Internet in the Process of Education

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Abstract:

The role of the Internets a source of information is significant. It has become one of the most important media which has been confirmed by various users. Unfortunately information that occurs in web sites is poorly sorted, often badly classified or exists in many formats. Moreover, the process of searching for information on the Internet is constantly obstructed by a changeable structure of the Internet in terms of both quantity and contents.

This article attempts to present the role of the Internet in the educational process.

1. Introduction

At the end of the twentieth century information technology enabled many people to quickly access information at a very low cost. This information should be presented in such a way that the recipient can easily and quickly reach it and read it. A customer-dependent differentiation of the content of information, its outlook and access to it is required and Internet technology makes it possible. Education is one of the areas in which this new technology is employed. The Internet has become the most important source of information for a large part of the population. It is used by approx. 17 million Poles and worldwide number of Internet users is more than a hundred times greater. The percentage of households with Internet access reached 74% in 2014. Access to the internet had 93% of enterprises. The average time spent on the network by people aged 15–24 years is more than 33 hours per month. Students represent 82% of Internet users and use the Internet regularly (PBI/Gemius, 2015).

The percentage of households with a computer is steadily increasing. In 2014,. Nearly 10 million households (77%) were equipped with a computer and 94% of enterprises, including nearly all large entities (GUS, 2015). Frequency of Internet use is shown in Figure 1.

The expansion of the Internet that ran the world, is second to none. Over the last three years, the number of computers on the network has increased tenfold. The use of Web services – mainly e-mail and Web pages – can serve the integration of dispersed branch offices. It is now possible to hire professionals, working remotely outside the country, so you do not incur the cost of their travel and accommodation, and even local people can connect to the corporate server from their homes (Adamczewski, 2000).

Bill Gates, the founder of Microsoft and at the same time best described the role of the Internet in the modern world saying the richest man in the world: "The invention of, the steam engine two centuries ago and the widespread use of electricity has led to the Industrial Revolution, which fundamentally changed human life. Currently, such inventions as a computer and the Internet allow us to make another revolution" (Adamczewski, 2000).
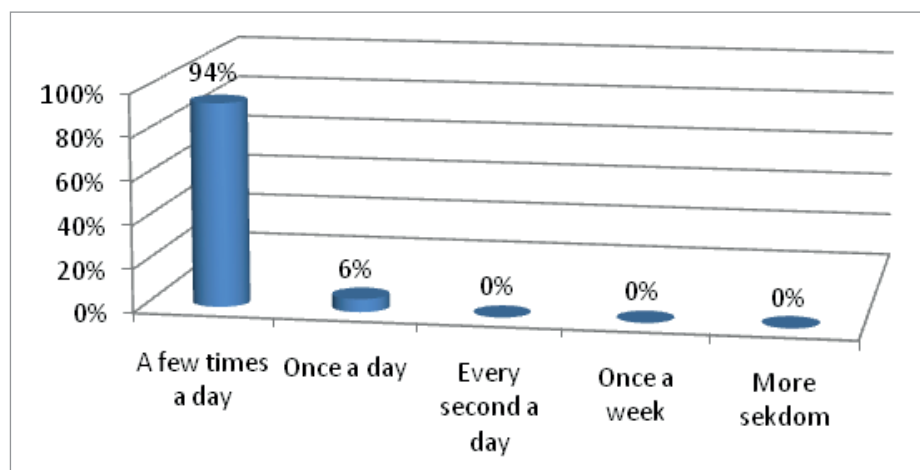
Fig. 1. The frequency of Internet use.
Source: own.

Specific features of the Internet distinguishing it from other tools facilitating communication have determined its constantly increasing role in social communication (Wojtowicz, 2010).

The Internet has become an indispensable part of our daily lives, supporting education and helping in working life, while acting as a facilitator of information retrieval, as well as being a form of entertainment.

The Internet as a still new and fast-growing medium has an increasingly noticeable impact on many areas of social life. The force of the impact is varied and encourages reflection on the social aspects of the network, perceived through the prism of changes initiated by this medium.

2. Impact of the Internet on the education system

Changes taking place in the mobile society through the development of mobile and wireless information technology means that education is faced with new opportunities and challenges.

The development of ICT is affecting almost all spheres of socio-economic development as well as poses a particular challenge for education which should follow the changes and, among other things: the specific needs of students in the twenty-first century, to shape a new type of teaching by using increasingly modern tools.

