Modern Approaches to Assessing the Learners' Achievements in Training Programs in Economics

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Abstract:

Training in economics is one of the relevant scholarly problems in terms of theory and practice. The rapidly developing information technologies, the digital document circulation and other recent aspects of professional activities in economics require new approaches not only to training and learning content, but also to new assessment methods. Assessment is no longer limited to determining the level of knowledge and of skill acquisition: it also comprises the individual trajectory of one's professional development.

Among the most pressing challenges in present-day higher education is training of professionals who satisfy the requirements of the job market, the employers' demands and national development strategies. Finding answers to this challenge will allow university graduates to get involved in resolving the most complicated problems related to national economic development in general and to national needs.

Teaching students to evaluate their professional level and to make decisions on developing their professional competencies is one of the new assessment methods in master programs training highly qualified specialists.

The present article examines the assessment of the learners' achievements in training programs in economics and presents the didactic assessment model entitled 'The Thematic Assessment Set', based on the competence approach.

Keywords: economics, economic education, assessment methods, professional development, model of evaluation activities.

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1. Introduction

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Economic education remains one of the major requirements for society's economic development ensuring the formation of the educational potential for employed people and training for entrepreneurs and businessmen. Education provides a basis for the development of productive forces, successful activities of any economic sector and resolution of economic crises. Today, the development of economic education considers the changes and trends in the enterprises' investment activities, production technologies, the nature of their influence on professional and qualification structure relative to staffing, the influence of market conditions on the territorial redistribution of the workforce and its labor mobility.

Education takes an active part in shaping the scientific and technical potential on regional and national scales, and its accomplishments are reflected in new technology and in the latest labor organization methods, while creating a foundation for enhancing its performance and the macroeconomic output. The development of the global knowledge economy and the advent of the information society highlighted the importance of education and of professional training to ensure economic development. The ongoing development of economic education occurs under the influence of factors of the professional environment and challenges of today's globalized society (Asarta and Butters, 2015; Saviotti *et al.*, 2016; Sergeyeva, 2010).

The time in which we live is characterized by major changes in politics, economics and social life. Today's Russian economy has an urgent need for people who can work actively, with a great deal of interest, professional skill and innovative approaches. In this regard, the shaping of new scientific and economic thinking among the youth is of special importance, along with willingness to analyze the outcomes of their own and team work. Changes in the development of the productive force and in economic relations require constant updating of forms and methods applied in the economic education of the youth. The 'training-education-work' combination results from modern conditions for business activity and the development of science and aims, above all, to teach every individual to treat property with respect, to make rational use of available resources to satisfy various needs and to develop the skills corresponding to social interests and the all-round development of the human being (Bogunov 2011; Almarabeh 2017).

Structural changes in the national economy have direct impact on the demand for skilled workers on the job market. Consequently, the content of many professions has considerably changed, while a great number of new professions related to modern technologies and the good functioning of a market system are in short supply of workforce. Economic changes influenced the demand for education and training in terms of their level, content, quality and specialization, and new professions are in high demand, while others are out of date. Companies are interested in profit making and, as a result, require that specialists perform professional actions, based on theoretical calculations, profound professional

knowledge and the analysis of the economic environment (Zalkina and Sergeyeva, 2013; Krupa *et al.*, 2015; Medvedeva *et al.*, 2015; Vovchenko *et al.*, 2017).

Today, university graduates can succeed only if they get high-quality university training and show their professionally important qualities in on-the-job training, internships or pre-employment tests. A person cannot become a true professional and earn reasonable salary without decent education. The lack of extensive theoretical knowledge makes it hard to improve one's professional skills, since only acquisition of theoretical knowledge opens the path towards developing one's intellectual capacities. For the past two decades, a close link has been confirmed between learning capacity, good job placement and effective performance at work.

The employer determines the extent of a university graduate's professional knowledge by applying certain indicators, including those that characterize the work of an educational institution. The increased demand for highly qualified specialists increases the requirements for their professional training, puts the education system under considerable pressure and is a major factor at play in their changes and adaptation. Though government institutions lay out new requirements in compliance with the demands of social development, employers play more significant role in this process, since they determine the demands of professional education, suggest learning goals for achieving the minimum standards required for enhancing national competitiveness and manage the preparation, planning and promotion of educational opportunities. The current descriptions of official duties are structured down to the last detail and are based on the specificities of the employee's fulfilment of his or her core functional role (Sidorkina, 2015).

The discrepancy between the professional level of graduates from higher education institutions and the qualification requirements of the job market demand an appropriate reaction on behalf of national education and training systems.

