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# PREFERENCES OF THE YOUNG PEOPLE IN USING IT TOOLS MLADI LJUDI I PREDNOSTI U KORIŠTENJU IT ORUĐA

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#### Abstract

Mass culture particularly affects the development and shaping of modern man. The appearance of the worldwide web is considered to be the main factor in the globalisation of information. General access to the Internet allows the user to obtain information from outside his direct reach. Both the worldwide web and computer games strongly affect people and can either enhance his development or be of destructive character. The ability to use the gains of civilisation is the foundation for human development. Therefore, we as a society should devote more attention to shaping this ability. Teachers have a special role to play in this area; on one hand, they should develop technical abilities of their students, while on the other one, they should counteract excessively technocratic approach to reality. The starting point for educational interactions in this area similarly to all the other educational contexts is the diagnosis of students' preferences for using IT tools, in addition to examining their knowledge and skills.

This paper is a report on research concerning interests and preference of secondary school youth (gymnasium and lyceum) in using IT tools

#### Introduction

Mass culture has an enormous impact on the development and shaping of a modern human being. Ubiquitous access to information presented in an attractive way allows for the formation of particular views as well as inspires us to further action. It also allows for much greater and easier than during the pre-Internet days access to information which is now "at hand" as well as to techniques of its further processing. It is not groundless to say that the Internet is one of the factors of information globalization. However, for the productive usage of the potential of the Internet and information processing tools a human needs certain skills. The key information skills (Juszczyk) comprise: effective usage of tools offered by technologies; making use of modern means of gathering and processing information; successful communication with a computer program in a direct way; indirect communication with other users of information

Sažetak

Masovna kultura posebno utječe na razvoj i oblikovanje modernog čovjeka. Pojava WWW-a je najvažniji faktor u procesu globalizacije informacija. Sveopći pristup internetu omogućuje korisniku da dođe do informacija koje mu nisu direktno dostupne. I WWW i računalne igrice imaju snažan utjecaj na ljude, te mogu pridonijeti njihovom razvoju ili imati destruktivan učinak. Mogućnost uporabe civilizacijskih dostignuća je temelj ljudskog razvoja. Učitelji bi trebali imati posebnu ulogu na tom području; u jednu ruku trebali bi razvijati tehničke vještine svojih učenika, dok bi u drugu ruku trebali biti protuteža tehnokratskom pristupu stvarnosti. Startna pozicija za edukativnu interakciju je slična I drugim edukacijskim sadržajima pri određivanju učeničkih preferencija za uporabu IT oruđa, kao prilog ispitivanju njihovog znanja i vještina. Ovaj rad je izvještaj o istraživanjima o interesima I preferencijama učenika gimnazija u uporabi IT oruđa.

system by means of special software; critical reception of multimedia information and its use in the process of education or professional work; ability to work in team, contributing to the success of a team and ability to present the outcome of team work; ability of self-presentation.

Stimulating information competence of students on all levels of their education constitutes one of the most crucial objectives of contemporary school. The question arises to what extend a modern school faces this task? The IT education system still manifests tendency of technical content advantage over usable one. That means that we still teach to use the computer as a machine and not why and in what way it should be used. As put by Tadeusiewicz, from the point of view of functioning of most of the contemporary students as future citizens of information society, the approach to usable content is of much greater meaning. For do the young people who can perfectly make use of the computer as a machine realize why this ability is useful for them?

The knowledge a student gains at school constitutes only a beginning of a long way of gaining information competence of a human being. It is essential in order to start the process in an appropriate way, however, it should not be understood as final and one and only. In the light of constant civilization changes connected with acquiring and processing of information we need to be aware of the development of information competence throughout all life. And the key role in this process should be played by an individual's own activity.

### **Research issues and objectives**

The objective of the undertaken empirical research is to learn about the preferences of the youth in the way they make use of IT tools and factors differentiating these preferences. The following research questions have been put:

1. What are the sources of gaining IT competence by young people depending on the level of education they represent?

2. Which computer programs are most frequently used by young people on different stages of education and what is the reason they use them?

3. To what extend do young people on particular stages of education make use of the Internet?

The research was conducted in Cracow in February/March, 2007 on the group of 90 people including 30 junior high school students, 30 high school students, and 2 groups of 15 students, the first group representing IT faculty and the latter non-IT one. The survey was anonymous.

