Practice-oriented model of estimating the competency formation in the system of economic education in view of the labor market needs

Modelo orientado a práctica de estimación de formación de competencias en el sistema de educación económica en vista de necesidades del mercado laboral

Viktor Nikolaevich GLAZ 1; Yuliya Aleksandrovna GLAZ 2; Tatyana Evgenevna POKOTILOVA 3; Elvira Antsasovna RUSETSKAYA 4; Oleg Viktorovich GLAZ 5

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ABSTRACT:
All over the world today, when discussing the main problems and directions of the development of the education system, significant attention is paid to key competencies that must be formed in accordance with the requirements of the labor market. Essentially, this is a social or public order, expressed in the need to prepare the society members for the modern realities of working life. The reforming of the Russian education system, currently underway throughout the country, is a step toward the modernization of various spheres of life in modern Russian society, where higher education should become one of the most important criteria for success and good prospects. The purpose of this study is to justify the application of a practice-oriented model for assessing the formation of competencies in the system of economic education. To achieve this goal, the...
1. Introduction

The system of assessment of the specialist training quality, currently existing in Russia, is aimed at checking the knowledge of graduates on the individual disciplines studied within the educational program and, as a rule, the skills of its usage only in typical professional situations. At the same time, from the point of view of the labor market representatives, besides the purely professional knowledge and skills that characterize the graduate's qualification, the specialist also needs such qualities as initiative, cooperation, ability to work in a team, communication skills, ability and willingness to learn, evaluate, think logically, select and use the relevant information. And the most important thing is that the graduate who received the education diploma should be able to apply all these skills in his/her professional activities.

In our study, a practice-oriented model for evaluating the quality of graduate training, developed for the Bachelor’s Degree students in the "Economics" training direction, is considered.

2. Methods

Changing the modern educational goals, the competence approach sets new benchmarks in the content and results of education. In the educational process of the higher education institution, the primary task will be not the formation of certain knowledge and skills, but the integration of knowledge and practice as the basis for the graduate's ability to use the knowledge and experience acquired in the course of training in solving professional problems, excluding their opposition.

Competencies are defined through such concepts as the result and the criterion of the specialist training quality, special abilities, the personal component of professionalism, knowledge, skills, qualities and characteristics of personality.

In other words, competency can be determined as a preset requirement for the student's educational preparation, and the individual's acquired ability to independently fulfill certain life
requirements, to act correctly and reasonably when achieving goals and in the specific
conditions determined by the situation.
The conducted study is based on general scientific methods of theoretical cognition,
observation, experiment, analysis, analogy and generalization.
Each of these methods was used adequately to its functional capabilities and ensured the
representativeness of the research results, the reasonableness of the assessments, the
reliability of the conclusions and propositions.

3. Theoretical aspects of the study
According to Art. 2 of the Federal Law No. 273-FZ of December 29, 2012 (version of July 29,
2017) "On Education in the Russian Federation":
- "education is an integral purposeful process of upbringing and training, which is a socially
significant good and is carried out in the interests of the individual, family, society and the
state, as well as the totality of acquired knowledge, skills, value orientations, activity
experience and competence of a certain scope and complexity for the purposes of intellectual,
spiritual, moral, creative, physical and (or) professional development of the person, satisfaction
of his/her educational needs and interests;
- vocational education is the type of education that is aimed at the students’ acquiring the
knowledge and skills in the process of mastering the basic professional educational programs,
and the formation of competence of a certain level and scope that allow them to carry out
professional activities in a certain field and/or perform work according to a particular profession
or specialty";
- the education quality is a complex characteristic of the educational activity and training of the
student, expressing the degree of their compliance with federal state educational standards,
educational standards, federal state requirements and (or) the needs of the individual or legal
entity in the interests of which educational activities are carried out, including the degree of
attaining the planned results of the educational program".