2. Methodology

In the context of application of the systemic and structural approach to training and development of learning technologies, the aim of the present study is to elaborate a didactic assessment model, or 'The Thematic Assessment Set', based on the competence approach.

The competence-based approach is far from being new in professional education and training. From the perspective of "training for life", such practice-oriented aspects of the competence-based approach as "training for professional activity", acquisition of productive functions, productivity management and "science-based management" have been always present in all education systems. Researchers have rightly observed that the modern competence-based approach is an attempt to bring mass education practices in line with the job market demands, which is related to the idea of the open order for the content and outcomes of education (The Competence-

Based Approach in Higher Professional Education: An Anthology, 2007; Carmichael and MacEachen, 2017; Tadlaoui *et al.*, 2016).

Modern research on the competence-based approach in professional education has been carried out among specialists with various levels of performance and responsibility, ranging from heads of state agencies and banks to small production companies and agriculture (Raven, 2002).

The current stage of the competence-based approach development (since the 1990s) is related to the competency framework presented in the UNESCO and the Council of the European Union as being the required learning outcomes. The scope of the challenges ahead has increased the relevance of the competency in both professional and non-professional activities.

For our research purposes, we shall make use of conceptual principles, which are set out in the methodological approaches adopted by foreign researchers, who perceive the competence-based approach in education as a focus on the formation and development of key (basic, fundamental, supra-subject) and subject-based personal competencies, while "competency" is defined as a combination of context-based knowledge and skills (Serdenciuc, 2013; Ruchen, 2003; Gladilina, 2013).

We chose to assess the set of special competencies (SC) elaborated by the Moscow City Government University of Management, which the students graduating from the "National and Municipal Procurement Management" program must have during their practical training (Gladilina, 2013):

- *SC-1:* justification of the cost-effectiveness of procurements; offering to the public procurement authority the possibility to assess in online mode the quality of the state procurement process with a view to make managerial decisions aimed at enhancing the effectiveness of the procurement process;
- *SC-2:* elaboration of the contract system strategy and development of tactics based on modern management technologies, including result-oriented budgeting; object-oriented situation modeling in state and municipal procurements; and procurement risk management;
- *SC-3:* management of the effective implementation of goals and target indicators of state programs by enhancing the procurement management quality;
- SC-4: monitoring of objective budget spending when realizing procurements;
- *SC-5:* development of personal managerial competencies, such as leadership, organization and responsibility, among others;
- *SC-6:* identification of areas of research on procurements, development and subsequent implementation of innovative management technologies.

3. Results

The Thematic Assessment Set (hereinafter TAS) has been designed to improve the monitoring activity system as a core component of teaching economic disciplines. The monitoring of learning achievements of students with the TAS was implemented within the context of innovative strategies of learning technologies in terms of their openness to introduction of additional relevant parameters to assess quality of education.

We define TAS as a system of target-oriented tasks reflecting the learning activity parameters and corresponding to the professional competence of the prospective specialist in this field. TAS should be thematically complete and logically comprehensive, thus ensuring the construction of the uniform teaching content of a discipline and attaining the integral didactic goal in compliance with modular learning principles.

The module as a functional center of the educational process contains the logically complete unit of didactically adapted information. The student's mastery of the unit involves his or her working on many theoretical questions and practical exercises according to the curriculum or on an individual learning schedule. The learning unit consists of two phases: 1) introduction, discovery, 2) thorough understanding of the learning content, skills training. The learning unit's structural components vary according to specific didactic goals and are subject to hierarchy.

At the planning stage, the teacher can weigh up the possibilities, the time frames and the potential of the specific learning group and define objectives, the achievement of which can be assessed – in other words, checked and evaluated – by using available material and technical means.

The development of TAS model starts with the examination of requirements for the professional exercise of the prospective specialist's official duties. The teacher should accomplish this work when designing the course and have the students ponder on it in the form of essay or some other creative work.

The main constructive elements of TAS are the thematic assignment modules (TAM). The notion of TAM denotes a set of specific assignments arranged in a certain way, the completion of which requires that the student should apply relevant learning methods, means and techniques and is subject to the implementation of specific didactic objectives in every learning unit. The main differences between the TAMs have to do with organizing the students (choice of learning content, methods, techniques, ways of completing the assignments, pace, time and equipment), who work on achieving specific didactic objectives in relation to the assessed subject (for instance, assignments on generalization of theoretic material, oral answers, completed practical tasks, etc.), assessment criteria (for example, content, activity, effectiveness, thoroughness, etc.). The subject for evaluation in accordance with the TAM reflects the specificities of each group of skills in the specialist's professional competence.

