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**HIGHER EDUCATIONAL MODELS AND ECONOMY
DEVELOPMENT**

Sedykh Irena (a)*

*Corresponding author

(a) Financial University under the government of the Russian Federation, 49, Leningradsky Ave., Moscow, 125993,
Russia, irena-sedykh@yandex.ru

Abstract

The paper discusses the educational models currently used in Russian higher education, among them are such as: Liberal, Professional and Blended. Along with the models we analyse some possible mechanisms able to harmonize the learning outcomes, which universities denote as the teaching goal, and the requirements of the labor market. The analysis includes a comparison of the goals, consideration of different approaches to academic freedoms and description of the tools used within the models under discussion. Models-based comparison allows us to identify some additional opportunities enabling generation of more effective management mechanisms applied to organize processes in higher education institutions, including the harmonization of higher education outcomes and the labor market requirements. We conclude that inaccurate identification of the educational model can pose the following risks, such as: inadequacy of the choice of the educational model to the goals and objectives of state policy in the field of education; underestimation of economy indices influence impacting much the mechanisms going on in the labor market (this tendency is poorly reflected in higher education methodologies and strategies); reassessment of the educational model potentials for successful solution of the issues relating to quality, efficiency and availability of higher education. These discrepancies in choosing the educational model that will be applicable and capable to tackle the current challenges can bring some negative trends to the higher education system. The contradiction arising in the regulatory framework is indicated. The reason for its occurrence is studied.

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Keywords: Higher education, educational model, academic freedoms, educational infrastructure, vocational education.



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1. Introduction

In the Soviet time, the higher education system was mainly engineering-focused and fully strategic-governmental. The Government developed a list of specialties the universities had to prepare, the admission plan – admission figures (university places – AF), and, accordingly, the graduation plan and distribution of young specialists within the needs of the national economy. With this approach, the problem of harmonizing the system of higher professional education and the needs of the economy was solved at the country level. It was not very effective and with great inertia in terms of innovations.

After the transition from the planned management of the national economy to the market economy, the Government abandoned the system responsible for university graduates' distribution.

Currently, the procedure to AF planning is based on the competitive call on the Government order for specialists having a university degree. The emergence of several levels (degrees) of higher education (bachelor's, master's, engineer) leads employers to some confusion. What exactly is the difference between a bachelor from an engineer and an engineer from a master? And the mechanism for harmonizing the system of higher education and the labor market, with its requirements, turned out to be unbalanced.

2. Problem Statement

The system of higher education in Russia, over the past few years, has been in a state of continuous reforming, known as "optimization and improvement". Moreover, the vector of reforms has repeatedly changed. In the 1990s the hot topic for debate was the academic content of bachelor and master programs. In the 2000s, these educational programs are beginning to take on the applied and practical focus. The Federal Law "On Education in the Russian Federation" contains a provision according to which the development of educational programs of undergraduate and graduate programs is confirmed by awarding to graduates the qualifications "Bachelor" and "Master" (Government RF, 2012). There was also an intermediate option. In the law of the Russian Federation "On Higher and Postgraduate Professional Education" in Art. 6 p. 2 contained the entry: "The following levels of higher professional education are established in the Russian Federation: higher professional education, confirmed by awarding to a student who has successfully passed the final certification, qualifications (degrees) "bachelor"... and further qualifications (degrees) "master" (Government RF, 2005). With this approach, the difference in the sense of the fundamental concepts of educational legislation is leveled, namely "qualification" and "degree".

The transition from engineers' education to bachelor-and-master education has significantly changed the structure of the basic educational programs at all universities, as well as the instability and uncertainty of the educational reforms conception, which caused a gap between higher education and the needs of the labor market (Shekhonin et al., 2017). At universities, the situation is complicated by the fact that, along with structural transformations, the search for educational models has been and continues to be the open issue to discuss.

Educational Models

The education system development in any country begins with choosing a specific/needs-responded educational model. This model will set the algorithm for tracks necessary to achieve the goal.

It includes (7):

- a certain sequence of actions used for organizing an educational space,
- a specific scientific approach to the educational process,
- a set of mechanisms with the help of which different university departments will collaborate.

3. Research Questions

3.1. Classification of Educational Models

Existing models can be classified by some criteria (Sidorov, 2019):

1. a profile of the educational process/university:

- a research model. This model implies the integration of students' research and professional activities,
- humanities university. The idea of such a model is in activities related to generalization, preservation and transmission of the cultural experience of mankind,

2. a social order:

- university – company. The model takes into account the current situation in the labor market and tries to adapt flexibly to it,
- university – society. The model is focused on the fundamental education, due to the economic, political, social and other needs of society,

3. the principles on which the educational process is based on and organized with:

- an innovative model. A variety of innovative structures are being opened on the platforms of some universities: scientific and technical parks, incubators, innovative educational laboratories, scientific, industrial and financial departments. This model involves such a mechanism of interaction between science, education, and industry, the basis of which is a university whereas the ways of communication with other structures are various legal agreements,
- a traditional model. The classic model of interaction between a university and enterprises. Some enterprises can provide the financial support for students when they study at the university, and students can undergo an internship at these enterprises,

4. some geographical characteristics:

- the European model. With all the variations existing in the educational systems of the European countries, they have one feature in common - adherence to the LiberalArts model. Such an educational model is aimed at developing a student's ability to work independently, be able to search for additional information, not being limited to the material received in classrooms. The LiberalArts model guides a learner to do own choice and be responsible for it,
- the American model. Its fundamental elements are the possibility of choice, practice orientation and simplification of educational programs. No one will argue that practical orientation is an

extremely useful thing, but it allows other academic European approaches to be also competitive. The effectiveness of this approach is ambiguous. This is the reason why the United States is constantly in need of students studying mathematics and technical sciences,

- the Soviet model. The educational system was functioning under the Governmental order. The Humboldt academic model of higher education was used aimed at training scientists and research engineers.

At the universities that were under the church control as Cambridge and Oxford, the education was available only to upper social classes. In the learning process, the practical applicability of science was beyond importance. Humboldt tried to give to universities the academic freedom, holding them responsible for the needs of the state and society. The only significant drawback of such a university model is the high academic level and complexity of re-profiling and training specialists in free professions.

Such a model of education in the Soviet Union was a complex and balanced set of tools and methods, which guaranteed, for a long time, a combination of comparative rate, reasonable cost for the country budget, and a high percentage of graduates' compliance with the State Standards. But, while the specialists in engineering profiles ensured a high scientific level of research, especially in the military field, in the field of social sciences, political science and sociology, the Soviet Higher School, within the ideological reasons, did not have a free access to the world sources of information and it was its considerable loss to the western education. The Soviet Higher School taught the graduate the ability to work effectively in stable, unchangeable conditions. In market-economy conditions, not only the model itself but also its product (a specialist, an average Soviet graduate) turned out to be not ready for rapid changes. This is an example of how strongly the model of education could impact society and its well-being.

- the Japanese model. At the university, they receive wide professional knowledge and then acquire a narrower profile in practical working in any company at the expense of an employer.

4. Purpose of the Study

We will consider the three educational models currently used in the Russian system of higher education: “British” or “Liberal”, “German” or “Vocational/Professional” and “Blended”. We start with the characteristics of these models, such as academic freedoms (9), infrastructure, and mechanisms ensuring convergence of the higher education system and the labor market. A comparison of the educational models, mainly based on the comparison of their components, will reveal some additional resources, which are necessary to optimize the educational process relating to its organization and management.

5. Research Methods

5.1. British or Liberal Educational Model

The British or Liberal educational model is currently considered in Russian higher education as innovative. In fact, this is the British system of training the scientific staff. It is based on the level-based

education (bachelor's and master's degrees). Its goal is to provide the fundamental university teaching including an individual approach to learning in order to grow graduates as highly educated specialists. The individual educational trajectories are the supporting structures in educational programs development. Each student studies within his/her individual curriculum.

Academic freedoms of the "Liberal" model:

- individual educational programs development;
- a wide set of options to select academic disciplines;
- the subject-subject character of the educational process;
- maximum independence of students;
- a comprehensive approach to the educational interests of students ("student-centered");
- ambitions for the maximum output of the "educational potential" of students;
- available educational infrastructure.

All these academic freedoms are aimed at students to achieve a high educational level. The model does not offer or suppose a clearly expressed professional orientation of education.

To ensure harmonization of the higher education system and the job world and to provide for graduates the necessary professional skills, there must be a non-university infrastructure:

- networked certification centers that offer professional educational programs of various profiles;
- a system of continuing professional education, to a greater extent, focused on the professional needs of university graduates;
- developed a system of corporate education;
- institutes of independent assessment of education quality, the system of public and professional accreditation;

In assessing the academic achievements of students, a competency-based approach should be used. As a result of studying at the university, an academic degree is awarded. And qualification appears as a synonym for a document confirming mastering of an educational program at a certain level.

The additional infrastructure is a condition for solving a problem related to the professional practice of graduates with involvement of an employer. Then, the university graduates do not have any difficulties with employment, because obtaining a specialty (profession) becomes an inseparable part of the mechanism for combining education levels and the qualification structure of the country's economic system.

5.2. German or Professional Educational Model

A Professional educational model is not new. This is a traditional German educational system for engineering training. It was the model at pre-revolutionary, and then Soviet, and then modern Russia time that was used by Higher School institutions. The goal of this model was vocational/professional education that implied training of a highly qualified specialist. Its practical use involves such an organization of the educational process, which ensures qualification to graduates and the employment for them in the future followed by the specialty or professional field they studied. Academic freedoms of the Professional educational model:

- a wide choice of specialties/programs at start when students enter a university;

- a choice of academic disciplines in a professional educational program within the profile the students have chosen as their profession;
- the comprehensive consideration of students' professional interests;
- necessary conditions needed for high-quality education of students, allowing them to be ready for a future professional career.

