

Increase in Efficiency of Activity of Educational Organization in System of Higher Professional Education under Current Management Technologies

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Abstract: Economic reforms and those in the educational sphere have contributed to the increase of the concern towards the efficiency of the activity of educational organizations and higher educational establishments in particular. This deals with the increased competition in both international and national markets for educational services; the growth of informational openness of higher education establishments; and the enhanced role of strategic planning. All these aspects are gradually leading to a new objective that faces higher education establishments, which is a necessity to demonstrate the efficiency of their education services and support it with definite indexes. This article discusses the issues on implementation of modern management technologies to increase the efficiency of the activity of educational organization in the system of higher education establishments; views the essence and practical peculiarities of management technologies such as benchmarking and crowdsourcing; and suggests recommendations for increasing the efficiency of universities’ educational activity based on implementing these management technologies.

Key words: Educational organization of higher educational establishments • Efficiency of educational activity • Current management technologies • Benchmarking • Crowdsourcing

INTRODUCTION

In the present time, when under both globalization and growing competition on the education market Russia’s higher educational establishments have to comply with new severe requirements for both educational services and research work, it is undoubtedly necessary to renovate and upgrade the systems of higher education establishment management aimed at improving the indexes of efficiency of their activity.

The activity of any educational organization is primarily associated with the process of providing educational service. Educational service is a useful labour, which directly satisfies a human need for education and a material and physical product, which provides a person with an opportunity of self-satisfaction of his need for education (tutorials, training programs, manuals, etc.) [1].

Analyzing the concept of educational service primarily in the law context, T.V.Zhukova points out that in this context the term “service” should be interpreted as

“conduction of definite actions or that of a definite activity” with due account for the norms, required by the customer [2].

The development of this idea and thorough studies of the essence of educational service allows O.V. Yuzhakova to conclude that “educational service is a complex array of possibilities, which are purposefully created and offered to the society to obtain a definite knowledge, abilities and skills for satisfying one or another education need” and this array “can be subject to regulation of various branches of law” [3].

Hereinafter, we shall proceed to the analysis of the efficiency of educational activity of higher education establishments.

Analysis of Efficiency of Educational Activity for Higher Education Establishment: Efficiency is a key indicator of performance quality for the system, which characterizes a degree of its ability to fulfill its function as intended. As far as the efficiency of education services of higher

Table 1: List of Indexes for Evaluation of Efficiency of Federal State Establishments for Higher Professional Education and their Branches [5]

No.	Indexes	Units of Measurement
Education Activity		
1	Average grade of the Uniform State Exam (hereinafter referred to as the "USE") of the students accepted, due to the results of the USE, for a full-time attendance under bachelor-level programs and those on specialist training funded from the relevant budget resources of the RF's budgetary system.	Grade point
2	Average USE grade of the students accepted, due to the results of the USE, for a full-time attendance under bachelor-level programs and those on specialist training, charging individuals and legal entities a tuition fee.	Grade point
3	Minimal USE grade, averaged due to realized directions (specialties), of the students accepted, due to the results of the USE, for a full-time attendance under bachelor-level programs and those on specialist training.	Grade point
4	Number of the first-year students accepted for a full-time attendance under bachelor-level programs and those on specialist training without entrance examination; i.e., winners and awardees of the final stage of All-Russian Academic Olympics for School Age Students.	People
5	Proportion of the student accepted for a full-time attendance under bachelor-level programs and those on specialist training, based on their participation in Academic Olympics - i.e., winners and awardees of Academic Olympics for School Age Students, members of Russian Federation Teams, which have taken part in international Academic Olympics on general subjects and are grouped in a manner defined by the RF's Ministry of Education – to a total number of the first-year students accepted for a full-time attendance under bachelor-level programs and those on specialist training.	%
6	Proportion of the first-year students accepted, due to the results of the target acceptance, for a full-time attendance under bachelor-level programs and those on specialist training, to a total number of the first-year students accepted for a full-time attendance under bachelor-level programs and those on specialist training.	%
7	Proportion of the students (hereinafter referred to as the "Group") studying a master's program to a number of the Group participants studying general academic programs of higher professional education (hereinafter referred to as the "GAP HPE")	%
8	Percentage of the students (hereinafter referred to as the "Group"), who have obtained higher professional education in other higher education establishments, to a total number of the Group participants accepted by a university for a Master's degree course.	%
9	Number of Ph.D. students per 100 students (of the given Group)	Units
10	Proportion of the attendants from external companies to a total number of the attendants, who have finished university programs on advanced vocational training and retraining.	%
11	Proportion of academic personnel (hereinafter referred to as the "AP") with Ph.D. degree to a total number of the university AP.	%
12	Proportion of the AP with Doctor's degree to a total number of the university AP.	%