Every assignment module performs certain functions in the achievement of comprehensive didactic objectives, which we divide into following groups: cognitive, psycho-emotional and psychomotor. It seems appropriate that each assessment set should include tasks of all levels of complexity for every student giving him or her the choice to perform tasks in accordance with his or her capacities. This approach is, therefore, very different from the current learning practice, when it is the teacher who determines the learners' capacity to complete this or that task of varying complexity.

In TAM structure, we highlighted the following groups:

- 1) cognitive (content-based) tests, or short study/psychological tasks that identify the levels of the student's competence;
- 2) performance tasks that show to what extent other professional competence elements (technological, social or personal) have been formed.

Therefore, all learning material must be divided into several modules containing several topics that are joined by content and performance, to monitor every stage of training. To accomplish this, it is necessary to determine:

- 1) what professional competence elements dominate in the system of knowledge and are formed at every stage (technological, conceptual, personality-based or social);
- 2) what theoretic content is necessary to ensure the standard level of knowledge acquisition; what needs checking and assessment (individually or in the form of current or final evaluation, etc.);
- 3) what level of acquired new knowledge is to be given at every stage of education.

Consequently, the next step would be to determine the volume of content to be assessed, ways of its realization and the level of complexity of the assignments. It matters to determine what the assessment is carried out for: to determine the conceptual or reproductive level of the student's knowledge or to detect his or her skills in applying the new information in terms of algorithm/activity or creativity. This will provide the foundation for further assessment steps.

During the professional training, the teacher fulfills a whole range of didactic tasks corresponding to the structure of the model of professional competence of prospective economists and which can be classified as follows:

- increase in the students' theoretical preparation, knowledge generalization and systematization;
- formation and development of psychomotor and strong-willed skills, necessary for carrying out specific professional tasks;
- improvement of business communication and interaction skills;
- improvement of problem-solving and decision-taking skills.

The implementation of TAS model in the study group begins with determining the correspondence between real knowledge and the requirements for learning outcomes in a topic or a unit of topics. The teacher often seeks to assess the students orally fully possible or to check all written assignments. Such an approach is laudable but ineffective. It is procedural in nature and helps to check the students' diligence in completing their assignments, because it is physically impossible to interrogate all students or listen to their oral presentations. Consequently, the aim of this kind of work is to check that the assignment is done. The second (productive) assessment component requires more in-depth preparatory work on selecting the content of assignments and more meticulous planning for presenting the completed assignments. At this stage, it is recommended to analyze what assignments the student completed, what answers he or she provided and how he or she used their logical thinking or adopted any creative approach, among other things (in conformity with the selected assessment criteria for quality of education).

We have developed TAS model for the discipline entitled "National and Municipal Procurement Management", given that the development of the procurement system demands the continuous improvement of professional competencies, and the methodological support of the specialists' professional development in procurement not only is a scientific problem, but also meets the state's requirements for staffing in national, municipal and corporate procurement (Zagladin, 2013; Nesterovich, 2015).

From the very first days of training, the students are provided with a complete set of informational and learning materials on the related discipline, including slide lectures, calendar plans of lectures and practical assignments, the methodical structure of assignments on the entire course and a list of specific assignments on every topic of the curriculum, requirements for the evaluation of completed works and a list of recommended reading.

At this initial stage, what matters is the coordination of the performance assessment criteria on the given subject and of the requirements for the quality of education, set out in the professional competence outlines. The students' further creativity and initiative must be in line with the given parameters. The main steps to implement the personal training technology are applied on two axes: 1) work with theoretical materials, which ensures the cognitive foundation for the subsequent measures aimed at developing the prospective specialist's professional competence; 2) practical work for shaping the student's applied quasi-professional skills. To that end, the students are provided with a syllabus listing the assignments for independent work, which shows all groups of tasks and exercises to be completed.

The following questions arise before the students and the teacher right after the start of the model's implementation. Are all assignments to be completed? Are they to be completed orally or in writing? How will the completed assignments total up to get the final 100 points? How are they to be verified and analyzed? How is the student

to reflect on the outcomes of his or her training? How are the assignments to be completed, since the outcome will be just a mechanical accumulation of points?

The study program is implemented according to the functional cycles of its content's deployment, and it is the student who chooses the combination of specific assignments in the suggested model. The teacher directs this choice to shape corresponding groups of the students' professional competences resulting from their completing assignments. The teacher's task is to combine assignments in such a way that they correspond to the given difficulty levels and match the student's expectations of learning outcomes. When teaching the discussed discipline ("National and Municipal Procurement Management"), the main criterion for selecting assignments is focusing on the implementation of professionally significant competences.