The development of the Internet, the emergence of new media and technological advances have had a significant impact on the quality of people's lives which in turn forced us to adapt and improve existing techniques and processes to the latest standards. Therefore the system of education, training and development hmationad to be subject to transfor. The traditional system of education in recent years has evolved from conventional methods towards flexible learning, "face to face", by progressive introduction of multimedia devices, the Internet, to e-learning and m-learning. Another, the latest form is the so called blended learning, which combines direct full-time education with distance learning by means of available technology.

Currently the Internet is also increasingly performing the function of social space – the environment for doing sport or pursuing leisure interests in which its activities are also targets of an educational nature. Students and teachers create a virtual environment when while working together on various tasks and projects they are trying to – through various online channels – to solve problems and come to each other's aid. The scale of this phenomenon is so large that it is hard not to find a way to use this trend in education.

3. Internet assisted teaching process

It seems that one of the elements constantly developed is a technological know-how which is a great progress in the field of computerization and electronic news. They supply the powerful empire of the mass media, thus, they influence the recipient. Today, no one questions the far-reaching impact of mass media on the individual and society. Therefore, the ability to use the benefits of technology becomes the basis for effective work with children and youth. In teachers' career development it is useful as a method of responding and processing all kinds of information for educational purposes.
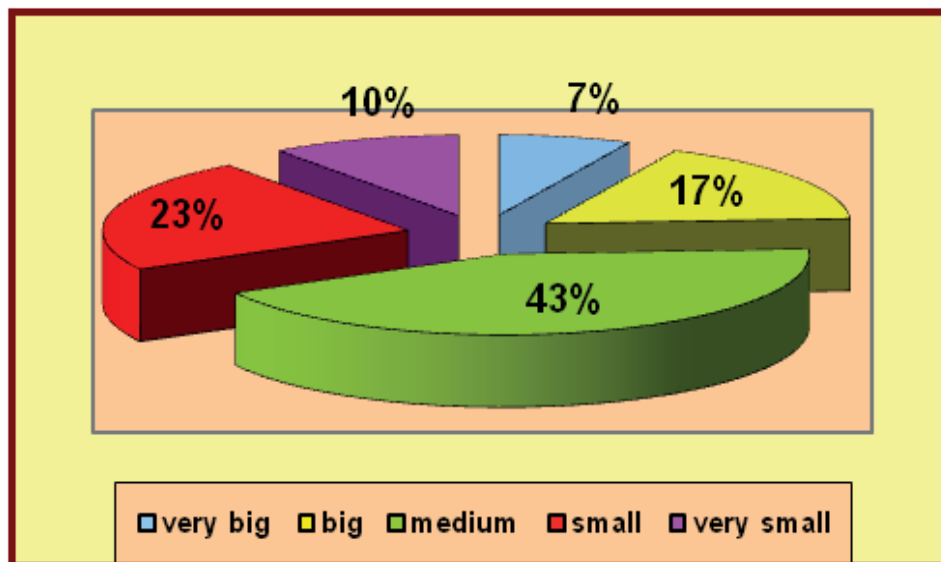
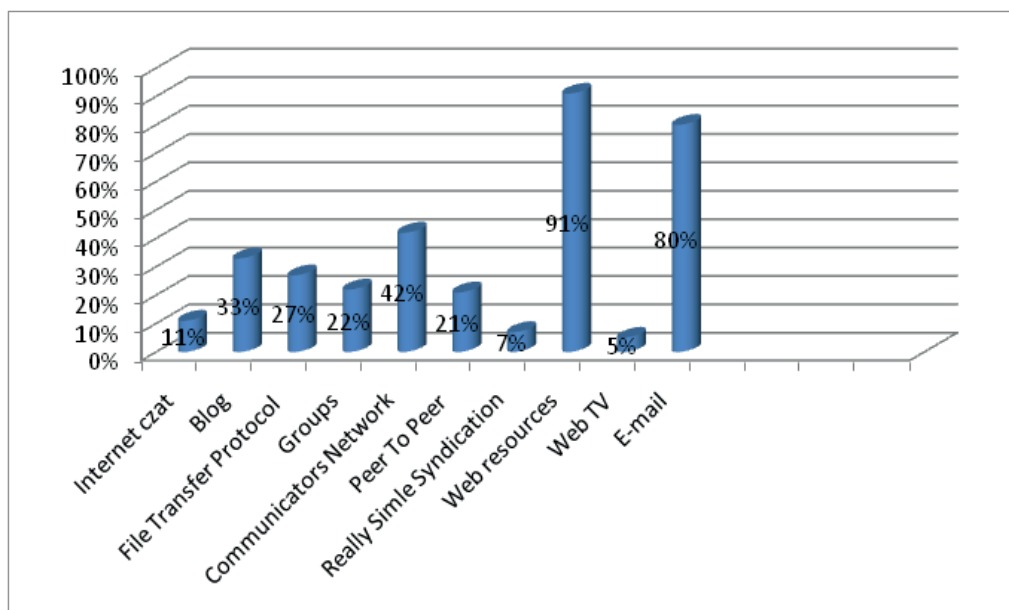**Fig. 2. Internet – role in the learning process.**
(Sałata E., 2010)

