

Ways of assessing university teachers' professional competence

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Abstract— The problem of education proficiency has existed since early times. Recently, it has intensified considerably in many spheres of the society vital functioning, the socio-cultural importance of education being enhanced and followed by the necessity of a search for new approaches to proficiency control. Modernisation of the current system proficiency estimation is one of the most important problems of education in Russia. A high level of professional integrity commonly found in pedagogical personnel is a key factor in raising education proficiency. In the given context, the increased results of education proficiency are directly dependent on the work efficiency of a higher school instructing personnel and on the formedness level of their professional competences. As a consequence, a necessity appears to carry out an expert evaluation and proficiency estimating with regard to an educator's professional integrity and his/her correspondence to modern requirements of a higher school. The paper gives some consideration to the process of estimating the formedness level of educators' professional integrity that allows not only to set a tone for a professional perfection in the future, but also to define the basic parameter of a proficient characteristic which is the competitiveness of a modern educator.

Keywords — *competence building approach, professional integrity, estimating proficiency, professional activities, process of estimating, criteria and parameters of estimating.*

I. INTRODUCTION

The main problem humanity facing today is to achieve full employment and the stability of the growing economy in the conditions of a global economy and social integration. Lately, this problem has become of a more complicated and urgent character. Revolutionary changes in economic, socio-political and technological areas gather momenta in order to catch the opening opportunities in a quickly integrating global economy where a continuous adaptation of political and executive systems is necessary. A fact has been widely recognised that a high level of proficiency and personal integrity is a key to an economical and social development along with education investments and professional development. Russia as a part of the global educational and information space is also in the search for new ways and methods to develop and form a modern expert's personality, who is capable and ready to adapt to a quickly changing world.

Consequently, a new society, in which knowledge becomes capital and the main resource of economy, sets new

and even more severe demands on the social activities and social responsibilities of people. Nowadays we are defining and shaping who is an educated person and what capabilities he or she possesses. First of all, it is an employee with a corresponding level of ability, competitive in the labor market, proficient, responsible, an expert having a good command of his profession and oriented on the activities areas, capable to work effectively and on a good level of global standards, ready for a continuous professional advance, socially and professionally mobile.

The transformations taking place in all the spheres of Russian society could not leave alone the system of higher professional education that determines the national intellectual potential for the future and conditions its prosperity and development. In the present conditions, the problem of estimating pedagogical activity proficiency has acquired particular importance as it is the period of Russian education transitioning to the market relations through changes in an informational model to an effective, competence-building educational system, which is defined as a basis for new Federal educational standards. Competency-based approach in determining the goals and content of education is not completely new, and not even alien to Russian education. Russian teachers and psychologists such as M.N. Skatkin, I.Ya. Lerner, V.V. Krayevky, G.P. Schedrovsky, V.V. Davydov and their followers in their writings have already oriented on learning skills and ways of working. Nowadays, the competency-based approach is defined as an attempt for higher school and labour market demands to be brought in balance. The approach focuses not on the educational result, but on the person's ability to act properly in certain situations. In this case, a result is being considered, not an amount of the information acquired. Russian researches believe that a competency-building paradigm is not equal to a knowledge-oriented one, supposing a higher school graduate to have had the experience of real problem solutions, performing professional and key functions, social roles, and acquiring certain competencies (Ye.Ya. Kogan, V.V. Laptev, Ye.A. Lenskaya, A.A. Pinski, I.D. Frumin, B.D. Elkonin, etc.).

The authors agree with the O.Ye. Lebedev's opinion that "a competency-based approach is considered to be a collection of general principles defining the purposes of education, the selection of education contents, educational process organization, and *estimation of educational results*" [1]. They also believe that the essence of the competency-

based paradigm is not only meeting the construction of an educational activity model in correspondence with a public contract but also purposefully improving the performance of educational activities.

