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MANAGEMENT RATIONALITY MECHANISM FORMATION IN HIGHER EDUCATION

The author has developed an algorithm offering the optimal mechanism for achieving rationality in higher education. The combination of interests of individuals, the state, higher educational institutions and employers is analyzed. Proposals on the development of mutual interest in cooperation within the system to meet the interests of all parties involved are suggested.

Keywords: higher education; public procurement; professional qualification guide.

JEL classification I21; I29; J24.

Андрій Б. Почтовюк

ФОРМУВАННЯ МЕХАНІЗМУ РАЦІОНАЛЬНОСТІ УПРАВЛІННЯ ВИЩОЮ ОСВІТОЮ

У статті розроблено алгоритм формування оптимального механізму досягнення раціональності управління вищою освітою. Проаналізовано питання поєднання інтересів індивіда, держави, вищих навчальних закладів і роботодавців. Надано пропозиції щодо перспектив розвитку зацікавленості у співпраці елементів системи з метою задоволення інтересів усіх сторін.

Ключові слова: вища освіта; держзамовлення; професійно-кваліфікаційний довідник.

Рис. 1. Літ. 10.

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ФОРМИРОВАНИЕ МЕХАНИЗМА РАЦИОНАЛЬНОСТИ УПРАВЛЕНИЕ ВЫСШИМ ОБРАЗОВАНИЕМ

В статье разработан алгоритм формирования оптимального механизма достижения рациональности управления высшим образованием. Проанализированы вопросы совмещения интересов индивида, государства, высших учебных заведений и работодателей. Даны предложения относительно перспектив развития заинтересованности в сотрудничестве элементов системы с целью удовлетворения интересов всех сторон.

Ключевые слова: высшее образование; госзаказ; профессионально-квалификационный справочник.

Problem setting. From the position of the rationalist approach, the existence of targets indicates the lack of rationality — a mechanism that allows to combine the goals and results, namely to establish equality between them. The mechanism refers to a set of interrelated tools relative to a system. The purpose of the mechanism is the realization of goals to achieve the mission of higher education by establishing a dialogue between its subjects. The dialogue is the basic mechanism in rational management. Dialogue between the subjects of the system of higher education is the key to satisfying simultaneously the interests of all entities that implement the main missions of higher education (HE). Dialogue is the process of identifying and setting the convergence of the positions, reaching common agreements and consistent decisions by the parties that represent the interests of HE on the formulation and implementation of state policy in the fields of labor regulation, social and economic relations. Traditional methods of dialogue that belong to the command economy have lost their

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efficiency leading to negative consequences. Priorities contained in these methods are not dominant today. Other instruments of dialogue are being formed in which the state is guided by the interests of higher education institutions in determining the need for professional and qualified manpower. In turn, under the conditions of limited state financing higher education institutions have to meet the needs of ambitious individuals in obtaining popular specialties. Under these conditions the state order for the necessary economic experts is not fulfilled. An individual is guided by his/her own mind when choosing a career, hoping for employment and high wages. Practice shows that individuals are subjective in their perceptions of the benefits of professional qualification. As a result, individuals are often unemployed at the end. This suggests that the priorities had been selected incorrectly.

The basis for this research are the works by Ukrainian and foreign scientists V. Andrushchenko (2006), V. Bech and O. Kaminska (2010), B. Danylyshyn and V. Kutsenko (2004), O. Kratt and L. Dyeyeva (2008), M. Zgurovskyi (2006). At the same time the problem of state regulation of higher education, taking into account the entire spectrum of individual interests, interests of universities and employers are covered insufficiently, not enough attention is given to the analysis of relations between individual elements, the state, universities, employers as a means of informing individuals on the current state of educational environment.

The purpose of this article is to develop an algorithm for optimal control in higher education, to identify instruments that will efficiently manage the dialogue within the higher education system (HES).