In teaching one of the most important things is access to information and its transmission. The Internet has changed the way of information transfer. Its presence in the teaching process will be steadily increasing (Figure 2). The number of teachers using the Internet will be constantly growing.

New trends emerging in education are a consequence of changes occuring in the whole society. At the same time, among progressive teaching methods Global Information Infrastructure becomes the most important (Sałata, 2010).

The teaching process with the Internet differs from traditional activities in many respects. Transmission of information becomes faster, and the same information may be more accessible and transparent (Siuda, 2006).

The Ministry of Education for years 2007-2013 (2014) have prepared main goals for Polish young people which would enable them to meet the challenges of the modern world. These are"

1) Equal educational opportunities;
2) Preventing social pathologies;
3) Adjusting the contents and methods of teaching to learning opportunities;
4) Improving the efficiency of the education system;
5) Improving the quality and dissemination of modern methods of education; etc. (CPM, 2014)

Fig. 3. Internet service used to obtain information.
Source: own

A characteristic feature of education in Polish schools was the introduction and use of a computer in the process of learning and teaching. It is not essential but in combination with traditional forms of work with students it has become an important part of learning media. It greatly contributes to supplement knowledge and to provide the necessary messages through audio, video and print in a very attractive way for the student.

In science, one of the most important things is access to information and its transmission. The Internet has changed the way of communication – it is difficult to find a better, more effective, and also more practical way (Sałata, 2010). For thousands of people it has become an essential part of education and even work (Figure 3). The Internet is characterized by speed and ease of transmission of information, interactivity, namely the existence of mutual communication, the ability to work with many types of computers regardless the hardware or operating system (Siemieniecki, Lewandowski, 1998; Sałata, 2010).

The emergence and development of the Internet introduced a new era in education. Since mass access to the global information infrastructure has become a fact, the Internet can safely be described as a new educational space. The specificity of knowledge transfer through it led to a new reality. This reality changes our point of view and traditional reference to the education and values associated with it (Kaku, 2000; Sałata, 2010).

Effective school learning requires the knowledge of many approaches. In a situation where the student has to master the voluminous material, and also wants to gain time for other activities than learning, these methods are gaining importance. Effective learning does not only allow for a more leisure time, but also to achieve good results in science.

4. The Internet as an information medium in the education process

There is a widespread belief in the power of the Internet. Today, the media and the Internet are the main components of information and communication technology. The development of information exchange is progressing by leaps and bounds. The message can easily flows between people thousands of kilometers apart in less than a few seconds. Every year we observe a new, more effective, and more efficient electronic devices which increase circulation and exchange of information (Sałata, 2010).

Wide opportunities offered by the network led to increased interest in the various institutions. They developed a number of programs for teaching through the network. Network mode of action of universities refers to the tradition of distance learning successfully used in Western countries which created a lot of centres, institutes, and organizations supporting this process. Many of them have impressive achievements in the field of multimedia education and developed materials. There are many new concepts like virtual classroom, virtual university, "school without walls", global university. All these terms point to the detachment of the education process from a traditional class with tables and blackboard. Learning via the Internet does not require a constant presence in front of a computer because all instructions, answers, assignments, and papers may be found in student's inbox (Siemieniecki, 2002). Education using the Internet as a medium of the teaching process due to its specifics must be characterized by a strict definition of the course outline and must have a script of further actions. The Internet is a very popular phenomenon so using it for educational purposes appears to be fully understood: correspondence courses, distance learning, video conference systems linked computer network, teaching by radio and television (Siemieniecki, 2002).