With regard to all-Russian system concept for assessing the quality of education, the notion of “quality” is defined as an integral characteristic of an educational process and its results, expressing the measure of their compliance with the ideas that this society should have about what this process should be [2]. As a matter of fact, estimating the quality of education is identical to estimating the education system quality as the whole and each of the parts composing it, in particular. Following V.A. Kalney and S.Ye. Shishov, it is defined that the quality of education as a social category determining the state and efficiency of education in the society and its abilities to meet the requirements and expectations of different social groups, aiming at development and formation of civil, commonplace, and professional personality competences [3]. The formation of proficient education is a targeted impact on the factors controlling the quality of the educational process aiming at the achievement of the planned results.

Currently, there is a duality of interpretation of the concept of quality: on the one hand, philosophical, according to which quality is an integral part of the subject, on the other, evaluation, in which quality appears as a set of essential properties of an object that are significant to the consumer [4]. Today, the problem of ensuring the quality of education is directly proportional to the main trends in the development of educational systems in general. Education becomes a profitable investment of capital, a strategic commodity, the process of obtaining of which is directly related to the requirements of a market economy. The main characteristics of quality education are transparency, international mobility, rapprochement of educational environments, the equivalence of diplomas obtained.

The problems of ensuring and assessing the quality of education depend mainly on the efficiency of teaching and the background of university professors in competitive conditions. These conditions remain of vital importance and call for effective ways to transform various aspects of society, its social institutions, the higher education system included. The academic system of education is oriented at a proficient education development and training specialists. It should also be able to meet the changes occurring in the labour market. Thus, for example, a good knowledge of the economy and computer science, that can be successfully applied as examples in the academic classes, can also be professional qualification indices for an educator working in humanities. The following criteria can be an indicator of future specialist proficient training: 1) the time a graduate of a Higher Educational Establishment needs to adapt at his workplace in accordance with his specialty and 2) the number of related professions according to which a graduate can work without considerable loss of time and time spent for their acquiring. However, in the educational process, several factors block the solution for this important scientific and practical issue. For example, one of the factors is a traditional approach to assessing the quality of a specialist training and another factor is concerning traditional methods of instructors' requirements that do not meet the demands of a labor market of a specialist and, naturally, these methods do not

correspond to a modern standard of education. The third factor is the lack of an effective diagnostic methodology system of assessing the proficiency of the education. Insufficient implementation of scientific and technical maintenance of a current and final estimating control with the regard to development and determination of professional qualities, information and process development, all this makes the work of educational specialists on demand quite difficult.

For today, the processes taking place in the field of education are accompanied by a feeling of necessity for the higher education to orient towards a globalizing labour market. They demand objective and reasonable criteria, approaches and standards in defining educational assessment to be developed. Solutions concerning the quality of education, rising the authority of some universities and their diplomas are acute today in the world. Consequently, the level of professional integrity of the instructional personnel and availability of specialists that are ready for changes on a large scale and are capable of implementing innovative technologies into an educational process are the most important factors, directly affecting and forming the quality of education in the higher education system. As practice shows, the readiness of the individual to change is a major factor in the success of any reform. It provides a person's positive attitude towards the changes taking place, it renders comprehension and realization of a change essence, positive attitude to self-changing in new conditions.

II. MATERIALS AND METHODS (MODEL)

One of the most significant activities that need to be concentrated is the work with pedagogical personnel. Nowadays, there is a necessity in a qualitatively different training and retraining of a modern university teacher, and in particular foreign language teachers. It is to combine the depth of basic professional knowledge and innovative thinking with a research practice-oriented approach with the solution of specified educational problems.

Within the framework of the competency-based approach, the position of the teacher changes fundamentally. The teacher stops being a carrier of “objective knowledge”, which is being conveyed to a student. The main task is to motivate students to take initiative and be independent. The teacher should organize students' educational and independent activities, in which each of them could realize their abilities and interests. In fact, the teacher creates the conditions and environment in which for each student it becomes possible to develop his intellectual abilities and certain competencies.