Key research findings. State financing means that citizens have the right to get higher education free of charge in the state and communal educational establishments within the volume of training for country's social needs (procurement). Thus, the state order for training specialists is being formed not only by the needs of the labor market, but also in view of the very constitutional right of Ukraine's citizens to free higher education. In this regard, the volume of state order should include the ability of citizens to pursue higher education budget funds for every specialty and field of study. Even with the saturation in a particular knowledge field, the government should provide places for receiving talented graduates in the relevant areas of training and specialties at the state expense. But to determine the number of places is very difficult. In addition, today's Ukrainian youth is not heading for the choice of future profession to be for the demand at the labor market. On the one hand, the state provides the individual an opportunity to study free of charge, on the other, the individual has the right to freely choose a profession and qualification. Under these conditions, the interests of the state and the individual do not always match. If the government seeks to allocate funds from the state budget for the training of specialists needed by the society, individuals are guided by considerations of personal prestige and prospects of high wages (Danylyshyn and Kutsenko, 2004).

If the selected individual line training is funded either by the government or the employer, he/she has two choices: to change one's mind and to choose a different specialty or to pay for the study. In assessing the economic feasibility of the first option, the individual receives higher education and a chance of getting a job from the state or the employer. That is a logical view on individual educational needs. The second option does not guarantee employment and payback on investment. The indi-

vidual guided by personal considerations, often becomes unemployed or does not work by the specialty obtained. In turn, the employer loses the opportunity to get highly skilled workers. Exceptions are rare cases when studying at the own expenses stimulates a student for more active job search and early work. For the students enrolled on the commercial basis there is more chance to work by the specialty they received. There is an incentive to "work out" their own money spent during the entire period of studies.

Thus, there exists weak coupling of individual interests of employers, government and higher education institutions. Primarily we should identify the individual instruments interaction for the subjects of HES, which will help to achieve professional qualification compliance and provide information on the extent of employers' needs for specialists with higher education.

In this case an individual begins the interaction with the employer prior to formal employment. Industrial practice of students are often formal and reduced to mandatory registration of practice reports. It is difficult for employers to motivate graduates in employment, if they rely on other jobs. Professional training centers are not able to persuade students to choose higher engineering education, under the influence of external factors a different attitude to future profession is formed before entering a university. Disparity between real labor market needs and demand caused, firstly, information asymmetry: the applicant and his/her family do not know the real demand for certain professionals in 4–7 years, and what the salary will be. Secondly, it is important to know wishes and demands of employers. This asymmetry in developed countries has been described in numerous surveys of young professionals and employers. In Ukraine, such surveys are carried out very rarely. Employers do not have resources and opportunities to independently make a difference (Zagirnyak and Pochtovyuk, 2013).

Regarding the interaction of individuals and HE institutions it is necessary to emphasize the presence of resource dependency of higher education institutions upon individuals. Diversification of funding sources for higher education institutions has led to the involvement of individuals, introduction of educational credit, payments for additional professional education development of non-core activities etc.

Higher education institutions agree with any decision of the individual as for the choice of future profession and qualification to meet his personal educational needs. changing the orientation of higher education institutions toward the interests of employers brings in the risk of losing applicants in case of the refusal to receive higher education under state procurement but on unpopular specialty. This risk can be overcome if higher education institutions are confident they can count on sufficient state funding if the individual chooses future profession according to employers' needs. It is necessary to change the attitude of individuals to higher education, to convince them choose professions that are in demand at the labor market. Mass popularity of certain professions (manager, economist, financier, accountant, lawyer etc.) has led to a glutted labor market of these professionals. While there is acute deficit of engineering personnel, and so they are always open for procurement. By selecting this option, the individual has a more significant probability of employment. This should be told to everyone enrolling to university. Higher education institutions are unable to massively distribute this information at the labor market.

Since the state social policy covers all social and other aspects of human life, the state exercises the greatest influence on individuals. Interaction of the latter with the state is the only option that allows individual choice of a profession and qualification in the interests of the employer. This individual will be guaranteed employment and can count on the highest level of professional qualification.