5. The new style of teaching

The rapid development of science and technology forces society to make excessive school addressed demands. This fact compels teachers to constantly update and supplement their knowledge. The teacher ceases to be the central figure in education, but he intends to indicate the source of information by establishing quality standards. Learning outcomes and the results of education significantly depend of him (Domański, 1993).

Undoubtedly, a new medium always causes some perturbations in the learning process, both in the program and tasks, as well as in teacher's work.

The challenge for the teacher is a total change of a working style imposed by the requirements and style of working in the network (Figure 4). The leading teacher ceases to be the central figure of the education

process. He becomes a consultant, animator of the process. Students are focused on gathering information and processing. The teacher supervises the process without too drastic intervention, but directs and adjudicates disputes of a scientific nature. His mission is to motivate to work, to encourage in-depth analysis of the phenomena being presented (Siemieniecki, 2002).
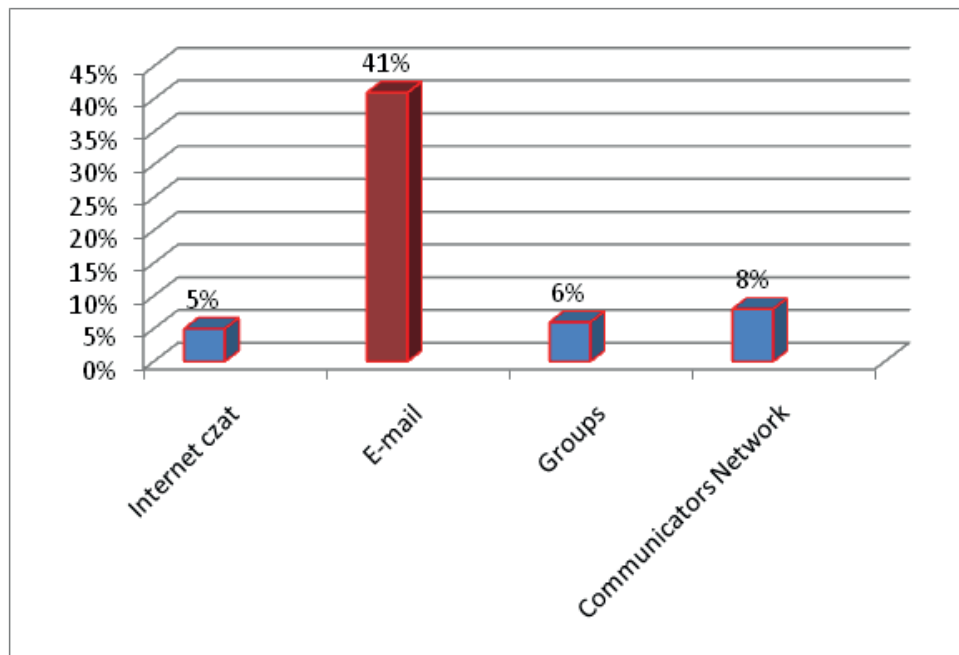
Figure 4. Methods of communication between the teacher and pupils/students through Internet services. Source: own.

Nowadays, it is essential to teach children and teenagers the proper use of the media and encourage them to choose only valuable TV, radio, computer and other programs.

The social role traditionally played by the teacher in the educational process is obvious to all (Pilch, 1975). Whereas, in the developing information society and in the face of expanding offer of distance learning, via the Internet, the roles performed by a teacher should be discussed again. Observers of the development of education point to the differences between generations and a rapid technological advancement, and other realities of young people lives in (Siemak–Tylikowska, Kwiatkowska, Kwiatkowski, 1998).

6. New objectives of a teacher

Another significant aspect is the role of the teacher which is associated with the creation of substantive knowledge. By term "knowledge" a teacher usually means a set of content that he provides to students in his classes. This meaning stems from the teacher's habit to move among the areas determined by the program, the process through which he must lead the student. This tradition has negatively affected the learning process in practice, forcing the teacher to function as a provider and verifier of information only. Changes in recent years have shifted inevitably towards the drastic re-evaluations including the approach to knowledge. Knowledge is becoming a set of skills as well as information constituting a basis for wisdom which is ultimately the supreme value (Osmańska-Furmanek, 2002).