What is the purpose of education?
In the "Akademik" dictionary, the purpose of education is understood as "the planned results of
pedagogical activity, consisting in providing such development and such conditions that will
enable the student to reveal and bring to full bloom his/her potential capabilities (physical,
spiritual and intellectual) that he/she possesses as a member of society.
The goals are divided into: the training goals – the scope and level of mastering knowledge and
the formation of skills and abilities, identified in the curriculum; the upbringing goals – the
formation of character traits, value orientations, volitional qualities, the mastering of standards
of social behavior and interpersonal interaction; the goals of development – enrichment of the
spiritual world, cognitive and intellectual-creative abilities, improvement of perception,
attention, memory, and thinking. The goals of education are conditioned by social requirements
and act as a means of achieving them" (Akademik" Dictionary).
In the pedagogical dictionary, the goal of education is treated as "an educational ideal,
determined by a social order and implemented through various approaches. An extensive model
of the goal of education is the transmission of the fullest possible amount of accumulated
experience and cultural achievements, assistance to the student in self-determination on this
cultural basis. A productive model is the preparation of the student for the types of activities in
which he/she will be engaged in, and for the structure of employment that supports the
development of the social community and his/her own development. An intensive model is the
preparation of students on the basis of the development of their universal qualities that concern
not only the mastering of certain knowledge, but also their constant improvement and
development of their own creative potencies" (Pedagogical dictionary).
The dictionary-reference book on philosophy defines the external goal of education as a state-social institution as "the life-support of society in concrete historical conditions, the development of its productive forces, the general culture, the strengthening of the civil status of relations (citizenship) and the moral-legal foundations of the society members" (Dictionary-reference book on philosophy).

In our opinion, the main goal of education, in relation to the education system itself, should be the training of a competent specialist who is able to adapt quickly when the needs of the labor market change.

Let us try to understand the conceptual apparatus, since for the system of Russian education the concepts of "competence" and "competency" are relatively new and serve as links for a large number of theoretical and practical disciplines. Each of the two reveals a specific content; however, in a variety of works by Russian authors there is confusion in their distinction.

<table>
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<tr>
<th><strong>Table 1</strong></th>
<th>Comparative characteristics of the &quot;competence&quot; and &quot;competency&quot; concepts in the dictionaries of Russian authors</th>
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<tr>
<td><strong>SOURCE</strong></td>
<td><strong>COMPETENCE</strong></td>
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<tr>
<td>Ozhegov’s Explanatory dictionary</td>
<td>1. Knowledgeable, well-informed, authoritative in a certain field. 2. Possessing competency.</td>
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<tr>
<td>Business dictionary</td>
<td>From the Latin competens – relevant knowledge, experience, education in a certain field of activity.</td>
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<tr>
<td>Psychological dictionary</td>
<td>It is the ability to do something well or effectively; it is the ability to adhere to an established standard applied in a certain profession.</td>
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<tr>
<td>Economic dictionary</td>
<td>Manifested personal qualities and demonstrated ability to apply knowledge and skills.</td>
</tr>
<tr>
<td>Economic dictionary</td>
<td>1. Possession of competency; 2. Possession of knowledge allowing making judgement about something.</td>
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According to the presented table of comparative characteristics of the concepts, competence is defined as the person’s ability to adequately act in certain situations; whereas, the boundaries of competence depend on the person’s ability to learn and readiness to apply knowledge and skills in a profession or situation. Competence is an individual characteristic of the person; whereas competency is a field which the person should understand and which boundaries are set by a certain collection of authorities. The competency is fixed by the standard norm and, in
the organizational context, is regulated by the functional duties of the person. 

Analysis of the psychological-pedagogical literature (A.V. Khutorskoi 2007), A.G. Bermus 2008, V.A. Bolotov and V.V. Serikov 2003, V.N. Vvedensky 2004, G. B. Golub and E.A. Perelygin 2012, J. Raven 2002, G.K. Selevko 2006, Yu. S. Kostrov 2011, etc.) showed that, despite the fairly frequent use of the considered categories in pedagogical practice, there is at present no clear interpretation of the "competence" and "competency" terms. Besides, the opinions of scientists differ regarding the correlation of these categories, their classification and kinds.

In Table 2 we consider some scientific definitions of these concepts.

<table>
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<tr>
<th>Author</th>
<th>Definition</th>
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<tr>
<td>Raven J.</td>
<td>Competence is treated as a life success in a socially significant field. The author singles out 39 kinds of competencies, which he identifies with &quot;motivated abilities&quot;. Among them: ability to self-education, self-control, critical thinking, readiness to solve complex problems, self-confidence, perseverance, ability to work together, personal responsibility and others.</td>
</tr>
<tr>
<td>Khutorskoi A.V.</td>
<td>From the point of view of the author, competence is &quot;the possession of the relevant competency, the totality of the personal qualities of the student, conditioned by the experience of his/her activity in a certain socially and personally significant area&quot;.</td>
</tr>
<tr>
<td>Selevko G.K.</td>
<td>Competence is not just a collection of knowledge, skills, and personal qualities, but the ability to use them in a specific situation. This is &quot;a measure of the person's ability to engage into activity&quot;.</td>
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</tbody>
</table>

We agree with all authors and believe that a competent specialist should have knowledge and skills in terms of diverse competencies and life success in a socially important field, have motivated abilities, be mobile and be able to manifest flexibility in decision-making.

