# **European Academic Mobility: A Case of Serbia**

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Abstract—A university is a developmental foundation of the entire society, and it is necessary to maintain its continuous perfection in compliance with the needs of a society. Modern society needs, based on the principle of united Europe, demand not just individual development, but mutual compliance of all high educational systems. Mobility of students, researchers and academics is a priority of the European Union (EU) in compliance with the scientific and educational principles. Closer ties of The Republic of Serbia with the European Union allow for the use of certain fund sources which the EU uses to encourage the development of higher education through academic mobility in the Western Balkans. This paper presents the first experiences of the University of Novi Sad within the mobility programs realized in cooperation with the European Union universities in the last two years.

Keywords: trans-national education; Bologna Process; Erasmus Mundus; academic mobility; University of Novi Sad

## I. Introduction

It is considered that every society's survival depends on the said society's ability to develop international cooperation, and Higher Education Institutions are the ones that are in the best position to do just so [1]. A university is a developmental foundation of the entire society, and it is necessary to maintain its continuous perfection in compliance with the needs of a society.

National education systems that have been created throughout the Europe since the 11th century differ from country to country. Different socio-cultural factors, during this very long historical development of the European countries, have conditioned their differentiation and various placements with regard to the leading positions in certain scientific and research areas. In this respect, a need for communication and expert exchange has emerged in order to overcome staff deficit in certain European regions or countries.

Expert, researcher and teacher exchange, in the very beginning, was carried out on individual and self-organizational level, while nowadays there are many systematic structures that deal with academic potential exchange. Modern society needs, based on the principle of united Europe, demand not just individual development, but mutual compliance of all high educational systems.

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Closer ties of The Republic of Serbia with the European Union allow for the student, researcher and teacher exchange in almost the same way as it is done in The Member States of the European Union. Universities in the Republic of Serbia are allowed to use certain fund sources which the EU uses to encourage the development of higher education through academic mobility in the Western Balkans.

Young people, student, teacher and researcher mobility is the EU priority. On the adoption of the Lisbon Strategy in 2000, the Heads of States and Governments of the EU have made a further commitment to make EU one of the most dynamic economies in the world. The only possible way of achieving this goal is to achieve increased economic growth by using the main advantages of the old continent: knowledge, intelligence and creativity. Individual mobility is becoming ever more significant in the world dominated by internet and industrial globalization.

This paper outlines opportunities and advantages of the participation of University of Novi Sad in the exchange of academic potential. The stress will be on the prominent effect by which institutionally organized academic mobility is increased, as well as on the development and reforms within the institution itself and its educational, scientific and administrative processes. This paper presents the capabilities and capacities of academic mobility, which is one of the fundamental postulates of the Bologna Declaration, which has not yet achieved the expected levels at higher education institutions in Serbia.

# II. TRANSNATIONAL EDUCATION

Transnational education raises a number of chances designed to give more importance to learning versus teaching. Therefore, this new education methods need to design learning objectives for the knowledge acquisition and the design and evaluation of competences. On this basis, the new curriculum will have an approach primarily based on the students and their training, and it allows for a more active participation of all students. In the last decade, new forms of cross-border education have emerged. Cross-border education not only includes international student mobility, but also education programs mobility [2]. On the other hand, transnational education also involves some subject

scheduling considerations as well as considerations concerning obligatory component quality, and their realization, and the use of models for the design of the programs.

Transnational engineering education requires teachers that are able to merge the unique engineering needs of their country with the best practices and techniques for fostering global awareness and readiness in engineering students [3]. Implementation of the Computer science course under the Spanish university education system is presented in [4]. Following the enormous success of this initiative, many other programs are being designed and implemented. One of the education programs of these universities with a highinternationalization component is the European Computer Science (ECS) course. It is on a joint-degree, organized by seven universities of six different European countries. Currently, the institutions offering the ECS course (listed by their respective countries) are: Turku University of Applied Sciences from Turku (Finland), Université François Rabelais from Tours/Blois (France), Université Paul Verlaine – Metz from Metz (France), Hamburg University of Applied Sciences from Hamburg (Germany), Universita Ca' Foscari Venezia from Venice (Italy), Instituto Politécnico de Coimbra, Coimbra (Portugal), Universidad de Burgos from Burgos (Spain). A candidate, still in the application phase, is the West University of Timisoara from Timisoara (Romania). Students are given the chance to master a particular foreign language during their studying period at their home institution. Many of the institutions also offer a range of subjects taught in English, and they also include a complete specialization in English, which makes the communication with the foreign students even easier.