Thus, a modern competency-based approach and quality requirements for the implementation into the educational process led the pedagogical community to the conclusion that only a competent teacher can form and develop students' competencies. What kind of professional competencies should a teacher possess in order to meet modern requirements for a pedagogical activity, updated educational contents and to be able to fulfill a new social role in a class, shaping and developing students' competencies? The essence of these new terms for the Russian teacher is interpreted by many modern authors very widely and ambiguously. In the dictionary of pedagogy, the term “competence” is interpreted as a range of issues in which a person has knowledge and

experience [5]. Domestic educators offer various definitions of the notion under consideration. On the one hand, it renders an individual's specified informativeness: skill and knowledge in a certain sphere of human activity; on the other hand, it is a competency which is a qualitative use of competences [6]; competence is a systematic manifestation of knowledge, skills, abilities and personal features [7]. It is also a complex of works, actions, knowledge, abilities, activities, independence and other characteristics of a person responsible for the decision-making [8].

III. RESULTS AND DISCUSSION

The analysis of the scientific and pedagogical literature allowed us to formulate the authors' vision of the concepts of competence/professional integrity, the notions that are fully meet the requirements of a modern methodology. Competence is the ability and willingness of the individual to work based on knowledge and experience, which are acquired through training. Such knowledge is focused on the independent individual's participation in the learning and cognitive process, as well as aimed at successful employment and performing quality labor activity at work. Professional integrity is considered to be an integral feature of a personality characteristic for aspiration and ability (readiness) of a specialist to realize the available potential (competence) to perform successful professional activities.

Thus, competence/professional integrity is a generalized characteristic of a person (specialist) determining his ability and readiness to use it as a potential (knowledge, skills, proficiency, experience, and personal qualities) for successful activities in a specific social and professional field. At the same time, the category "professional integrity" is used when a general integral characteristic of a specialist is meant. For example, a competent instructor, a competent lawyer, a competent doctor, etc. The term "competence" is used when one has to characterize a specialist professional competence in one sphere of his activities.

An achievement of a higher level, the level of professional integrity is, indeed, a strategic goal of modern education. A number of Russian scientists devoted their works to the problems of forming competent specialists (A.K. Markova, I.A. Zimnyaya, I.A. Kolesnikova, F.V. Khutorskoi, V.A. Slavenin, etc.) In a general sense, an integral characteristic of business and personal qualities of specialists are needed when professional competence is spoken about. These qualities indicate the level of knowledge, skills and abilities, experience and whether they are sufficient for a certain kind of activity to be performed, especially in the connection with making professional decisions [9]. Professional integrity of a university teacher is considered as a complex of knowledge, skills and abilities that characterize as one of the most important characteristics of the activity and an integral quality of a person, which act both as a result and as the most important condition for the effectiveness of professional-pedagogical activity.

The professional competence of a teacher is assessed by the level of formation of professional competencies possessed. With regard to the basic functions of a higher school educator, one can focus on the following group of professional competences that compose the essence of an instructor's professional integrity:

- gnostic competence as an ability and willingness of the individual to acquire new knowledge and use it to solve pedagogical problems;
- managerial competence as an ability and readiness of the individual to be engaged in a professional activity that has an innovative character;
- designing competence as an ability and readiness of the individual to form pedagogical goals and objectives;
- methodology competence as an ability and readiness of the individual to master a system of processes, approaches, methods, and facilities used in an educational process;
- communicative competence as an ability and readiness of the individual to communicate and create a favourable social and pedagogical environment in the process of education;
- analytical competence as an ability and readiness of the individual to give consideration to estimate the proficiency of the participant activities in the educational process on the whole and in some parts of it, as well as to explain the reasons and prospects of a future specialist development;
- research competence as an ability and readiness of the individual to carry out investigations and analyze their results [10];
- communicative competence in foreign languages as an ability and readiness of the individual to realize intercultural relations.

The level of possessing the professional integrity by is identified by means of a developed technology that allows to carry out an expertise and estimate their professional integrity.

Increasing the responsibility of a university for the quality of the final results of educational activities necessitates the use of modern technologies and methods for assessing the quality of activities. It is necessary to talk about the quality management of education only if special procedures, technologies, criteria are used to measure this quality. The level of proficiency in the professional competencies of foreign language teachers is determined by the developed technology that allows to carry out an expertise and estimate their professional integrity and competencies.