Rather transparent in its basic ideas, the competence approach acquires a multivariant character in practice, which implies a plurality of scenarios for its implementation, depending on the subjects involved in the vocational education process, regional needs, the level of education, directions, training profiles, etc. The ideology of the competence approach presupposes the formation of competencies as a practice-oriented result of education reflected in the ability to successfully cope with a certain range of professional tasks.

Thus, the formation of competencies as a result of mastering the educational program is a purposeful system process aimed at the integral effect of learning outcomes. Since the key word in this definition is "process", it should provide for possible decomposition into component parts with the identification of intermediate results. We also consider it necessary that the representatives of potential employers participate at all stages of this process.

4. Results and discussion

As a result of the research conducted by the authors, it was revealed that the practice-oriented model was the most acceptable for the system of higher economic education.

In Table 3, we proposed the following structure of the educational program (on the example of the Bachelor's Degree program).
| 1st-2nd years | Disciplines of the basic part | • Disciplines that form the basic level of general cultural competences;  
• Disciplines forming the basic level of general professional competencies;  
• the beginning of training (in the 4th semester) in the disciplines that form the basic level of professional competencies. |
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<td>Disciplines of the variable part</td>
<td>• Disciplines that form a higher level of general cultural and general professional competences.</td>
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<tr>
<td>indicator of the <em>basic</em> level of formation of general cultural and general professional competences</td>
<td></td>
<td>• Training practice</td>
</tr>
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</table>
| 3d year       | Disciplines of the basic part | • Disciplines forming the basic level of professional competencies;  
• Disciplines that form a higher level of general professional competences. |
|               | Disciplines of the variable part | • Disciplines that form a higher level of general professional competences.  
• Disciplines that form a higher level of professional competences (profile) |
| indicator of the *basic* level of the formation of professional competencies and an *increased* level of formation of general cultural and general professional competences | | • On-the-job training |
| 4th year      | Disciplines of the variable part | • Disciplines that form a higher level of professional competences (profile) |
| indicator of an *increased* level of formation of professional competences | | • Pregraduation practice |
| Assessment of the formation (result) of general cultural, general professional and professional competences | | • Final state certification |

In more detail, we will consider the possibilities of a practice-oriented model using various kinds and types of practices (see Fig. 1):
Some of the objectives of students during all types of practices, as well as the objects and types of their fulfillment are presented in Table 4.

### Table 4
Scheme of traineeship

| Training Practice (stationary, concentrated) | indicator of the basic level of formation of general cultural and general professional competences | • location: educational organization;  
• the formation (adjustment) of the complex integrated practice assignments;  
• introductory excursions to enterprises (organizations) of various types of economic activity;  
• organization of meetings with leading specialists in various spheres of professional activity. |
|---------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On-the-job training (stationary, dispersed) | indicator of the basic level of the formation of professional competencies;  
indicator of an increased level of formation of general cultural and general professional competences | • Location: educational organization;  
• the "Educational Supermarket" project, an approximate scheme of which is shown in the figure below. It will allow the student to perform a separate labor function of the specialists in various spheres of professional activity working at enterprises (organizations) of various types of economic activity. |
| Pregraduation practice (stationary or onsite, concentrated) | indicator of an increased level of formation of professional competences | • location: enterprises (organizations) of various types of economic activities, financial, credit and insurance institutions, state and municipal authorities.  
• collection, systematization and analysis of |
Particular attention in the presented scheme should be given to an intermediate stage between mastering the indicator of the basic level of formation of general cultural and general professional competencies and the indicator of an increased level of formation of professional competencies. At this stage, we propose to create an educational laboratory on the basis of educational organization. For students of economic training profiles, we propose to create an "Educational Supermarket" (see Scheme 1); for legal specialties it can be "Legal Clinic", etc.

Scheme 1.
Scheme of activity of an "Educational supermarket"

The "Educational Supermarket" model proposed by us on the basis of the educational organization has certain positive aspects, which are reflected in Table 5.

Table 5
Positive factors of creating an educational supermarket on the basis of educational organization

<table>
<thead>
<tr>
<th>For the customers of services (enterprises, insurance companies, banks, executive bodies, etc.)</th>
<th>For educational institutions and students</th>
<th>For people</th>
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<tr>
<td>- no need to create additional jobs;</td>
<td>- improving the quality of education;</td>
<td>- selection of the optimal necessary product or service (credit, insurance, bank insurance, filling out a declaration, marketing research, etc.);</td>
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<tr>
<td>- expansion of sales channels;</td>
<td>- the possibility of mastering additional competencies;</td>
<td>- saving time;</td>
</tr>
<tr>
<td>- expansion of the clientele;</td>
<td>- raising the level of prestige of the educational institution;</td>
<td></td>
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<tr>
<td>- maintaining loyalty when changing preferences of consumers of financial services, including when developing an</td>
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unconventional way of evaluating the effectiveness of financial and innovation activities of commercial organizations on the basis of stochastic modeling (Manuylenko, et al. 2017);
- training of qualified young cadres.