The state is able to directly influence the salary of engineering profession, since this factor significantly affects the professional. Low wages do not encourage employees to improve vocational qualification. The state can create conditions for wages growth (especially in traditionally low-paid economic activities), defining its policy in this area as a priority. One option is the adoption and enforcement of minimum wage industry standards that would perform the role of a measure, norm, on which the system of wages at industrial enterprises would function (Andrushenko, 2006). But in the interests of employers and their profitability, the industry average profit margins remain the priority. Therefore, we need social policy tools that would allow individuals start their vocational guidance to meet the needs of employers in labor force.

The first tool is the professional qualification guide or directory of occupations and qualifications (DOQ). It is the official publication issued on behalf of the public employment service and this report contains materials and information on the nature of the labor market in Ukraine. The basic idea of publishing DOQ is that in a small, easy for individual use file format most useful information about the existing demand for specialists is concentrated. The main purpose of DOQ is to assist individuals in proper selection and training, in relationship with employers (without reference to specific companies). The main information sources for DOQ are: Classification of occupations DK 003: 2010 (The National Occupation Classification, 2010).

The second tool is state information. This information is the dissemination of various political, philosophical, scientific, artistic ideas with a view of their introduction into mass consciousness to intensify the use of these ideas in practice. However, promoting such a message exercises beneficial influence on public opinion, provoking programmed emotions and changing attitudes or behavior of groups of people which can be directly or indirectly beneficial but also dangerous (Kratt and Dyeyeva, 2008). The main elements of this process is information, on the one hand, subjects (a social group whose interests are expressed by information) – employers interested in a specific number of professionals, trades and skills; on the other hand, objects (audience or social community to be targeted by information) – that is individuals (consumers of professional education services). Crucial for the understanding of state information is the socioeconomic interest of employers, their relationship with the society as a whole and certain groups of individuals targeted by this information. This defines the contents and the influence on the choice of means and channels of information.

Prime satisfaction of requirements of the labor market leads to state promotion of vocational and qualification compliance. Socioeconomic development without highly educated workers, professional development of personnel at industrial enterprises is impossible. Choosing future profession and qualification the individual has to be guided by those specialties which belong to priority branches of national economy development and are demanded among employers. It has to be realized and recognized by each citizen. Otherwise economic interests of an individual in receiving high

payment for own professional knowledge, skills and abilities will be dissatisfied and there is a risk to remain unemployed. The idea to promote vocational qualification is the main criterion for the choice of state information on the matter. Through social forecasting tool the state has data on the dynamics of labour needs of the economy for years. It needs to be processed to present this information to individuals in a readable form.

The channels to provide information from DOQ to individual:

1. Mass media. This is one of the most powerful means of communication in the society. Media is the transmitter of information in the society and therefore it can be used to active express and represent all sorts of interests. According to the Law of Ukraine "On Information" mass media is a means of public dissemination of printed or audiovisual information (Verhogljadova, 2005). So under media here we mean television, newspapers, radio, magazines and the Internet. According to international standards, printed media are periodicals (newspapers); audiovisual media are radio and television. Since the main purpose of media is to influence public opinion, the state will quickly inform the public about the needs of employers. Through printed media, radio and television, it is possible to provide population with updated information on industries rating ("top 10"), popular professions ("top 20"), the number of positions and vacancies available.

2. Internet resources. Information posted on the website of the State Employment Service (www.dcz.gov.ua) is free for all. Since the State Employment Service is responsible for the collection and processing of professional qualification cards, the information on vocational qualification needs of employers is on its site. Individuals have free access to this information on occupations and skills that exist at the labor market by regions and industries (Figure 1).

Figure 1 is an option on how to provide access to summarized information on professional qualification cards at the regional level and by industries. User of the SES website is proposed to choose the place of employment: region (area), then city (district) etc. To select an economic sector the site gives graphical and tabular forms of industries ranking by the number of existing jobs and vacancies as.

After choosing a particular sector of the economy one moves to the next ranking "top 20" of professions and positions or "top 20" of occupations and job opportunities.

The occupations demand degree at the labor market corresponds to the position of a profession in this rating. Occupations with higher ratings have better job prospects. The choice of future profession should be made on this basis. This is the last stage for an individual to choose the qualification level.

The individual who received a degree in a certain profession or qualification thus will be more confident of employment in a specified region or industry.