At the same time, the implementation of the main aspects of professional activities takes place by stages: content-based, technological/methodological, socio-psychological and personality-oriented. During the learning process, the teacher directs the relevant students' acquisition of professional skills and their achievement of specific learning outcomes.

If students obtain, at the beginning of their training, a list of assignments that can be completed within each period of studying independent sections of a discipline, it will be easier for them to choose the level of their own activity and to complete the assignments they like. Consequently, the individual approach is implemented in training. Using TAS model while taking into consideration the competence-based approach enables the teacher to react promptly and make changes to the structure and content of assignments on the subject. In our view, the advantage of the TAS model consists in its ability to serve as a tool to detect momentum around the development of professional competence in operational/streaming mode. Some four to six weeks after the beginning of the course, the teacher should be able to detect what kinds of assignments are better done by the group or individual students.

The proposed assignments usually belong to one of the following groups:

- Preparation for lectures. Work on the theoretical material preceding practical exercises. Two-level thematic tests;
- Unit-based final tests with four difficulty levels;
- Completion and presentation of a business project;
- In-class presentation. Participation in team works in class;
- Preparation for the publication of an academic article based on the results of a research project carried out during training exercises;
- Completion and presentation of creative works and of an essay on the topic "I am head of the department that manages procurements";
- Team and individual creative project.

From the student's standpoint, the TAS model is some kind of a 'road map' when studying a discipline. The student can focus his or her own efforts in the right direction and need not anxiously expect the marks or seek a tutor to obtain additional assignments and feedback on them. Using the TAS model must be formalized in terms of organization, by providing the students with the assignments' structure, their detailed list, deadlines, formatting, feedback and evaluation criteria. When handing out assignments, the teacher indicates in which way the results can be used further on in professional life.

4. Discussion

Control and knowledge assessment are important management functions and major educational components. Significant changes in the development of economics education related to its content, forms and methods of teaching economic disciplines require updated approaches to monitoring and assessment of students' educational attainments, which is an important element in ensuring quality of education (Zhidkova 2012; Nedkova, 2011; Chanamarn and Tamee, 2017; Egorova *et al.*, 2015).

Diagnostics of quality of education implies assessment of the individual's level of acquired knowledge and skills, and of professional, attitudinal and civic qualities. At the same time, quality of education refers to the level of the student's skills, characteristics and qualities, which are predefined by the curriculum and stipulated by social procurement. Monitoring activities and the comprehensive diagnostics of the students' learning outcomes is an integral part of quality assurance in education that complies with the requirements of the Bologna Declaration because the assessment of education quality must be based on specific knowledge and skills acquired by the graduates rather than on the length or content of education (Bekoyeva, 2015). Monitoring activities are to be mainly focused on verifying the students' acquisition of skills that are of importance to future specialists, and evaluation criteria must be directly related to their professional competence elements (Mukhamadeyev and Latypov, 2015; Gorina, 2016).

Monitoring in the profession-oriented learning model means setting up a system of monitoring the learners' activity level in a manner that defines the achievement of pre-determined targets at each level and makes timely correction of eventual deviations. Such work can be effectively done in conditions that the teacher realizes taking into consideration the students' learning objectives, expectations and wishes. Some of these conditions include determining the volume of the material to be monitored; purposefully selecting the learning materials while optimally distributing the monitoring, evaluation and control of knowledge acquisition; setting time limits on the verification of knowledge and the evaluation of final tests and optimizing the labor intensity of monitoring activities; building testing system to achieve the best possible objectivity when assessing the students' theoretical knowledge; creating conditions for the students' self-preparation, self-control and for individuals

consultations; fostering the students' independent work; diversifying the assignments, methods for and ways of control and of informational and methodological support; and the tasks' relevance to modern management conditions.

5. Conclusion

Evaluation activities are required to achieve the educational goal consisting in the acquisition of a specific set of knowledge and skills, in forming the student's relevant competence level and, finally, in ensuring specific quality of education. Levels of cognitive activity (levels of acquisition) determine the student's ability to apply the acquired knowledge, and the teacher sets them through assignments that enable the student to achieve the following educational goals: shaping the intense activity skills from simple information perception to the proposition of hypotheses, selecting the method of studying the topic and its practical application and independence in learning new knowledge, among other things.

Given the specificity and diversity of economic disciplines and the scale of educational goals, monitoring and assessment activities can foster the formation among the students of vast theoretical knowledge of the foundations of economics and its components, the ability to analyze economic processes and patterns, to solve tasks and problems, to put into practice theoretical knowledge and to create educational projects.

The challenge is how to attain educational goals by combining monitoring and assessment forms, methods and techniques in the best possible way. This task demands wider use of the entire system of various methods of control and assessment of learning achievements in the study of economic disciplines.

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