#### III. EU ACADEMIC MOBILITY INSTITUTIONALIZATION

Ministerial Conferences in Prague (2001), Berlin (2003) and Bergrun (2005) have defined a clear and unanimous position of all European countries, united in the belief that there is "the need to strengthen the intellectual, cultural, social, scientific and technological dimensions" which rely on common academic potential. In this way Europe works to ensure competitiveness in the global education market, and to protect itself from the penetration of other major higher education systems, of which the American education system is the most successful, because the fact is that only two European universities are among the top twenty universities in the world [5]. Fair competition between European universities is the condition for their continuous improvement and improvement of the quality of the services they provide.

Educational mobility is the priority of the European society focused on knowledge. Improving mobility is one of the most concrete objectives of the Bologna Process, whose interpretation does not allow for disagreements and controversial ideas. Besides, improving mobility in the Bologna Process context can be viewed as instrument for achieving all other objectives of the process. Mobility

programs created by the European institutions represent strong support to aspirations of students, researchers, and academic and administrative staff at universities in the European countries. As part of the Touth, Socrates, Leonardo da Vinci, Erasmus, Erasmus Mundus and Marie Curie scholarship programs between the 1987. and 2010. More than 2 million young people, students and teachers stayed in a European country that wasn't their own. European Union makes constant effort to achieve full implementation of these programs with optimum efficiency, while providing incentives for states to remove barriers to mobility and improve procedures for the recognition of academic qualifications.

#### IV. VIEW ON ACADEMIC MOBILITY

In a more narrow sense, student mobility refers to the short study period spent mostly abroad followed by a return to the home institution. Lately, the term mobility is increasingly related to the possibility of transfer of teaching and non teaching staff, whether in education, teaching or scientific and research purposes. Student mobility can be:

- 1. **Intra-college mobility** means mobility of students among similar programs at their home college relative to the optional content
- 2. **Intra-university mobility** allows the mobility of students at the university in those parts of the study programs that allow interdisciplinary permeating between different areas
- 3. **Inter-university mobility within one country** with partner universities in Serbia allows students to study part of the program or to complete their studies at another university within the home country.
- 4. **Inter-university mobility abroad** allows students to study part of the program or to complete their studies at another university in another country.

Mobility type classification is primarily determined by the type of involvement of professionals and their position in the higher education institution which engages them, and according to this there are: 1) incoming mobility and 2) outgoing mobility [6]. Incoming mobility is defined as the arrival of researches from a foreign country in order to give guest lectures, workshops, educational programs and the like, and this term also means that these guest lecturers will be returning to the higher education institutions or some other institution, while the outgoing mobility focuses on lecturers that go to another country and then return to their home institution or go to some other institution. There is also an intra-departmental mobility which is defined as the movement of professionals and researchers from the economic department to the science department, and vice versa.

# V. BOLOGNA PROCESS IN SERBIA

Ministerial summit meeting in Berlin in 2003 represented the birth of the Bologna process in Serbia, which, as soon as this started, designed a new Law on Higher Education. It was necessary to provide adequate legal and other circumstances in which Bologna Process was to be accepted and affirmed as applicable. The law was passed only in 2005 due to the government circumstances at the time, as well as public view on the reform. But, after the law was passed, Serbia quickly found itself in the European academic community: European University Association, the Campus of Europe and it has accepted the projects necessary for the compliance with the education policy

Universal knowledge with the tendency for overcoming geographical and political boundaries of the European soil has been the main goal from the very beginning of the transformation of higher education and application of the Bologna Process. Although the implementation of the Bologna process had several main focal points, the point of academic staff mobility was labeled as extremely important because active involvement in international cooperation processes on university level provides preservation of European tradition and highlights the importance of humanistic heritage of Europe. On the other hand, active networking and connecting of university structures allows for the mutual achievement promotion and institutional qualities realization which directly creates high quality education market, particularly on the global level.

#### VI. MOBILITY IN SERBIA

The agility is the vanguard of the mobility. Agility is one of the competencies, it is a context which strengthens personal development and ability to find job, and it enables cooperation and the dialogue on multiple academic levels. Agility allows for internationalization of one's abilities and competencies, enhances thought pluralism and attitude towards different things. Clearly, agility is based on individual capabilities and capabilities of all members of the European academic groups, but it also depends on a host of economic and social conditions. Necessary conditions for agility and mobility need to be simultaneously created in the institutional and legal framework, following the economic power of the academic population.