– the possibility of student practices and traineeships;
– additional income for students without quitting the studies.
– individual approach to the client;
– increasing the financial literacy of population.

To organize the work of an educational supermarket, the educational organization (as the party in interest in the work of this structural unit) undertakes to provide premises and necessary equipment (Rusetskaya, Rusetsky & Ushakova 2015).

The procedure for customer service can include several directions:

- Online service involves the work of specialists (coordinators in the directions of the declared profile activities and trainees) in solving the following issues:
  - preparation of the client's request for the search of optimal options for financial products and rendering other services;
  - solving the issue concerning an opportunity of carrying out a marketing research or sociological survey;
  - filling in various kinds of declarations;
  - the work of the technical-information block on the creation and effective operation of the site of educational supermarket on the basis of the educational organization.

The telephone service begins with the administrator’s answering the call. The role of the administrator is played by the specialist who has relevant knowledge in all areas of activity of the educational supermarket, who takes all necessary information from the client to make a further decision on the possibility of providing the service. Further, the administrator transfers all the data to the corresponding department of the supermarket, where the request is assigned to the executor or group of executors (trainees), and a person responsible for the execution control (teacher or representative of the employer) is appointed. Simultaneously, the administrator maintains a database of all serviced customers, where the information about the time of submitting the request, the customer, the service or product, the executor (s) of the request, the timing of its execution, the final provider of the service/product, etc. is reflected.

- The "office" service also includes the reception of the request by the administrator and consulting the client. At the same time, the processing of the request does not exclude the possibility of consulting the manager of cooperating profile organizations. After processing the request, the client (in the "office", online, by phone) is provided with at least 3 options for resolving the financial issue (a certain product/service, a company), with a detailed explanation of each option. After the client’s making a choice, the relevant specialist accompanies the deal to the final result – the purchase of the needed product.

- Also within the framework of "office" service, the implementation is supposed of the programs of financial literacy of the population. Within the framework of this activity of the "Educational Supermarket", specialists will conduct seminars and master classes on various financial issues. At the same time, for the sake of simplicity and convenience of working with clients' requests, the activity will be coordinated with respect to specific directions (industry specifics, types of services, their complexity, etc.). To work in the educational supermarket, students will undergo a certain selection (testing for knowledge of the general professional concepts and categories, interview with a supervisor or coordinator).

To attract customers and the development of the "Educational supermarket" on the basis of the educational organization, it is assumed to use Internet advertising, regional television and radio broadcasting, advertising in social networks, banner advertising, advertising in partner offices, and also, by agreement with a partner, it is possible to apply small discounts on the product/service for customers.
At the same time, like any other financial institution, this model does not exclude the presence of risks, among which one should name:
- concentration risks of the "Educational supermarket", which are associated with the prevalence of a certain type of financial services, or with the promotion of only one provider of certain financial services;
- risks of decreasing the sales volumes due to falling the demand for financial services, including due to reducing the purchasing power of consumers;
- risk of loss of business reputation by the subjects of the educational supermarket because of failure to fulfill or improper fulfillment of obligations by each of them;
- legal risks;
- risk of damage or destruction of the supermarket property;
- risk of non-payment of commission on the part of financial service providers.

Having studied the positive sides and risks of this project, we believe that the positive sides of creating a regional "Educational supermarket" on the basis of an educational organization prevail. The activity of the "Educational Supermarket" will bring a significant positive effect both for insurance companies, banks and other financial institutions, and for the educational organization and students. At the same time, within the framework of this project, the end-users will be able to get, without spending much time, an optimal financial service for them with appropriate explanations of all the subtleties and specifics. Also, with the effective organization and management of the "Educational Supermarket", it is possible to significantly minimize all of the above-mentioned risks.

5. Conclusion
The proposed practice-oriented model for assessing the formation of competencies of the graduate is suitable for use as a basis for designing a professional educational program, and, in the future, developing the directions for its development. But, at the same time, its application requires some adjustments, and, in some cases, a revision of methodological and didactic approaches to the organization and conduct of different kinds and (or) types of practices.

Conflict of interest
The authors confirm that the presented data do not contain a conflict of interest.

References