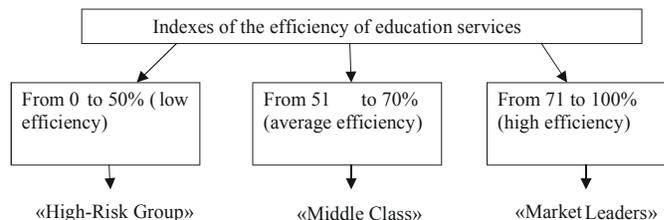


Fig. 1: Classification of higher education establishments due to educational activity efficiency indexes.

educational establishments is discussed, the main mission of such a service is both the possibility of further employment and graduates' implementation of the knowledge they have gained with help of these services.

If one refers to legislation, it is possible to explain the educational activity of a higher educational establishment as activity to the extent concerning conduction of the primary mission of the education establishment; i.e., training and labour market launch of definite high university degree specialists, retraining of specialists, advanced vocational training [4].

To evaluate the activity of educational organization, we can take as a basis, a system of general indexes given in the List of Indexes for Evaluation of Efficiency of

Federal State Establishments for Higher Professional Education and their Branches.

All educational activity efficiency indexes for higher education establishments, in accordance with the procedure proposed by the researches T.V. Terentyeva and M.N. Kulakova [6], are divided into three groups. This phenomenon is illustrated in Fig. 1.

The higher education establishment, which efficiency of educational activity refers to the third group, is in the "high-risk group"; i.e., less than half the graduates of this institute works within their specialty. If the establishment demonstrates such indexes over the course of three years, its further existence on the market for educational services is subject to being called into question.

The higher education establishment, which efficiency of educational activity refers to the second group, is in the “average class”; i.e., more than half the graduates of this institute works within their specialty. If the establishment demonstrates such indexes, it should carry out a deep self-examination, find its weak traits and possibly progress them towards optimal indexes.

The higher education establishment, which efficiency of educational activity refers to the first group, is a “leader in the market for educational services”. Its main objective is possibly to maximize its indexes rather than decrease them. Such establishment is worthy not only to be highly ranked but also to be encouraged by the state through bonus supplements.

The market environment and the necessity to constantly maintain and increase a competitive power make domestic leaders in the sphere of higher professional education explore modern management technologies, which enable the improvement of the quality of rendered services and that of business processes and to improve the efficiency of management systems. These management technologies are associated with benchmarking and crowdsourcing.

Increase in Efficiency of Educational Organization Activity on Basis of Benchmarking: Benchmarking is a process of identification, understanding and adaptation of the existing examples of the organization’s efficient functioning for the purpose of improving own performance [7]. It equally includes two processes: evaluation and comparison. Benchmarking as a process of searching for better practice uses methods of comparing business processes to not only quantitative metrics but also qualitative ones.

Regular benchmarking allows an active monitoring of competitors’ actions. Furthermore, it gives an alternative to a traditional strategic planning “from the achieved results”, revealing the opportunity to change over to the planning procedure based on the analysis of competitors’ indexes. Thus, the technology of benchmarking unites a strategy development, branch analysis and competitor analysis in a single system [8].

In the present time, benchmarking is widely used by American associations for professional education (NACUBO – National Association of College and University Business Officers, ACHE – The Association for Continuing Higher Education), by some universities (The University of Chicago, the universities of Oregon,

Pennsylvania, Utah, etc.), by private consulting agencies (Educational Benchmarking [9], The Benchmarking Exchange [10], etc.). Europe hosts a very popular European Center for Strategic Management of Universities [11], in which the program “Benchmarking” has been successfully run for several years. This program provides all the participating universities with the opportunity to analyze and to improve their key management processes.

The system of Russia’s higher professional education possesses a necessary and sufficient set of conditions for the realization of benchmarking projects. This primarily deals with network joint projects, with university orientation towards the requirements of both external and internal consumers, with implementation and development of quality management systems, governmental and public accreditation of educational programs and institutions, interaction of professional education with the market of labour, social partners, etc. [12].