Academic freedoms are aimed at mastering a particular profession and acquiring the appropriate qualification. The content of the educational program should strictly correspond to the profile of professional activity. There are some restrictions on choosing academic disciplines. They appear as a result of differences observed in the targeted functions of the British and German educational models. In the first case, this is a classical university education, the purpose of which is to achieve by students a certain level of education. In the second case – vocational/professional education, which aims at mastering by a student a profession itself or a specialty. Therefore, academic freedoms are limited within a specific profession or specialty.

In this educational model, harmonization of the higher education system and the job world is based on:

- state Educational Standards is the key regulatory mechanism in the educational process, which vary in programs' profiles;
- professional educational programs;
- professional Standards;
- a system of continuing/life-long learning professional education;
- a system of the Government control over the quality of education.

Moreover, the learning outcomes are evaluated in terms of “knowledge, skills, abilities (acquisition)”.

At present, the system of life-long learning professional education is, to a greater extent, focused on advanced training of specialists who already work. Professional Standards turned out not to be effective as expected (Belotserkovsky, 2015). The strategy aimed at developing higher education prepares universities to be ready to provide 'the education for future', whereas the Professional Standards state the requirements relevant to the present time, and even the past one. Therefore, the Higher School working within the professional educational model should solve both challenges simultaneously – to train specialists for the future, but when developing the educational programs, take into account the requirements of the Professional Standards existing today (Sedykh, 2017).

The result of mastering the educational programs within the framework of the professional educational model is qualification as a confirmation of the graduates' readiness to carry out their professional activities at a certain level, as required. This activity does not always fully comply with the requirements of the Professional Standards (Pak et al., 2018). The outcomes gained at the completion of a professional educational program do not imply awarding of the university degree. But in the Russian educational system, there are the degrees “bachelor” and “master”.

5.3. Blended educational model

At present, the Russian Higher School implements the blended educational model, a kind of symbiosis of the British and German systems. The reforms happening in higher education are aimed at training highly qualified specialists, who will have a university degree. The teaching is based on the blended educational programs (Jadrovsky, 2013). These programs must meet the requirements of both “knowledge” and “competency-based” approach. As a result, the structure of the basic educational programs is aimed at the development of individual educational trajectories, while the content of the professional education should ensure graduates to receive the professional qualifications they are studying for. Attempts are being made to combine the academic freedoms of the British and German educational models. As a result, simultaneously with the academic freedoms of the Liberal educational model (a wide choice of academic disciplines and access to individual educational trajectories development), it should be possible for students to choose the profession as well. But the choice of the profession significantly limits the development of individual educational trajectories, actually reducing the choice of academic disciplines.

At the same time, the combination of the tools of the system of higher education and the instruments of the job world in the liberal and professional educational models is needed. Currently, the Higher School is fully working according to the professional model, while the tools of the Liberal model are at the development stage (Blinov et al., 2016). A network of the certification centers, a system of public and professional accreditation and its other attributes are only being created and are not working effectively yet.

The result of mastering educational programs within the framework of the blended educational model should be both the qualification confirming the graduate's readiness to carry out professional activities and the academic degree confirming the educational level. Since it is almost impossible to solve at the same time both challenges at a high level, the award of the academic degree has a symbolic nature.

6. Findings

At present, the educational model, applied by the Higher School, has become more professionally-oriented (Pilipenko et al., 2016), but with designing some curriculum it contains the essential part of the liberal educational model.

7. Conclusion

Thus, from the analysis targeted at the conception of the liberal and professional educational models it follows that the purpose of the first, is university education, confirmed by the academic degree (in the western educational systems it is confirmed by a scientific degree), whereas the purpose of the second one is training specialist of high qualification. Each educational model requires an appropriate level of academic freedom and a specific toolbox to achieve its goals. Their hybrid is not effective since it becomes extremely difficult, or rather impossible, to use simultaneously the goals of the liberal and professional models in the limited time that is set for educational programs at various levels.

The essence of the conceptual contradiction in the regulatory framework of the higher education system is as follows (Senashenko & Struchkova, 2019). In the Federal Law “On Education in the Russian Federation” (FL-273), “higher professional education” is defined as “higher education”. Thus, the Higher School is oriented to academic university education. However, the same law requires to take into consideration the statements of the Professional Standards, when Federal State Educational Standards are developed. Thus, the goals of higher education are to reflect the current needs of the economy (Senashenko, 2018). The university should prepare specialists who will be ready to work immediately. This is exactly what an employer does not want to spend the financial and time resources on, namely, on adapting a graduate to real industrial conditions.

During the educational reform, we need to remember that all the above-mentioned discrepancies relating to the choice of the educational model in real-day situation hardly contribute to the development of the national higher education institutions.

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