Student, teacher and researcher mobility is an important characteristic of European higher education and science. Academic mobility is not seen as an objective, but as a means of enabling the process of internationalization of higher education, coordination of various educational systems, the realization of the idea of knowledge-based Europe, the process of reform within higher education institutions and the circulation of ideas necessary for the continuous development of society.

Universities in the Republic of Serbia are allowed to use certain fund sources which the EU uses to encourage the development of higher education through academic mobility. It is about the Erasmus Mundus programs within the action 2 (EM2), that is, the formation of university networks between universities in the European Union and the universities of the Western Balkans. University of Novi Sad participates in all three existing EM2 networks for the Western Balkans:

- BASILEUS (2008-2009)
- JoinEu-SEE (2009-2010)
- STEM (2011-2012).

In order to properly absorb the assets of the European Union for the educational development, the universities in the Republic of Serbia have, for some time now, been improving not only its internal structure, but also to the higher education system as a whole. Academic mobility, although seemingly simple transversal activity, implies the existence of numerous mechanisms whose development and implementation require many participating actors within and outside the university, and from whose quality the success of the program and the realization of the mobility goals largely depend on. Although the key idea of the EM2 programs for the Western Balkans is to facilitate quality student, teacher, researcher and associate exchange, this program prepares high educational institutions from the region for full participation in EU Lifelong Learning Program, and encourages, in a specific manner, strengthening of integration function of a university. When a university organizes and implements academic mobility on all study levels, in all fields of study, in both directions, numerous and complex questions arise:

Are there mechanisms for academic recognition of study visits abroad?

Are they transparent and equivalent?

In what ways the basic tools for European mobility program implementation can be used?

Programs such as: Learning Agreement, Recognition Sheet, Transcript of Records?

What student programs can attract foreign students?

What part of the academic offer is in English?

Is the information transparent and easily accessible?

There are a lot of questions, but their purpose is to abet the institution to solve them continuously, step by step, thereby engaging all their resources - from individual professors and researchers, through the head of colleges and universities, to numerous administrative services that should, in their own way, contribute to smooth and high quality exchange.

# VII. UNIVERSITY OF NOVI SAD PARTICIPATION

Students are the greatest beneficiaries of the Erasmus Mundus May 2 and have the opportunity to compete for the prestigious Erasmus Mundus scholarships. For the most part

they are intended for the academic exchange, for one semester and / or two-semester study visits at one of the partner universities. Teachers, scientific and administrative staff can apply for one month visits to the partner university in order to teach, research, work on projects and publications, personal academic development and other academic activities.

Another type of scholarship available to students is the scholarship for overall studies abroad – for master or PhD studies. Graduates of the University of Novi Sad were part of this type of mobility, and the BASILEUS 2009/2010 program has granted scholarships for overall master degree studies for four postgraduates from our university, and JoinEU-SEE has granted five scholarships. University of Novi Sad has, in both of the mobility programs, used significantly more than was its quota.

TABLE I. OVERALL RESULTS OF THE UNIVERSITY OF NOVI SAD IN EXCHANGE CATEGORY

	Undergr aduate		Master		PhD student		Postdo ctoral		Staff	
	О	In	О	In	О	In	О	In	О	I
BASILEUS (2008/2009)	8	4	3	-	4	1	1	1	6	9
BASILEUS (2009/2010)	18	4	14	4	4	3	1	-	7	2
JoinEU-SEE (2009/2010)	31	7	14	3	4	-	-	-	16	4
Total	57	15	31	7	12	4	2	1	29	15
Total number of outgoing students and teachers									131	
Total number of incoming students and teachers									42	

Continuous mobility promotion and continuous efforts for achieving better quality student and teacher applications have placed University of Novi Sad at the very top among partners from the West Balkans region when it comes to absorption of funds intended for academic mobility.

In Table 2 are presented funds of the JoinEU-SEE program spent on students and teachers of the University of Novi Sad (exchange and the entire study), the organization of mobility (lump sum for University of Novi Sad), fee collection and scholarships (by the faculty of University of Novi Sad) for foreign students who stayed for the 10 month exchange.

