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## **Information and telecommunication technologies as microfactor for didactic adaptation of university students**

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Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.

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## **Information and telecommunication technologies as microfactor for didactic adaptation of university students**

The current period of the state formation in Ukraine is characterized by complex changes in political, economic, moral and other processes. The unstable economic situation results in increasing number of problems in socialization among university students.

Socialization takes place under certain terms, circumstances [Зайченко 2006]:

- mesofactors (ethnic and cultural conditions, the place and type of settlements in which personality is educated);
- macrofactors (space, planet, world, country, society, state that affect socialization of every inhabitant of our planet as well as every large group of people);
- microfactors (family, group of people of the same age, microsociety, entity in which social education is carried out – educational, professional, public and the like).

Adaptation as the process of adjustment to the new conditions by changing the already formed socially-psychological stereotypes is widely put into effect within:

- 1) educational process,
- 2) time management,
- 3) formal and informal co-operation and others.

Adaptation of students in every certain direction differs by difficulty and features that, on the one hand, depend on individual students' ability to perceive and adapt to new environment, which is different from school, and, on the other hand, on the specific features of the higher educational establishment.

**Professional adaptation** is adaptation to the university structure, to the set of courses and their content of the educational establishment, to the peculiarities of the chosen profession. Students typically have 'professional' problems due to:

- uncertain motivation in the choice of profession, the absence of sufficient qualification,
- unusualness of university system of instruction,
- the excess amount of examinations and credits,
- the excess amount of the new information,
- complication and novelty of the studied subjects and others.

**Social adaptation** is the process of involving the personality into range of roles and forms of activity of student as social group. Social adaptation is accompanied with:

- difficulty in organization of everyday life,
- enormous and unevenly allocated academic load,
- financial problems,
- housing problems,
- health problems,
- the necessity to combine studies with work and others.

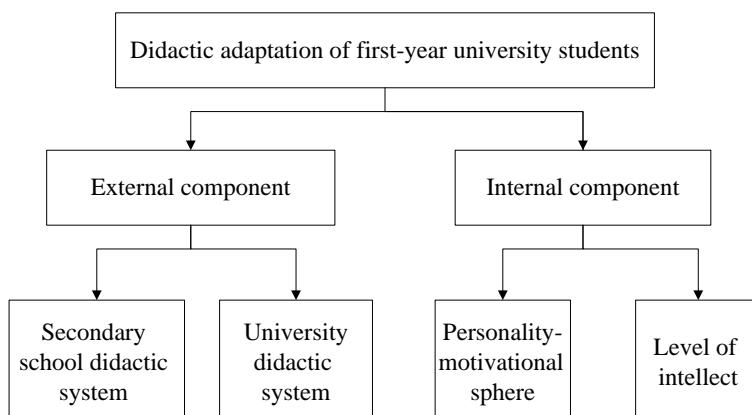
**Psychological adaptation** is the students' adjustment to the new psychological conditions that is expressed by the positive mutual relations with teachers and co-students. A freshman can undergo the followings difficulties:

- the excess anxiety connected with leaving school,
- lack of ability to carry out psychological self-regulation,
- difficulty in adjusting mutual relations with co-students,
- difficulty in socializing with teachers and others.

**Didactic adaptation** is related to the new conditions of academic process in the university that is different from those students got used to at a secondary school. It provides gradual introduction to the peculiarities of university instruction. Didactic adaptation is followed by such problems as:

- lack of ability to organize self-instruction,
- lack of ability to work with a book for a long time,
- lack of ability to use reference books and bibliographic literature,
- modification of progress control,
- change in the testing system and others.

Didactic adaptation of first-year university students can be illustrated as in fig. 1 [Перетялько 2010: 223–226].



**Fig. 1. Components of didactic adaptation of first-year university students**

We should also take into consideration that the number of academic hours allocated to self-instruction has been increasing recently. This results in the lack of productive thinking university students face in their first year which, in turn, prevents the efficient teaching.