In search for higher education prospects an individual can explore the social dynamics of the projected number of jobs and job training, and professions in the coming years. It is also proposed to give individual the opportunity to download the directory of occupations and qualifications online in a convenient pdf format.

3. Social advertising. This type of advertising is aimed at promoting positive for the society professions and is usually placed in media free of charge. The state should use such advertising to promote student learning on state procurement for engineering specialties required for further development of our economy.

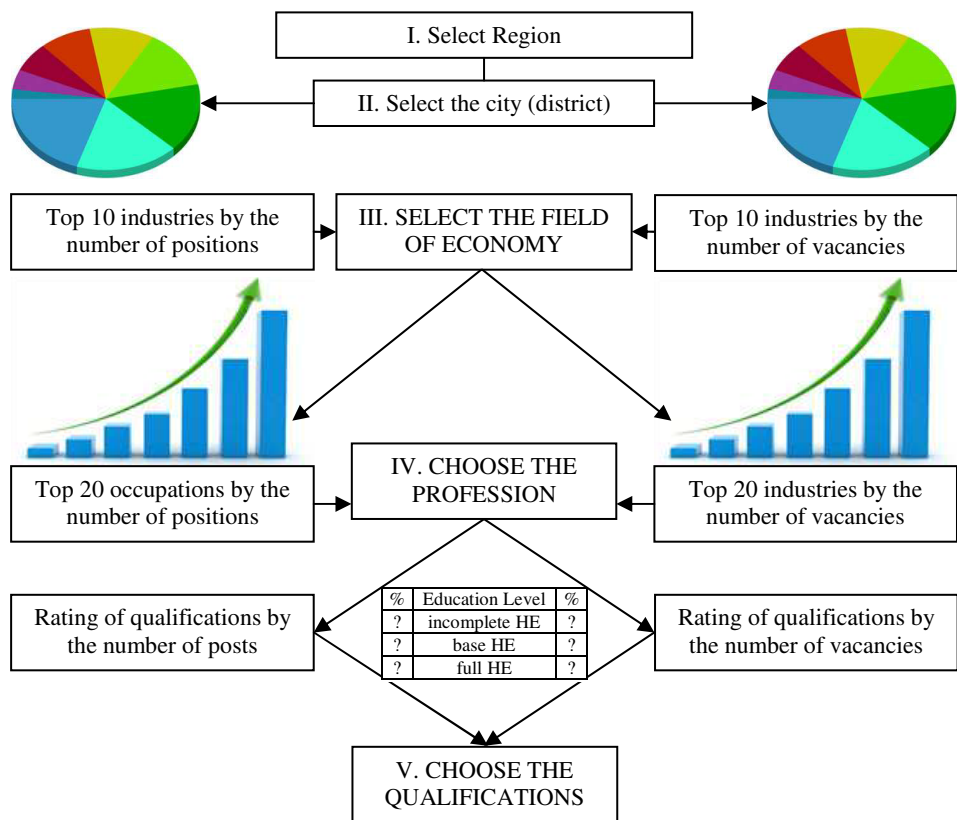


Figure 1. Career choice algorithm via online employment public service, constructed by the author

4. Other channels. Free distribution of annual DOQ if offered at municipal, district and city employment centers. It is advisable to distribute also monthly newsletters about the situation at the labor market. Besides that, individual can also get an information on professions and qualifications from private recruitment agencies, higher education institutions and their admissions committee, recruitment agencies (departments) at enterprises, job fairs etc.

Conclusions. Thus, only the state is able to influence the career perception of individuals and the society as a whole. State Employment Service reports on actual and projected conditions to achieve vocational qualification according to labor market demands, as well as a combination of interests of HES. Economic benefits for individuals in making decisions on higher education choice in specific areas of study (specialty) is determined by comparing the benefits related to the acquisition of basic or complete higher education and the benefits received by an individual from undergraduate education or basic higher education. As benefits are mostly related to wages in a future place of work, saving their own money to pay for tuition at higher education institutions; saving time which can be spent on work instead of getting higher education.

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Стаття надійшла до редакції 19.03.2015.