Mobility is in the service of integration and development of the university. Bearing in mind that the number of outgoing and incoming students and teachers is a good indicator of the success of an exchange program, the Office for International Cooperation of the University of Novi Sad has primarily perceived European mobility programs, that have become available to us at different times, as an effort of the European Union to show us the trends and modus operandi of majority of European universities when it comes to higher education and science.

Promoting and implementing academic mobility at the level of institutions such as the university is a very complex

task. The most important aspect of this activity is to build trust among institutions in a particular university network, which is necessary not just in the process of comparison of similar curricula, but in recognition of the exams passed outside the parent university.

TABLE II. FUNDS OF THE JOINEU-SEE PROGRAM

Funds of the JoinEU-SEE program						
Grounds	EUR					
Life expenses scholarship	550,000.00					
Travel expenses	47,000.00					
Insurance	24,018.08					
Scholarships for the 10 month study visits and more	91,287.50					
Scholarships for the foreign students for the 10 month exchange	7,972.00					
One time payment for the organization of mobility	5,000.00					
TOTAL	725,277.58					
Part of the budget JoinEU-SEE (2009/2010)	4,243,475.00					
Part of the budget JoinEU-SEE	17.09 %					

With the increasing number of exchange students and experiences emerged from the first mobility programs, The University of Novi Sad and its faculties have begun to coordinate their services and their established way of working with new circumstances and dynamics brought by foreign students and teachers involved in their studies, as well as domestic students who are preparing for departure.

Quality and efficiency in the organization of student mobility was guaranteed in all cases which involved coordinated work of: teachers (academic coordinator), University administration and faculty (person in charge of international cooperation) and students (as major beneficiaries of the program).

Coordinated work has been not only the key to the success, but means for overcoming barriers that exist in the mobility realization and the way to increase the percentage of University of Novi Sad students that show excellent results in these highly competitive programs.

Closer ties of The Republic of Serbia with the European Union provide our country with the opportunities within the EM program. In fact, the most prominent are the opportunities that exist for higher education institutions which are primarily related to the development of joint master and doctoral programs in cooperation with universities from European Union.

Within this action, AstroMundus program was carried out; this is an international master program in astrophysics and one of the first Erasmus Mundus masters programs to be held at one of the Serbian universities.

Programs run simultaneously on five leading European universities: Innsbruck, Rome, Padua, Göttingen and Belgrade. Although institutions in Serbia still can not be the

project coordinators under this action, this segment of the EM program is an opportunity for universities in Serbia to develop further cooperation with universities from the European Union, improve their curricula and increase their contribution to the European Higher Education.

The University of Novi Sad has approached all open issues and challenges brought by increased academic mobility access through very close cooperation with its faculties. The experiences from the first university exchange program *Campus Europae* (CE) have greatly influenced more rapid establishment of the basic mechanisms of mobility based on the European model: the appointment of academic coordinators at the departments and study programs, drafting regulations on academic knowledge of the study visits abroad at the level of individual faculty, quality and continuous information given to the public about the possibilities of academic scholarships for students and teachers of The University of Novi Sad, support in the application process through workshops on creating motivation letter, CV, learning contracts and the like.

# VIII. ADVANTAGE AND DISADVANTAGES

After more than 10 years since the introduction of the Bologna Declaration in the European educational system, debate about its advantages and disadvantages can still often be heard in academic circles. Mobility is, however, perhaps the only goal of this process that did not meet any obstacles and that is positively evaluated by all the signatory countries

By the implementation of mobility within the European Higher Education Area the following is realized:

Wider employment opportunities - learning, studying, or the conduct of research abroad, are all ways to improve employment opportunities. There is no doubt that the European labor market in the near future will prefer all those who spent a part of their education outside the home institution. Studies at the European level confirm that young people who have studied abroad are often quicker to find job and establish international careers which also carries the weight of the greater responsibility.

<u>Internationalization of high educational system</u> - this process is highlighted as a priority in several European countries (Italy, Spain, Portugal, Austria, Greece, Hungary and Slovenia).

<u>Filling unoccupied jobs</u> - one of more frequent reasons for incoming stimulation is certainly a shortage of qualified staff (Ireland) for some areas.

The development of scientific research - much of the mobility program is directed towards young professionals who are actively engaged in scientific research. In order to develop science and technology at the national level as well as involve people in already existing work foundations, many countries are interested in attracting as many people of this profile (Republic of Ireland, Germany, Finland).