As we can see, successful and instant adaptation of university students to the new academic environment is one of the key factors of their efficient instruction. In the thesis we would like to emphasise the didactic adaptation through the use of information and telecommunication technologies.

Theoretically the issue of computer-based interactive approach to education has been studied by Ye. Bondarevs'ka, L. Kulikova, V. Serykov, I. Yakymans'ka. A number of researches tend to use the term „computer-based educational technologies”, „information technologies”, „information and telecommunication technologies” etc. As soon as the modern information technologies include the use of the global computer network Internet, e-mail providing a wide range of communication facilities, we think the term „information and telecommunication technologies” is the most suitable one.

Thus, information and telecommunication educational technologies are the system complex of psychological and pedagogical procedures including the specific selection and arrangement of computer-based didactic forms, methods, means, devices and terms of instruction organization and evaluation.

Our numerous researches have proved the advantages of the use of information and telecommunication technologies in teaching university students since these technologies are treated as „human beings” to be co-operated and competed with. This phenomenon makes the environment in the classroom different from the typical, traditional lessons that students used to have at secondary school. Students are provided with the new, more efficient facilities for individual instruction that allow them to co-operate with each other in order to compete with the computer. It is clearly seen when the teacher applies the group methods of distance learning such as academic discussion, audio- and videoconferences.

Among the factors that have an influence on the rate of understanding of the material to be learnt is motivation. Being interested in what to learn, how to learn, what goals to achieve is greatly important for students and here the use of information and telecommunication technologies (due to their ‘dialogue’ mode of work) turns the person to be taught into the person able to teach himself/herself.

As we know disabled students require more attention during their adaptation to the system of high school system. When teaching them we must choose the methods of instruction in agreement with both external and internal factors that impede their successful learning. According to the numerous researches into the emotional-perceptional sphere of disabled students, the level of their anxiety, in the first place we see the anxiety provoked by the fear to have their knowledge

evaluated. These students feel nervous when displaying their knowledge publicly as they do not feel confident about their own progress.

The vast majority of these students find themselves in the situation when they feel scared to self-actualize (2<sup>nd</sup> place), i.e. to demonstrate their abilities. And in the 3<sup>rd</sup> place we have students who feel uncertain to interact with university lecturers [Томчук, Яцюк 2001: 65–69].

Information and telecommunication technologies can be efficiently used in the project work when students are supposed to perform the task that involves the use of the Internet. To avoid the misuse of the information received via the external resources the teacher must take care of students' information culture. That is particularly important for university students when they are in their first year as the right use of the academic information gotten through the Internet is supposed to educate them for further research work in their postgraduate courses. These technologies are often used to demonstrate the results of their group work and this ability to use various software in the first year at university is just the first step in educating a skillful specialist able to compete in the labour market.

So, we can come to the conclusion that the didactic adaptation of university students can be simplified due to the use of information and telecommunication technologies. The latter can shorten the time it normally takes students to sit for their classes; eliminate the tensity and anxiety students (especially disabled) feel when demonstrating their knowledge of the subject or self-actualizing; allow the teacher to involve students into project work which requires the use of these technologies at different levels: from selecting the necessary information from the Internet to the proper presentation of the obtained results. As a result, all these measures enable the academic process to run easily allowing the students to show their potential and hence accelerating their didactic adaptation.

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### **Abstract**

The article presents the notions connected with socialisation of first year university students, their ability of adapting to new academic environment and opportunities of using ICT in this capacity.

**Key words:** socialization, adaptation of teaching, information technologies.

### **Technologie informacyjno-komunikacyjne w osiąganiu celów dydaktycznej adaptacji przez studentów**

#### **Streszczenie**

W artykule poruszono problematykę związaną z socjalizacją studentów pierwszych lat studiów, ich zdolnością przystosowania się do nowego dla siebie środowiska akademickiego i możliwości wykorzystania w tym celu technologii informacyjno-telekomunikacyjnych.

**Słowa kluczowe:** socjalizacja, adaptacja dydaktyczna, technologie informacyjne.