

INIVERSITY OF NOVI SAD TECHNICAL FACULTY "MIHAJLO PUPIN" ZRENJANIN



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With this publication, the CD with all papers from the International Conference on Information Technology and Development of Education, ITRO 2016 is also published.

INTRODUCTION

This Proceedings of papers consists from full papers from the International conference "Information technology and development of education" - ITRO 2016, that was held at the Technical Faculty "Mihajlo Pupin" in Zrenjanin on June 10th 2016.

The International conference on Information technology and development of education has had a goal to contribute to the development of education in Serbia and the Region, as well as, to gather experts from natural and technical sciences' teaching fields.

The expected scientific-skilled analysis of the accomplishment in the field of the contemporary information and communication technologies, as well as analysis of state, needs and tendencies in education all around the world and in our country has been realized.

The authors and the participants of the Conference have dealt with the following thematic areas:

- Theoretical and methodological questions of contemporary pedagogy
- Personalization and learning styles
- Social networks and their influence on education
- Children security and safety on the Internet
- Curriculum of contemporary teaching
- Methodical questions of natural and technical sciences subject teaching
- Lifelong learning and teachers' professional training
- E-learning
- Education management
- Development and influence of IT on teaching
- Information communication infrastructure in teaching process

All submitted papers have been reviewed by at least two independent members of the Science Committee.

There were total of 163 authors that took part at the Conference from 15 countries, 4 continents: 96 from the Republic of Serbia and 67 from foreign countries such as: Macedonia, Bulgaria, Slovakia, Russia, Montenegro, Albania, Hungary, Italy, India, Rumania, Bosnia and Herzegovina, USA, Egypt and Nigeria. They were presented 82 scientific papers; 42 from Serbia and 40 from the above mentioned countries.

The papers presented at the Conference and published in Proceedings can be useful for teachers while learning and teaching in the fields of informatics, technics and other teaching subjects and activities. Contribution to the science and teaching development in this Region and wider has been achieved in this way.

The Organizing Committee of the Conference

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THEORETICAL AND METHODOLOGICAL QUESTIONS OF CONTEMPORARY PEDAGOGY

University Education in 21 century: Student Attitudes toward High Educational Programs in Macedonia

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Abstract - This paper is based on two surveys conducted in 2013 and 2014 on Goce Delchev University in Shtip, Republic of Macedonia. The importance of implementation of reforms in high education system depends on the dynamics of their implementation. In the case of Macedonia, the intensity of those reforms should create better conditions for the students in the possibility of gaining more cumulative knowledge. From the empirical data we can notice that the main problem is on practical involvement of students in teaching curricula's, communication with teaching and administrative staff and the access to the libraries and literature in general. The students also have different attitudes toward preference of the form of the exams. But the biggest problem which can be located is in low student exchange rate in using European programs and implementation of this segment of United Credit Transfer System.

I. INTRODUCTION

The role of education in 21st century is to provide future intellectuals in the countries which can serve as a buster for further social developments. Educational reforms are the core of this future development. In this sense the implementation of ECTS can serve as a base for student mobility, but also and as possibility for generating new teaching methods and knowledge in the age of globalization.

This paper is based on two surveys conducted in Faculty of Law in Shtip in 2013 and 2014. The goal of the research was to analyses students attitudes toward questions related with the students status and perceptions. The first research was focused on the attitudes of students of University "Goce Delchev" in Shtip and high school students, and the second one was focused on wider student population in Republic of Macedonia. Both surveys included approximately 300 persons. In the both researches there is gender balance, different social and ethnic status, but most of the included persons are from urban areas.

II. RESULTS OF THE RESEARCH

In the first research we are tracking the motives for involvement of the future and present students in high educational programs and Universities in general. On the question, Which are your motives for choosing your university or high school?, for the university students this is the personal choice, which makes them more autonomous in the choice (Fig. 1), but surprising is the attitude of the high school students in which together with autonomy we can notice and rationality of choosing their future profession i.e. they are equally motivated by the possibility of future employment and their predispositions or talent (Fig. 2).

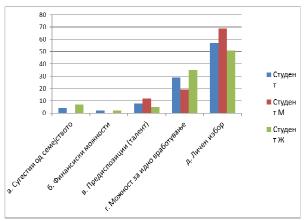


Figure 1: University students

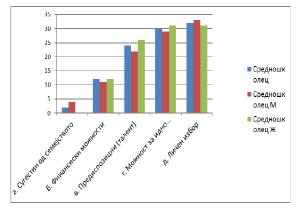


Figure 2: High school students

We also can notice that high school students are more optimistic about future employment than the university students (Fig. 3 and Fig. 4). More university students on the question "Do you expect that after finishing your studies you can find work?" answered with maybe, but high school students on the same question answered with yes and maybe.

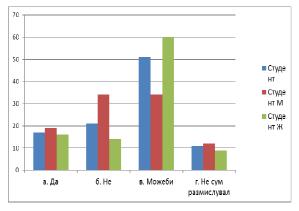


Figure 3: University students on the question: Do you expect that after finishing your studies you can find work?