In our view, Russia should advisably develop university benchmarking on the basis of national and industrial quality awards, beginning with University Quality Contest as a base stage. The creation of an industrial database will enable to combine the best experience of the participant and awardees of such contest, as well as other interested educational organizations. The access to this database must be organized using advanced information technologies through the global Internet resource to be created [13].

Benchmarking of educational services is not only an advanced technology of competitive analysis but also a concept aimed at helping the university strive to continuous improvements, simultaneously being a process of improvement itself. This continuous search for new ideas, their adaptation and practical application increases the university’s investment attractiveness and triggers its success in the competitive market.

Increase in Efficiency of Educational Organization Activity on Basis of Crowdsourcing: Another modern management technology, which allows increasing the university’s efficiency, is associated with crowdsourcing.

The free encyclopedia “Wikipedia” proposes the following definition - Crowdsourcing is the practice of outsourcing definite corporate functions to an identified network of people by virtue of a public offer agreement, which does not imply entering into employment contract [14].

In 2006 Jeff Howe, a journalist, coined the term “crowdsourcing” in his Wired magazine article “The Rise of Crowdsourcing”. Although the way to solve problems collectively had been widely used before, in his article Jeff Howe proved that groups of enthusiasts working over any task are more often likely to succeed than professionals with formal expertise [15].

As opposed to outsourcing, when few additional resources are attracted in from outside, crowdsourcing uses a significant energy of a vast number of enthusiasts. Not all of them show a high competence and expertise; but owing to a collective control and with experts’ supervisory support, it is always possible to identify from thousands of solutions the most important and interesting ones. Crowdsourcing is used for solving various tasks – some companies receive proposals on product and service upgrading, other companies ask the Internet community for ideas on creating new goods and ways of their sales [16].

In Russia, outsourcing technologies are coming into life. Intrinsically, there are only two companies working in this segment - Witology è WikiVote!.

The development target for Witology is the platform of a principally new type, which serves to identify key problems in complicated projects, to find and to attract most active, competitive and productive specialists of any expertise for their solution from any part of the world through the Internet technologies. The program product, created by Witology, is equipped with special algorithm for filtration of “social noise” on the level of ideas and people (when hundreds of crowdsourcers are working, they produce an array of ideas and comments, making a so-called “social noise”). Moreover, they have developed the ways for achieving intellectual potential synergy [17].

The WikiVote! Company shows an easier approach to task solution – a platform for a collective development of texts and to work over their improvement. In the recent days, WikiVote! managed to realize a series of large projects. As a regular example, one can consider an open network project, which involved citizens interested in the creation of a clearer text for the Federal Act on Education approved by the society. The project engaged more than 5.5 thousand participants and received 169 ideas of solutions for the most urgent issues. The open platform is currently at the launch stage for the creation of a collective book about the essence of innovations in Russia, ordered by the Innovative Center “Skolkovo” [18].

Higher education establishments are more likely to apply crowdsourcing than any other organization.

Modern trends dictate the necessity to bring the quality of university graduation into compliance with the requirements of knowledge economy, which mean that a graduate must not only possess a set of necessary knowledge but also be able to generate it throughout his life and to orientate himself in challenging situations.

Crowdsourcing is often practiced by higher education establishments to work out development programs. As an example, Sholokhov Moscow State University for Humanities decided to implement crowdsourcing for self-development. On the website “GosDiscuss”, it has posted the program on university development, which welcomes the comments of any volunteer including the students and other enthusiasts. The same undertaking is planned to be brought into practice by the Moscow State Technical Institute of Radio Engineering, Electronics and Automation [19].

For the efficient implementation of crowdsourcing, it is necessary to minimize costs and provide a precise control over both schedule times and information leakage. On implementation of crowdsourcing in either higher education establishments or any other organization, it is essential to concretize a target, to divide it into sub-targets and, for cost cutting, possibly to use the community being aware of the substance of the matter.

CONCLUSION

A modern and properly innovative higher education establishment being in step with the time will always try to use efficient tools, models and strategies in its operation. Both benchmarking and crowdsourcing are the key management technologies for the increase the efficiency of activity under both a severe competitive struggle and the increase of attention to the consumers of education services.

The implementation of the technologies of both crowdsourcing and benchmarking will work to achieve the congruence of interests of all university stakeholders, to integrate a higher education establishment into the global information space, to attract necessary human, innovation and investment resources for increasing the efficiency of management solutions, for providing comforting conditions for education and university operation, for expanding knowledge from the research and development sector, as well as for capitalizing it and for stimulating the development of scientific and research centers.

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