<u>Teacher exchange and training</u> - the law from 1999 in Italy as an additional criterion for election to the position of a teacher introduced a period spent at foreign universities. It is also the criterion for further progress. [7]

The only unfavorable consequence of mobility is certainly so called "brain drain". This widely accepted term refers to the process by which a country loses its most educated and the most talented experts because they have been, for lack of work opportunities and prosperity in their country, forced to leave and find job in another country.

On the other hand, small countries see it as an advantage. For example Iceland, Liechtenstein and Malta show a special interest in "exporting" students, with the aim of their being trained and even employed in Europe.

The most popular destinations for students from our country, among the programs offered, Germany, France, Great Britain, Spain and Italy definitely have the leading role. Students from the EU on the other hand usually go to the U.S., Britain and Germany.

# IX. FUTURE WORK IN MOBILITY

Ministers of Education of the signatory countries of the Bologna Declaration stressed the exceptional importance of mobility for the future of Europe, as well as an intention to have by 2020, at least 20% of all students within the European Higher Education Area who have in their biography an international experience in the form of study abroad. Australian experts predict that by 2025, 15 million students will be studying abroad, a significant increase from 3.3 million in 2008 [8].

Considering the above mentioned guidelines the University of Novi Sad, together with all other universities in Serbia and all higher education institutions across Europe, faces a long-term, complex and a very serious task.

The objective of this task and its success depend on the synergy of all the processes and actors that shape the Higher Education and Science, and quality implementation of basic institutional strategic objectives in the field of internationalization.

Given the diversity that is still present between the faculties of the University of Novi Sad concerning the implementation of mobility programs, University of Novi Sad plans to prepare, in 2011, **Ordinance on the academic recognition of study visits abroad** which will represent the standards in the field of evaluation points and grades acquired at the partner universities. It also provides the regulation of the process of signing and implementation of learning agreements with transparency of all procedures of academic recognition at the University of Novi Sad as a whole.

In line with the strategy of management of the University of Novi Sad to insist on bilateral and a long-term partnership between institutions in the field of academic mobility (brain circulation vs. Brain drain), it is essential that the University of Novi Sad take all the necessary steps that lead to increasing numbers of foreign students, teachers and

researchers in all areas. The main recommendations for this inner vision of internationalization of the University would be:

- A detailed catalog of courses in English
- The establishment of study programs in English language
- The establishment of study programs with a double or joint degree (e.g., through the Erasmus Mundus Action 1, Tempus, WUS Austria)
- Incorporation of mobility in new study programs (so-called mobility windows would significantly facilitate the process of academic recognition and would constitute an excellent basis for entry of Lifelong Learning Programme LLP (Earamus program))
- Exemption from tuition fees for foreign students in mobility programs
- Establishing an International Office at the Faculty.
- Development of recording and monitoring software for incoming and outgoing mobility.
- Elimination of administrative barriers for accommodation of foreign students in the Student Center dormitories.
- Strengthening and development of university student-host network (*buddy-network*).

Quality assurance is an important component of the overall process of internationalization and mobility of all institutional programs. Students of the University of Novi Sad will increasingly make decisions for a study visit abroad by considering not only the amount of the available scholarships and programs, but also the willingness of the parent college/university to recognize, acknowledge and respect the agreement on the recognition of exams taken and passed abroad.

On the other hand, foreign students will choose the University of Novi Sad having in mind the institution's willingness to provide lectures in English language, transparency and accessibility of information on the courses before coming to the exchange, the quality of dormitories, and simplicity of the administrational procedures.

## X. CONCLUSION

European academic mobility aims to increase the recognizability of European higher education and to present the EU as a center of excellence. Quality evaluation is the way to achieve it. The last ministerial conference in Leuven in 2009 summarized the results of the Bologna Declaration and advised universities to fully embrace and implement Bologna principles by the end of the 2020.

Twenty nine points of the Leuven communiqué talk about the Bologna's thematic emphases and communicate the priorities of the European area of higher education. Special emphasis in the chapter on *Learning for the future* is on the mobility of academic categories, students and researchers.

Transnational education and internationalization of the activities of higher education institutions is a complex field of work on integration and cooperation of all the available

capacities of universities, from simple mobility of students and researchers, mobility and exchange of scientific and teaching staff, exchange of library funds and scientific material, and exchange and dialogue of advanced academic and policy experience. Mobility should be understood as a trademark of the European higher education, and the differences and heterogeneity of that education should be seen as Europe's unique potential to unite differences.

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