The teacher should therefore focus on two aspects: not only on proving information, but also teaching how to create one holistic and useful entity and how to acquire this information intentionally and selectively. Knowledge is characterized by multiple complexity forming internal structures and penetration – such holistic structures should be created in learner and it is the teacher's task to stimulate their formation. This requires from the teacher to be a good observer, limited in the absence of direct contact, as well as reflection and creativity of the planner, who depending on the course of events will modify the process. Another problem (and not just with work at a distance, but the entire functioning of a person as a teacher) is that a teacher has been educated in a schematic cognitive governance based on linearly knowledge ordered (Kwiatkowska, 1997).

7. Advantages and disadvantages of the Internet as a part of the learning process

Undoubtedly, one of the advantages of the network is the possibility to work at any time a person needs. Such a flexibility adjusts the rate and time of work to users and learning needs (Figure 5).
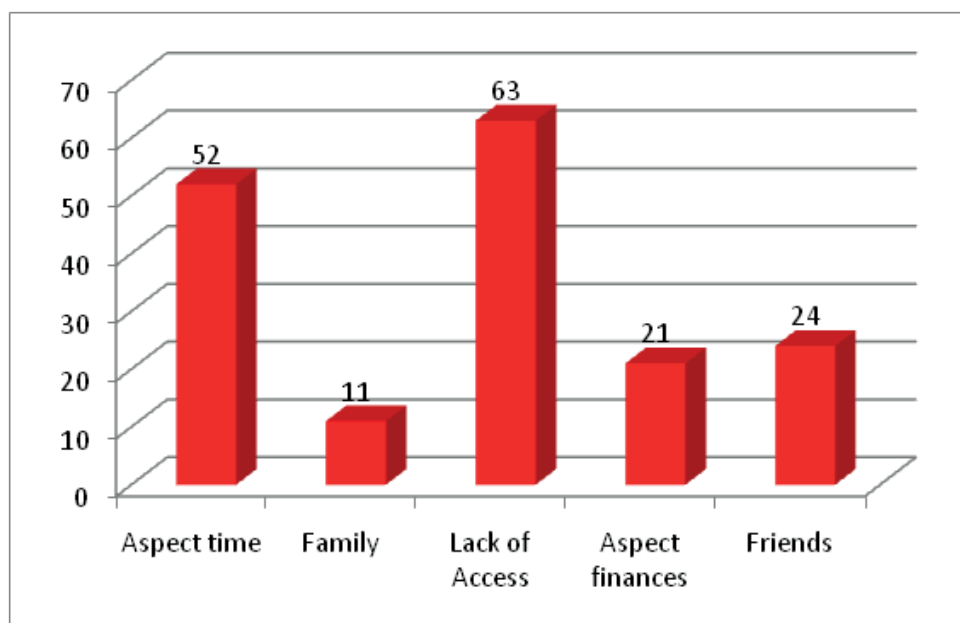
**Figure 5. The factors leading people to choose science over the Internet.
Source: own**

The Internet also helps to find information even in remote corners of the world. Networking also provides significant opportunities to deal with scientific institutions, schools, individual teachers, and forms of cooperation and mutual understanding. It allows people to work in teams, not necessarily located in the same room. Numerous studies indicate that networking is more conducive than other forms of cooperation, especially considering a contact between students. The teacher uses the network for methodological solutions of his colleagues, and can receive methodological materials within 48 hours (Strykowski, 1999).

However, a computer network as a teaching tool has also its limitations. The access to a large amount of information may cause difficulties to make the right choice. In a data network various information may possess different value, so on a big bazaar information sought by the teacher may be interwoven with of minor importance. Information is often unclassified and without any scientific assessment (Siemieniecki, 2002).

8. Summary

The Internet provides better, faster, and more current information. It provides a more effective way of communication between teachers and students. As a result, it may be used as a tool for expanding cooperation and exchange of information which may be connected with interactivity. Moreover, the Internet stirs up a lot of emotions. Some people treat the Internet as a factor that positively affects societies in many countries, others – as another electronic toy or a tool for Americanization of the world. Whether the world's largest computer network become a valuable teaching tool in Polish school – that depends on teachers and students.

I think that teachers have gained an access to a new and powerful source of knowledge. Students will be able to learn new skills needed in the modern world. The Internet can become one of the ways of making up the civilization delay. It creates possibility to learn about other people's cultures, and to promote their culture among other users. Regardless various problems and phenomena connected with the Internet it should be noted that communication has become an integral part of our everyday live. The Internet may complement interpersonal relations when it is properly and appropriately used. However, when it is treated as the only means of communication it can become a serious problem not only for individuals but also for entire society.

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