A mechanism for developing the professional potential of the professor-teaching composition in the higher school

V V Yankovskaya\textsuperscript{1}\textsuperscript{*}  
\textsuperscript{1} Plekhanov Russian University of Economics, 36 Stremyanny pereulok, Moscow 117997 Russia

E-mail: veronika28-2@mail.ru

Abstract. This article discusses the relationship of ICT with the need for lifelong learning and the development of the professional potential of the faculty of the Higher School. The goal of the paper is to present a mechanism for developing the professional potential of the faculty of the Higher School.

1. Introduction

The education system in today's market conditions is a major factor in national security, since it ensures social stability and development of the state and society. All the reforms carried out in the last twenty years were aimed at improving domestic education. The main provisions of these reforms are formulated in the National Doctrine of Education, the Law of the Russian Federation “On Education”, regulatory documents of the federal and regional levels. In all of these documents, one of the main provisions is the problem of training human resource capacity for / in the education system. Teaching staff, today, impose strict conditions of competitive selection, dictated by high market competition. The content of the professional potential of the teacher must meet high requirements. This includes the latest models and technologies of interactive student/Master's education and the appropriateness of their use, research and development. The systemic changes in the field of education require substantial productivity, mobility, and efficiency of the teacher of the Higher School.

Increasing the effectiveness of communication skills and empathy of the Higher School teacher is one of the main reserves for modifying and improving the educational process in preparing a student. This should become popular in the educational process in order to prevent such negative phenomena as “teacher profestagnation”, “teacher’s crisis”, its depletion, and “negative environmental impacts”. To overcome these phenomena, a completely new concept of creative and professional development of the teacher’s potential is needed, which will lead to emotional and positive, comfortable assistance from the teacher-student, teacher-colleague. The teaching profession is complex and requires significant psycho-emotional impact during the implementation of the educational process. The fundamental feature in which is creativity. The creative potential of the teacher is, almost always, a creative approach to solving communication processes with a student / master throughout lectures / seminars. The success of this process depends on both sides. This includes emotional activity and empathy, the unity of perception, the teacher’s internal and external techniques (reflection and gestures, posture) the ability to think logically, the dynamics of information presentation (voice and timbre, diction and mimicry), the speed of movement of the teacher in the department in front of the audience. Creativity, to some extent, is the
mechanism of development of the individual. The teachers must have highly communicative competences (Yu. N. Emelyanov, B. J. Zlivkov, B. F. Lomov, A. A. Leontiev), ensuring the presence of special emotional and creative abilities. The connection of emotions and creativity has long attracted the attention of researchers, especially recent years. In this respect, the works of D. Evrill and J. Guilford are interesting. They tried to establish criteria for defining and measuring a creative potential [17]. In the works of C. Izard and S. L. Rubinshtein, there is an attempt to explain the effect of emotions on the development of the creative potential of the individual [26, 28]. P. Salovey and J. D. Mayer developed the concept of “emotional intelligence,” and emotional ability is interpreted as a meta-ability that allows one to understand how an individual uses skills (and intelligence in particular) [22].

Theoretical studies / developments and empirical data on the creative and professional potential of a teacher allow us to conclude that a significant progress has been made in developing knowledge of these categories as a scientific phenomenon. In this paper, I am going to consider each of them and provide my personal opinion.

2. Main Part
The concept of the professional potential of the pedagogical staff of the higher educational institutions (High Schools) is rather complicated, since its core, judging from literary sources, is based on multiple components. These are many potentials: personnel, professional and pedagogical, scientific, scientific and pedagogical [2; 3]. Consider the definitions of potential proposed by various authors in the scientific literature and identify the need for their use to formulate the concept of the professional potential of teaching staff.

So, for example, under the professional and pedagogical potential of the pedagogical personnel of the higher educational institutions are understood the combination of creative and scientific (scientific and pedagogical) activity. Consequently, it is possible to distinguish two types of potentials that are part of the professional, pedagogical, creative, and scientific (scientific-pedagogical) potentials [4]. The essence of creative potential lies in the possibility of creative solution of such tasks as: the formulation of innovative socially useful goals; planning activities and effective implementation of plans; possession of technology (algorithms) and techniques for solving creative problems that are part of the identified problems; the ability to justify goals and perceive criticism of supporters of traditional solutions; an ability to achieve results or, otherwise, set goals.

3. Materials and Research Methods
In general, the paper relies on theoretical-empirical and private-scientific methods, using them as a tool. In our opinion, not all of the listed tasks are, first, creative and, second, significantly different from those that are part of the scientific potential. Thus, the category of creativity, from a philosophical point of view, is a multidimensional concept, which includes both general and special aspects [33].

The general aspect implies the ontological and systemic approaches as the basis of any evolutionary development. Ontology (from the Greek “ontos”) is the doctrine of being, which explores all the general principles, principles of being, its structure and laws. That is, ontological means creativity that is based on the philosophical doctrine of being, in contrast to gnoseology as a doctrine of knowledge [28].

