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DEVELOPMENT AND IMPLEMENTATION OF SYSTEM FOR PERFORMANCE EVALUATION FOR SERBIAN HEIS AND SYSTEM AS A TOOL FOR QUALITY IMPROVEMENT

Abstract: *The improvement of the quality of the higher education is important task for Serbian society. This paper presents on possible approach in development and improvement of system for performance evaluation in Serbian higher education system. It is clear that development of this system should be in line with the national strategies in specific fields. So in this manuscript we will try to provide analysis of needs of Serbian education system in development of such system.*

Keywords: *performance evaluation, higher education, value based management, ranking, study programs, higher education*

1. INTRODUCTION

The issue of quality of higher education is one of the most important issues. This idea has been important for a while in the whole Europe [4, 5]. This problem could be addressed from many different perspectives. For the purpose of this paper we will present the possible road map for development and implementation of performance evaluation system for Serbian higher education institutions and system as whole. The idea is to provide the set of key performance indicators, model for evaluation and ranking of study programs, and institutions. This system could provide the number of benefits for different stakeholders. In the many different researches it is possible to find the number of results from EU countries [3, 9, 10]. Development and implementation of system for performance evaluation for Serbian HEIs and system could have wider objective Improvement of management, operation and quality of higher education institutions and system in Serbia. In order to fulfil the general objective specific objectives could be stated: to define and implement indicators and measures for performance based evaluation of higher education institutions and system as a basis for value based management in Serbian HEIs and

system; Structuring and pilot implementation of the system for ranking of institutions and study programs and Introduction of performance measurement in accreditation and reaccreditation of study programs and HEIs.

The realization of wider and specific objectives need to provide the public value management [6], moving from bureaucracy to a market approach, providing the ways for higher education to better serve to society needs and providing the institutional means for the government to sear higher educational institutions and system in that direction [2, 7]. In addition it is very important to establish the meaningful connection between suggested approach and two the most important documents in Republic of Serbia. The first one is "Education Development Strategy in Serbia until 2020" [8] and second one "Action Plan for Implementation of the Strategy for Development of Education in Serbia by 2020" [1].

So the general goal of this paper is to provide analysis of importance and need for development of the performance evaluation system in Serbian higher education and to suggest the possible road map for its development and implementation.

2. THE IMPORTANCE OF PERFORMANCE EVALUATION IN SERBIAN HIGHER EDUCATION

Analyzing the document “Action Plan for Implementation of the Strategy for Development of Education in Serbia by 2020”, number of issues were raised in section “Higher Education – Joint action”, particularly action with code VO-ZD 09 “Introduction of quality indicators in Higher education”. This particular action has following implementation action (according to Strategy and Action plan): (1) Definition of set of indicators for monitoring of condition of HE, (2) Improvement of accreditation standards, (3) Development of model for implementation of indicators (information system).

In addition this is covered with actions from “Higher Education – Joint action” (VO-ZD 08 Improvement of public responsibility of HE for quality of education, VO-ZD 21 Improvement of approach students’ centric education, VO-ZD 24 Improvement of cooperation with employers, business and industry, VO-ZD 25 Improvement of research component of HE and VO-ZD 26 Improvement of innovation potential and innovation outcomes).

On the second place “Academic studies (bachelor and master), action VO-AC05 “Introduction of ranking of study programs” with implementation actions: (1) Definition of set of indicators, (2) Analysis of different ranking programs (based on opinion of employers as well as based on knowledge of students), (3) Systematic inclusion of employers in procedure of evaluation and ranking (4) Establishment of Manual for ranking of study programs, points on need for development and implementation of the this system in Serbia.

On the third place the development of such system will contribute to “Financing of Education - University education”, action FO-VO14 “Development of model of financing with integration of indicators for measurement of quality of education process”. The results of the system could contribute to decision and regulations of Ministry of education, science and technological development of Republic of Serbia and to experts’ teams.

According to this analysis it is clear that project proposal has goals and aims to fulfill

specific actions stated in “Action Plan for Implementation of the Strategy for Development of Education in Serbia by 2020”.

In addition in order to underline importance of this topic of education, science and technological development of Republic of Serbia in cooperation with Expert team for reform of Higher Education organized conference “Informative day about indicators for measurement of performance of higher education – the road to the new model of financing and ranking of study programs” that was held on November 24, 2015. The goal of the meeting was beginning of discussion about possible models of financing of higher education based on indicators as a part of introduction of Higher education law. The minister of Serbian government open that meeting stating importance of performance based management as well as introduction of quality indicators in Higher education (<http://erasmusplus.rs/odrzan-informativni-dan-%D0%BE-indikatorima/?langkl=lat>).

From everything stated above it is absolutely clear that system for performance evaluation and ranking strictly corresponds to actions and priorities of Action Plan.

On the other hand it is very important to mention that similar systems exist in number of EU countries. The number of EU countries have been introduced performance based system, measurement as well as funding of higher education institutions based on performances (Austria 2002, Denmark 2007, Finland 1994, Germany 1990s, Ireland 2012, Netherlands 2012, UK 2012). Generally they have different goals such as: to improve performance in core activities – higher quality (weeding out underperformers; increase efficiency); to enhance accountability and transparency (informing stakeholders; support dialogue and trust); to encourage HEIs to strategically position themselves: diversify; and to align national and institutional policies and activities. Serbia needs to interconnect its effort with EU environment and to provide and use the best experience from EU in development of its model that will be compatible with EU, on the other side the Serbian model could be used in other similar countries or as the basis for the further development of EU models, or development of joint EU model.