The technology proposed by the authors for assessing the level of formation of the professional competence and integrity of a foreign language teacher in higher education is based on the criteria-based assessment methodology. Criterion assessment reduces subjectivity, provides all participants with mechanisms that work equally efficiently both in assessment and in self-evaluation, which is the most important component of the educational process [11]. The criteria that form the basis of the methodology are objective indicators of the severity of the parameter being assessed, for example, knowledge, skills, abilities, competencies that are identified by monitoring the progress of the activity or by analyzing the presented result. Criteria can be tied to one or

another level of competence, for example: low, medium, high (then the assessment is called the criterion-level) [12].

The essence of the presented metrology lies in comparing personal achievements with clearly defined criteria. These criteria are known in advance to all participants in the educational process [13]. The technology includes the following steps:

TABLE I. ASSESSMENT TECHNOLOGY

Step 1.	Estimating each parameter quantitatively.
Step 2.	Defining a generalized estimation of all the parameters.
Step 3.	Transference of a generalized quantitative estimation into percentage according to the formula of identification of professional integrity proficiency. $PC = \frac{C_1 + C_2 + C_3 + C_4 + C_5 + C_6 + C_7 + C_8}{81} \times 100\%$
Step 4.	The relation of the results obtained to one of the four levels: supreme, good, satisfactory, critical.

The assessment procedure itself starts with the identification of parameters to be estimated (in this case they are specified professional competences) and revealing the criteria of estimation. The latter are used as objective indicators of a parameter to be estimated, e.g. knowledge, skills, learned behavior, requirements. They can be identified as a result of observing the process of activities or following the analysis of a result under consideration [14]. Each of the criteria is estimated according to a three-point scale: 2-1-0. Here is an illustration fragment of a parameter to be estimated, namely, a methodological competence [15].

Methodical competence (the ability and willingness of the individual to possess and use a system of technologies, techniques, methods, methods and means of training used in the educational process). It implies:

TABLE II. EVALUATION CRITERIA

Evaluation Criteria	Assessment Scale	Total Points
Ability to choose the type of a training event in correspondence with the goals and tasks set and to determine its structure	0-1-2	16
Ability to plan own and students' activities in a training event	0-1-2	
Ability to didactically choose methods and processing of instructing	0-1-2	
Ability to form knowledge based on available information and make it work	0-1-2	
Ability to form and develop subject-oriented and generalised learned behaviour as students' key competences	0-1-2	
Skills to develop new informational, methodological and didactical materials	0-1-2	
Use modern active technologies of educating process, including Information and Communication Technologies	0-1-2	

At the next stage of the presented metrology, a total number of points is calculated followed by their sum converted into a percentage and after that into a quality level of manifesting a competence: supreme, good, satisfactory or

critical. The evaluation of quality level with regard to an instructor's complex professional competence can be represented as the following table.

TABLE III. AMOUNT IN PERCENTAGE

	Percentages	Total points	Quality level
1	100 – 84	81– 70	Supreme
2	83– 65%	69 –53	Good
3	64 – 45%	52 – 37	Satisfactory
4	Below 44%	Below 37	Critical

Quality assessment can be carried out individually (self-evaluation) or in a group version [16]. In one case, a group review may be conducted in the form of a meeting and a general agreed assessment. In another case, the average score can be calculated, consisting of ratings given by independent experts. It is quite clear, that the criteria presented need further development and validation. Nevertheless, we propose them to be discussed by the modern pedagogical community.

IV. CONCLUSION

Experience in managing the quality of education at a technical university showed that the presented mythology allows not only to collect extensive, reliable and objective information about the quality and results of teachers, to identify the strengths and weaknesses of their professional activities, but also to plan the teachers' professional self interests in accordance with the needs of the university, as well as to predict further ways to improve professional skills.

The quality of education is a variable category, not a static, but a dynamic, constantly changing with time, with changes in the requirements of social customers, and with changes in life itself. Therefore, the monitoring of results and quality should be systematic, and the mechanism should be flexible, in a state of continuous modernization in accordance with the new goals set.

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