Hence, the ontological approach to creativity implies the study of the universal foundations and principles of being, its structure and laws. The systems approach, in turn, makes it necessary and possible to consider creativity as a whole, consisting of parts (elements, works, and tasks). A creative process is a set of parts that are performed sequentially (in series-parallel, in parallel), interconnected to each other and representing integrity, should be supplemented and characterized by emergence, i.e. a feature that no single element of the system has.

Consequently, the result of any evolutionary development, including creative, is the emergence of not only a new product of labor, but also a change in the properties of the system (process) itself that created this product.
But, in our opinion, all these characteristics and features are immanent to the scientific potential; therefore, the creative potential is closely connected with the scientific and pedagogical activity of the faculty.

Some scholars consider the pedagogical potential within the framework of a specific organizational culture of the university, considering that culture is a factor (from the Latin Factor – making, producing), i.e. the cause driving force of the process of formation or its application and most predetermines the nature of this potential, its individual features [28].

Hence, the potential of a teacher is a dynamic system of cultural phenomena (artifacts), combining the values, norms, methods and methods of transferring the experience and personal development of an individual (teacher) to a student. However, this system can be implemented only in specially created conditions, both for the work of teachers, and for the educational process as a perception of experience and personal development.

The properties of the potential of a teacher, displayed in the scientific literature, include resource, functionality, multidirectionality [2]. Resource and functionality are defined as the result of the functioning of the pedagogical potential, i.e. to reflect the degree of personal development. Let’s consider these properties in more detail. In our opinion, resource potential implies, first, the possibility of forming secondary information in the form of a certain qualitative and quantitative amount of knowledge and skills (in accordance with FSES3++); second, it implies the need to form an information database in the university (which are the teachers with primary input information) and also differ in the necessary volumes and quality.

Therefore, the property of functionality reflects the ability of a teacher to perform their functions, i.e. their professional duties, using the resource capabilities of information support, based on the employment contract and the Unified Qualification Reference Book of Managers, Specialists, and Employees.

The property of a multi-vector, in our opinion, can be interpreted as multivariance, meaning the multiplicity of the results of personal development in the process of functioning of the pedagogical potential.

Under the plurality of results should be understood:

- Getting new knowledge in the already mastered educational field and scientific direction;
- Mastering new methods of analyzing situations, organizing and conducting the educational process;
- Mastering complex branches of knowledge or academic disciplines, allowing to present a complex and systematic process of obtaining knowledge by students, improving the quality of education;
- Developing new research areas as a creative process under the influence of external factors and intra-university scientific environments;
- Transiting to an administrative position and building a professional career as a manager in higher education.

In addition to the above pedagogical potential properties, due to the use of ontological and systemic methodological approaches, in our opinion, it is necessary to investigate such properties as consistency, convention, and dynamism.

The system property makes it possible to consider the process of creating and realizing the potential of a teacher as an individual, taken separately as part of a multi-level hierarchy, at the lowest level of which is the potential of the department, at the middle level is the potential of the faculty (institute), and at the highest level is the potential of the teaching staff of the university (academy). Moreover, this potential is influenced by factors of both the external environment (political, economic, demographic, cultural, scientific, technical, and natural), and other structural elements of the internal environment of the university.
The property of conditionality means the existence of necessary and sufficient conditions for increasing the potential and, mainly, its use, which include:

- The level of provision of the educational process with all types of resources: information, material, financial, labor, technical (fixed assets);
- The level of compliance of sanitary and hygienic conditions to regulatory requirements;
- The rationality of the use of command-administrative, organizational and administrative, economic and socio-psychological methods of management;
- The rationality of the distribution of job duties and workload between teachers;
- The degree of workload in public work and other duties;
- The degree of adequacy of the personal (private) professional interests of the teacher, the collective (special) interests of the department, the faculty and the general interests of the university in accumulating (increasing) the teacher’s capacity in the intensity of its implementation;
- The possibility of improving professional qualifications.

The property of a teacher’s potential is related to the systemic nature and implies a continuous updating and increment of the teacher’s potential under the influence of changing requirements of the external environment (labor markets, the federal vocational education system, the state’s strategy or doctrine) aimed at developing education at all levels and higher education, in particular. For example, it is the need to publish the results of scientific studies that demonstrate the degree of the scientific potential of the faculty in foreign and Russian periodicals. The need to master new disciplines, information, and computer technologies, mastering a foreign language, the transition to a point-rating system of knowledge assessment, distance teaching refers to the changing requirements of the internal environment.

The need to master interactive technologies is dictated by the need to form, in the course of the educational process, students / masters of communicative competence and develop the professional potential of managers in the business education system and students / masters of the university using new information technologies, etc. The results of our theoretical study have confirmed the urgency of finding new approaches to raising / retraining the qualifications of teachers of the Higher School in the field of information and communication technologies, which has led to the possibility to identify some general provisions.

