while older groups use Internet in the learning process and as an information source more frequently. Even 78% of young people who are first-year faculty students use the Internet in the learning process, while that percentage is even higher among young people who are fourth year students (80%).

Table 1 For which purpose you use Internet?

	15 and 19 years	% of answers	19 and 21 years	% of answers	23 and 24 years	% of answers
A) fun	67	91%	55	86%	32	91%
B) learning	37	50%	50	78%	28	80%
C) informing	43	58%	48	75%	34	97%
D) social; making contacts	41	55%	0	0%	20	57%
TOTAL	74	100%	64	100%	35	100%

---

[1] there is a possibility of discrepancy between the number of respondents mentioned in the sample and the number described in relation to the individual questions.

On the question "How much time during the day they spend on the Internet?" majority of youngsters aged between 15 and 19 years spend up to 2 hours per day on the Internet (49%). Majority of young people aged between 19 to 21 years and from 23 to 24 years spend up to 2 hours a day on the Internet. It is interesting that 22% of young, first-year faculty students spend more than 4 hours a day on the Internet, while only 5% of young high school pupils spend more than 4 hours a day on the Internet.

Analyses of questions related to social networks, resulted that all young people, including faculty students and high school pupils, have their own Facebook profiles. High school students mostly use Facebook for socializing and chatting with friends (92%). Nearly the same percentage was recorded among first-year students (88%). Students in the fourth year of faculty used this social network for that reason recorded 86%. To a large extent, all respondents use Facebook social network for absorbing urgent and important information. What is interesting is that only high school students use the Facebook network to search for a potential romantic partner. In comparison, groups of young people from 19 to 21 years and from 23 to 24 years, no one has opted for this answer.

Regarding the use of the Internet for learning purposes, we concluded that all respondents use the ICT in their learning process. Young people from 15 to 19 years (64%) use the internet to complete their homework, while other groups of young people are using the Internet mainly to write reports and essays. Wiki pages are tools which youngsters usually use in their learning process. In Table 2 we could analyze.

From the questionnaire we concluded that all responders used Wikipedia for different purposes according to their age. Young people from the age group of 23 to 24 years use Wikipedia mostly for information (74%). Wikipedia is used for this purpose by 55% young people from 19 to 21 years old. While that percent is only 26% among the age group from 15 to 19 years. All groups are using Wikipedia mostly for homework papers and reports.

Beside the social network, responders also informed us about their use of blogs, forums and chats. Of the total number of young people, only 3 of them have written their blog (a high school student and two young people from 19 to 21 years of age). It was very interesting that even 94% of responders in the oldest group of young people were members of some forum. Six young people from 15 to 19 years visited forums, as well as only 3 of them among the group

aged between 19 and 21 years. As for the 'Chat', all respondents use it, mostly for dating and socializing, and to a lesser extent for information.

Table 2 In which situation are you using Wikipedia or some other Wiki page?

	15 and 19 years	% of answers	19 and 21 years	% of answers	23 and 24 years	% of answers
Homework	19	26%	0	0%	0	0%
Information	19	26%	35	55%	26	74%
	20	27%	15	23%	7	20%
Reading interesting content	4	5%	6	9%	4	11%
Content related to the school/faculty	24	32%	3	5%	0	0%
No	0	0%	5	8%	0	0%
TOTAL	**74**	**100%**	**64**	**100%**	**35**	**100%**

When it comes to YouTube, majority of respondents of all age groups do not have an active account. However, they do use You Tube for different purposes: to learn, reviews of new spots, information for travel, for looking at funny video clips. Majority of all respondents use You Tube for observing new music videos. Our statistics show 92% of youngsters between 15 and 19 years of age use YouTube for this reason, while older groups intensively review new music videos (97%). The use of YouTube in the process of learning is highest among the age group of 23 to 24 years (46%), with a slightly smaller percentage in the age group from 19 to 21 years (45%). In comparison, in the age group between 15 and 19 years only 7 pupils are using YouTube for that purpose. Results show that the Internet provided all respondents with the most assistance in resolving their homework, writing papers and obtaining the necessary information.

* * *

Possibilities for use of the Internet in the classroom, which allows the formation of virtual reality in the educational process, are extraordinarily high. Virtual reality in this technique allows: independent work of students during learning, interacting with objects, phenomena and

processes, seemingly managing real phenomena of virtual reality, student participation in what is apparently happening, modeling of certain reality, development of thinking, intuition, aesthetic image assessment skills, development of skills and abilities of importance for design of tools, etc.

The education system will continue the developmental process during the education reform. Under the pressure of technological advancement 'the school' has lost the privilege of being the only or the largest source of new knowledge and information. Students learn through the Internet, movies, travel, etc. For these reasons we have to accelerate our efforts to become up-to-date, modern school an as soon as possible, introducing innovative active and interactive forms and methods of teaching to become more efficient, more rational, and creative and to share functional knowledge and skills.

The results of our research have only opened new research fields that could be defined as possible pedagogical implications. We emphasize that the possible directions of development of the educational system is to include planning, monitoring and evaluation of the development of teaching in which ICT is applied. All things considered, innovation is not just ad hoc implementation of changes. It is change that presents a new quality of teaching and learning.

References

1. Vlahović, B.M. (2001). Putevi inovacija u obrazovanju: traženje novog obrazovanja. Beograd: Stručna knjiga.
2. Grandić, R., & Knežević-Florić, O., & Milutinović, J. (2004). Radno i profesionalno obrazovanje. Novi Sad: Savez pedagoških društava Vojvodine.
3. Kennewell, S., & Parkinson, J., & Tanner, H.(2000). Developing the ICT capable school. London: Routledge Falmer.
4. Lorimer, R. (1998). Masovne komunikacije. Beograd: Clio.
5. Milutinović, J. (2008). Ciljevi obrazovanja i učenja u svetlu dominantnih teorija vaspitanja 20.veka. Novi Sad: Savez pedagoških društava Vojvodine.
6. Perić Prkosovački, B.,& Brkić, N. (2011). Is the use of web 2.0 possible in learning? Education between tradition and modernity. Scientific symposium. Ohrid, September, 22'24, 2011, Institute of Pedagogy, University "Ss. Cyril and Methodius" – Skopje, Faculty of Philosophy – Skopje, 405-411.