3. ROAD MAP IN DEVELOPMENT AND IMPLEMENTATION OF SYSTEM FOR PERFORMANCE EVALUATION FOR SERBIAN HEIS AND SYSTEM

The system could be developed according to stated aim, wider and specific objectives in order to achieve the objectives as well as measurable milestones.

Generally road map is has tree parts: the preparation part with further analysis of present situation in Serbia, analysis of experiences from EU, the development part that cover development and implementation of set of performances, models as well as information and communication support, the pilot implementation will be carried out in this part. Finally the third part will have focus on provide normative solutions and acts.

In the first step the goal is establishment of infrastructure for the development of system for performance based evaluation in Serbia. This goal will be realized through several actions. In the first one, "Analysis of the needs and priorities in Serbian society and local economy", will provide analysis and framework for dialogue with different stakeholders about actual needs and development directions in the field of value based management of Higher education institutions and system. On the other side another set of stakeholders will be included in this process through analysis of students' and academics' needs and priorities. In order to provide support from Universities it is important to improve capacities of Universities to monitor and measure specific performances. In this step the basis for development of ICT solution will be made, through purchase of specific equipment and starting of software solution development. Starting from the fact that different countries in EU have different systems it is necessary to provide analysis of performance based evaluation in EU.

The second step Development of system for profiling and raking of institutions and study programs in Serbia will be based on the results and analysis from previous step. First of all it is important to define key processes and selected fields at HEI in Serbia, set of KPI (key performance indicators) at selected fields. Definition of key processes and its decomposition will provide the bases for

development and optimization of the set of performance indicators for study programs, institutions and HIE system as whole. Finally, based on the previous activities it will be possible development of the model for profiling and ranking of study programs and HIE institutions in Serbia. The developed model for ranking of study programs and institutions will be based on the valid key performance indicators, which will be representation of specific processes. On the other hand the model for ranking of study programs and institutions will use the best practice gained through analysis of EU models and demands of specific stakeholders (government, employers, students and academic community as well).

The third step is also connected with national Action plan and have goal to develop ICT for support of stakeholders needs and data presentation. It is very important to fulfil several objectives: to provide ICT support that will provide a software environment for ranking and presentation of the level of performances for different institutions and study programs as well as to provide data acquisition and public access to all information (for all interested parties). This goal will be achieved through: Development of ICT solution for data acquisition and ranking of study programs and institutions (Software); Training, organization and implementation of the ICT system at national level (Training); Presentation of the tools that will meet needs of students, labour market and society (Events); Pilot testing, verification and validation of the system on the selected study programs and institution (Events, Report)

The final stage is development of institutional background for developed system as well as development of basis for value based management in Serbian HEIs and system. This will be achieved through: Development and adoption of performance based evaluation for HIE management at institutional and national level; Introduction of performance measurement in accreditation standards ; Contribution to the HEI funding system (Report); Networking developed system with stakeholders ;

The dissemination of the results will be very important from many different reasons. The first one because number of Universities will perform same activity in development and implementation of system for raking of study

programs and institutions which is very important issue not only for academic society but for society in large. Dissemination could be performed to organization of meetings with academic and nonacademic representative, organization of promotion activities and development of project web site that will contain all developed material, reports, directions that could serve to the public in Serbia but also to institutions and public at Western Balkan Counties (at least).

4. DISSCUSSION AND CONCLUSION

The development of such system could provide number of impacts on different target groups:

1. Academic community, and the universities in Serbia. Developing a system for measuring performance and multi dimensional ranking of study programs and institutions should contribute to a better, higher quality, more efficient, market-oriented and socially responsible management of study programs and universities. Ranking of study programs and institutions will, through key performance indicators enable focus on key processes, process benchmarking, comparison and thus improving key processes at universities in Serbia which should contribute to higher levels of education, research, development and innovation processes, higher terms of the internationalization as well as cooperation with industry locally and in the region. On the other hand all this affects the definition and redefine institutional strategies.

2. Students. According to the ranking of study programs and institutions, students will have opportunities to make choices that suit them best, bearing in mind the set of performance which would indicate, for them, essential parameters (for example, the number of unemployed graduates is a study program).

3. Industry and business. Business entities would have an overview of different orientations and parameters defined study programs, their market orientation and quality. In this way, it is possible to achieve a kind of feedback between higher education institutions and industry.

4. National Employment Service and the Republic Institute for Statistics of focus group

would benefit from the access to real data, their organized monitoring and better connections with higher education institutions and businesses (today for example is not possible to generate information on the number of unemployed graduates originated from certain institutions,

5. Government and state institutions (policy makers) can use the defined set of performance to create the legal framework and recommendations for funding or financial models that should be incorporated indicators measuring quality educational process.

6. Finally all other institutions and organizations from western Balkan countries as EU as well could access to developed model and software and use it in order to establish their own systems or to improve an existing ones.

Development of suggested system could solve important issues that are underlined in Serbian education strategy as well as Action plan. Generally project aims to use comprehensive approach in order to provide the best possible set of indicators, performances, and model that could be used not only in Serbia, but could contribute to the development of models in similar countries or even to contribute to improvement of EU models. The suggested approach has aim to define and implement indicators and measures for performance based evaluation of higher education institutions and system as a basis for value based management in Serbian HEIs and system; and to structure and pilot implement of the system for ranking of institutions and study programs and finally to provide institutionalized changes in accreditation standards. Since other Western Balkan Countries to not have a language barrier, other countries such Bosnia and Herzegovina, Montenegro could use specific results and modify them for their higher education institutions and education system as whole. Finally the project need to make contribution and innovation in public value management through contribution in diversity, differentiation and profiling in higher education, stimulation of higher education institution and system through performance agreement and in redefinition of funding and performance agreements in Serbian educational system.

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