The target for raising / retraining the qualifications of the Higher School teachers in the field of ICT will be the formation and subsequent development of ICT competencies. This will lead to the widespread use of ICT by teachers in the educational process. Namely, the basic ICT competence, organizational and managerial ICT competence, disciplinary ICT competence, corporate ICT competence. Characterization of the structure and content of ICT competence of a teacher is manifested through such components as: a cognitive-operational component (displays the degree of ICT and methodological foundations of their use in the educational process), a design component (shows the ability to assess their knowledge in this area and design the necessary conditions for it), as well as a motivational value. The implementation of the ICT professional potential in the framework of raising/retraining the teacher’s qualifications focuses it on a continuous multi-level process of raising/retraining the qualifications of the teaching staff in specially created conditions. Creation of certain organizational forms of support after training and technical support in the subsequent in their educational process using the ICT. The permanent continuing education/retraining of faculty members were announced back in 1972 by the UNESCO Commission on Education. The vital idea of permanent education reflects the urgent need of society for streamlining the vertical structure of the educational process and refining its innovative components. The ongoing development of creative and professional potential is central to the idea of permanent education. Thus, permanence is considered by us as “a single holistic process,” which this is the main principle of modern education [41, 42].

In the scientific literature, there is an opinion that the influence of factors of external and internal environments on the teacher’s potential can be of two types — symmetric and asymmetric [5]. For
example, asymmetrical influences and ideologies reflecting the general and specific (group) interests of the university staff and its management systems can encourage the teachers to make certain decisions to improve their own professional development. Such a situation, as a rule, is caused by the use of mainly command-administrative (bureaucratic) management methods that orient the teaching staff to regulated behavior and thinking, which does not contribute to the development of the teacher’s personality in the existing socio-cultural reality. This is due to the fact that teachers unquestioningly obey the forms existing in the internal environment of the university, cultural principles and social models, certain group or common interests required for implementation, often contradicting their own private interests. In such a situation, creative potential is suppressed, and the teachers cannot offer more rational and effective options for creating both their own group and general pedagogical potential. However, symmetrical influences cannot completely deny the group and common interests of the university staff and only submit to the satisfaction of each teacher’s private interests; therefore, the boundaries of the interval where all three types of interests are combined in a rational and balanced manner must be established [5].

4. Conclusion
The potential of a teacher is an opportunity and limitations for a relatively focused cultural, educational, scientific, and creative development/realization of each teacher, allowing him/her to perceive the range of interests/hobbies with full or partial conformity with the group and integrity. This demonstrates the value orientation of the university, promote the socialization of teachers, and solves their professional tasks in the educational process. The pedagogical potential contains the following elements: intellectual, creative, social, and integrative. Both the teaching and pedagogical staff are the part of the university staff, which must have special professional qualifications that ensure adequate and timely solutions to the relevant tasks of various educational, intellectual, creative, and social processes. Based on the essence of the concept of the potential and opportunities in a certain field of activity, let us single out, besides the pedagogical or educational potential, those that allow the teacher to carry out such activities as research, teaching, educational on the basis of increment and the use of similar (of the same) potentials. So, the research potential is the possibilities and limitations for the teacher to carry out scientific research due to his/her personal abilities and interests, adequate to the interests of the group (department) research and development of high schools in general. It should be noted that the research potential increases as it is used in scientific interests. This fact is explained by the fact that the level of preparation of the researcher for the perception of new information increases, and, accordingly, it allows to accumulate information for further research in any chosen field of research or in related fields. At the same time, the Higher School requires a flexible and mobile response to the rapidly changing dynamics of the external environment; participation of the teaching staff not only in implementation, but also directly in the development of a strategy for research and innovation activities; self-development and self-realization of the faculty; assistance to the faculty in the programs of raising/retraining qualifications, creating conditions in the university, an environment conducive to the generation of ideas and projects, etc.

The level of development of the teacher’s professional potential depends on his/her professional and personal qualities. The professional potential is manifested and can develop when creating certain conditions of activity in the environment of the university. Its full implementation is possible in an environment consisting of a number of components: emotional, creative, technological, motivational, reflexive, and regulatory.

Analyzing the process of emergence and development of permanent education in Russia, V. G. Onushkin, E. I. Ogarev, A. L. Zagorsky, and others associate it with the evolution of education of individuals of the older generation and consider this the basic framework of permanent education. The above authors have identified three stages in the practice of education of the older generation of individuals: compensatory, additional, and permanent, which coexist as past, present, and future.
The epistemological sources of the modern process of permanent education, according to N. A. Lobanov, include the following: 1) permanent self-education of the intellectual elite; 2) recognition at the federal level of the need to continuously support a certain level of professional knowledge of an employee; 3) individual awareness of the need for a permanent increase in professional knowledge. The last two points are global factors of the formation of permanent education as a system. Their degree of influence on the education system and on the social sphere of society determines the intensity of the development of permanent education. The results of our theoretical study have confirmed the urgency of finding new approaches to raising/retraining the qualifications of teachers of the Higher School in the field of information and communication technologies, which has led to the possibility to identify some general provisions. The target of raising/retraining the qualifications of a teacher of the Higher School in the field of ICT will be the formation with the subsequent development of ICT competencies. This will lead to widespread use of ICT by teachers in the educational process.

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