## Acquiring IT competence

The research shows that school is neither the only one nor the most important source of acquiring IT competence of young people. In order to be able to determine the influence of school, three types of schools representing different profiles were analyzed: junior high school, high school, and two groups - students of the faculty of Information Technology at the Pedagogical University of Cracow and students of Family Studies at the Pontifical Academy of Theology in Cracow. The researched showed that junior high school and high school students to greater extend gain their IT experience among their brothers and sisters (83%) or peers (86%) whereas IT faculty students gain their experience at school (100%) or by self-education (100%) and Family Studies students mostly at school (100%). These data indicate diversity of acquiring IT competence by students depending on the stage of education. Groups of junior high school and high school students acquire most of their abilities outside schools whereas IT faculty students at university – presumably due to a large amount of specialist knowledge. Non-IT faculty students mostly rely on the knowledge they gained at high school. Not many of them develop the IT competence by selfstudy within this scope. An interesting observation was made that male students were much more interested in self-education within IT studies.

Comparisons are illustrated in the table below.

item	junior high school students (30)	%	
home	25	83,33	
peers	26	86,67	
school	23	76,67	
self-education	6	20,00	

item	high school students (30)	%	
home	14	46,67	
peers	28	93,33	
school	22	73,33	
self-education	11	36,67	

item	students – non-IT faculty (15)	%	
home	6	40,00	
peers	9	60,00	
school	15 100,00		
self-education	7	46,67	

item	students – IT faculty (15)	%	
home	4	26,67	
peers	14	93,33	
school	15	100,00	
self-education	15	100,00	

Results of research issue No.1, tables

# Types of IT tools used by young people on different levels of education

The second issue was to find an answer to the following question: Which computer programs are most frequently used by young people on different stages of education and what is the reason they use them? The research focused mainly on computer software used by students from the point of view of its intended use and level of competence in a given application.

The research showed a considerable discrepancy between used applications depending on the stage of education of the pollees. Internet communicators (Gadu-gadu, Tlen, Skype), Internet browsers, E-mail programs, multimedia encyclopedias and games are very popular among junior high school students. High school students showed interest in the same group of applications adding to it Internet security programs, group browsers, and specialist software, eg. to create websites. Non-IT faculty students declared using the same group of applications as high school students. IT faculty students appeared to be very competent in the choice of computer applications. To the above listed applications this group added special graphic edition programs, creation of advanced Internet websites, software programming, etc.

Analysing students' definitions they gave when asked to specify what they need a given program for and which of its functions is most frequently used, it turned out that only the students of IT faculty were able to list most of the functions they make use of in a given aplication. The remaining groups did not prove enough IT competence in this respect.

No significant differences between sexes in the students' answers were not stated.

Comparisons are illustrated in the graph and table below.

Software	junior high school students	high school students	students – non-IT faculty	students – IT faculty
Internet communicators	93,33%	100,00%	93,33%	100,00%
Group browsers	0,00%	23,33%	20,00%	73,33%
Internet security programs	30,00%	56,67%	60,00%	86,67%
Internet browsers	96,67%	100,00%	100,00%	100,00%
E-mail programs	63,33%	76,67%	73,33%	93,33%
Software programming	6,67%	16,67%	0,00%	73,33%
Graphic edition programs	13,33%	33,33%	26,67%	80,00%
Multimedia encyclopedias	46,67%	40,00%	40,00%	26,67%
Games	90,00%	83,33%	33,33%	60,00%
Others	73,33%	80,00%	73,33%	100,00%

Results of research issue No.2, table

# The ways of using the Internet by young people

The third research issue was to establish to what extend young people use the Internet on particular stages of education.

The research shows that the youngest group of students makes use of the Internet resources mostly for entertainment. Searching for information connected with education comprises the lowest per cent in case of this group. In their answers they usually listed: chats, communicators, entertainment websites, games, blogs. The group of high school students additionally showed interest in information, movie and music portals, online shopping, and websites relating to their personal interests. In case of this group, information connected with school knowledge and general science constituted nearly half of the information obtained with Internet browsers. Similar results were reported for non-IT faculty students. IT faculty students focus their attention to thematic portals closely connected to IT, at the same time using the Internet also for entertainment.

### Conclusions

As stated before, the role of school in developing the IT competences of a human has crucial meaning. However, in the light of the presented results of the research a question arises: to what extend school (junior high school, high school, university) and peer-to-peer environment help in acquiring IT competence and to what extend it is acquired by the student's own activity? This supports the conviction about greater role of school on developing students' reflexive thinking which determines the ability of reasonable and effective usage of IT tools. As stated by Tadeusiewicz "school should convey wisdom to students – wisdom manifested among others in the ability to reasonably and effectively make use of all technical improvements that the development of civilization brings. Such wisdom, manifested in the search for answers to "what for" questions and not "how" questions is especially indispensable in the days of computers, Internet and other information techniques."

To sum up, it can be said that although the impact of school, peer-to-peer and family environments on developing the IT competence of a young man is significant, it is the young man himself/herself that seems to be the most crucial link of this chain. However, only with appropriate support from the outside.

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