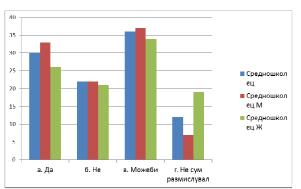


Figure 4: High school students on the question: Do you expect that after finishing your studies you can find work?

From the results we can also notice strong gender division on the question of their future profession. For example males prefer to be engineers, politicians and doctors, and females prefer their future profession to be related with law, professors or to be managers (Fig. 5).

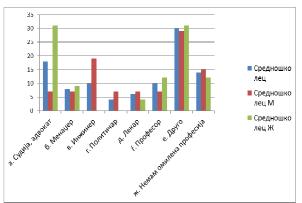


Figure 5: What is your favorite profession

Yet, the main problem of the Macedonian society, as in most transitional countries is the strong politicization. On the statement that the membership in political parties is precondition for future employment, most of the students fully or partly agreed, and only small number disagrees (Fig. 6).

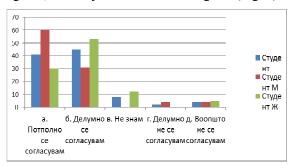


Figure 6: Membership in political parties is precondition for future employment

Students are having different opinions regarding the most influential factor of their studies. For them the most influential is the adjustments of study materials, related with teaching curricula's. On the second place by importance is greater level of practice during the studies and further are visiting the lectures and accessibility of the professors and assistants (Fig. 7). For the students of Goce Delcev University in Shtip the most important factor is greater level of practice, and for the students of Universities "Cirilus and Methodius" in Skopje and "Kliment Ohridski" in Bitola is the adjustments of study materials (Fig. 8). Regarding the average of the grades of the students, for most of them the adjustment of the material is the most importance, except the students with mid average between 7 and 8 grades where practice is the most important. We can also notice that the best students prefer more communication with their assistants and professors (Fig. 9).

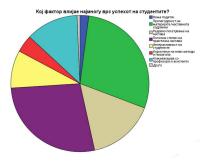
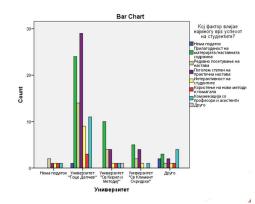
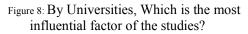


Figure 7: Whish is the most influential factor of the studies?





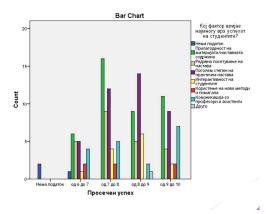
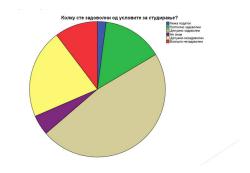
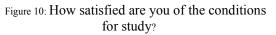


Figure 9 By Grades, Which is the most influential factor of the studies?

The students are partly satisfied of the conditions of their study (Fig. 10) and also with the grade they got for the passing different subjects (Fig. 11).





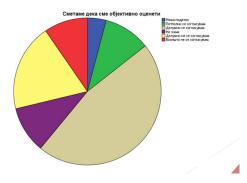


Figure 11: We think that the grades we got are objective

Asked about the form of the final exam the students are divided in their attitudes. Half of them prefer whiten exam and the other half oral final exam. By Universities, we can notice that the students of Goce Delchev University in Shtip prefer oral final exam and the students from Universities "Cirilus and Methodius" in Skopje and "Kliment Ohridski" in Bitola prefer written final exam.

On the issue of practical experience during the studies, we can notice that there is lack of it. Aldo there is division in the answers; the Universities in Macedonia should put more effort in this segment of the curricula's (Fig. 12). Yet, the most disturbing think is the lack of habits of the student to visit university libraries for their research papers. New informational technologies can serve as a tool for distance learning and research online from home, but the library experience is one of the key segments of study. Almost half of the students never went to the library, and one quarter of them is visiting university libraries only few times during the semester (Fig. 13).

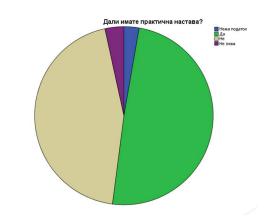


Figure 12: Do you have practice in your University?

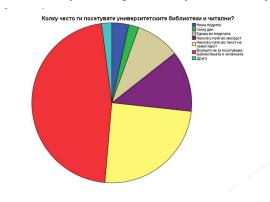


Figure 13: How often you are visiting the university libraries?

III. CONCLUSION

From conducted research we can conclude that ECTS is not well accepted in universities in our country. If for university students the motives for choosing their university is the personal choice, for surprising for high school students that is the possibility of future employment and their talent. Also can conclude that high school students are more optimistic about future employment and they think that they can do more in their lives, than the university students. We can also notice that the students are partly satisfied of the conditions of their study and also with the grade they got for the passing different subjects. The most disturbing think is the lack of habits of the student to visit university libraries for research and learning. Unfortunately, students more preferred to learn and investigate on internet from home instead of visiting libraries.

Our goal is to improve educational programs in universities in order to have more practical learning and better utilization of libraries. Also, we will try to reject the politics as precondition for future employment in order to have a better education.

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