

Factors development of teachers' competence in improving the quality of education

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Abstract. Modern strategic changes in the socio-economic and political spheres of education, which have reduced the standard of living in our country, pose new challenges to the higher school teacher. They include concepts such as the need to master the structure of a new subject in education, ongoing changes and the acquisition of innovative technologies and methods of education that take into account the activity and independence of education recipients.

1 Introduction

Changing the sphere of knowledge implies the acquisition of knowledge in the field of modern industrial and social technologies, the development of independent solutions, as well as the ability to predict the consequences of their occurrence, the ability to cooperate and influence the composition and nature of pedagogical activity with professional qualities. In this regard, the relentless search for teachers on their own has become an urgent requirement.

It is necessary to evaluate the work on the development of the teacher's potential, the continuous professional conflicts of the teacher's position, the knowledge of new ministers in professional denominations, students and other persons with knowledge and professional competencies, as well as the renewal of the training of teaching staff and the implementation of strategic directions for the development of modern education.

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In particular, German scientists who conducted research on the professional competence of teaching staff of higher educational institutions G. Lehmann, W. Nieke, S Blomeke, A Kopka and Brindt assess competence as a necessary unit of professional knowledge, skills

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and professional ethics, recognizing social analysis, diagnosis of pedagogical situations, reflection and professional action as its main components.

In particular, according to researchers, the professional competence of a teacher consists in his:

- possess special scientific and theoretical knowledge in the field of science and education, as well as the ability to effectively solve tasks;
- to find an effective solution to specific pedagogical situations arising from the interests of teachers on the basis of special professional ethics;
- for each pedagogical act in the performance of the above professional duties is determined by a sense of responsibility and responsibility to each person [8].

It is known that if the development of basic knowledge, skills and abilities in future types of professional activity occupies an important place in the professional development of a specialist, then the improvement of activities, the quality and level of its implementation among teaching staff engaged in real practical activities are considered important factors.

Because in these processes, deep knowledge is defined as complete knowledge of one's own work, the essence of the work performed, the dependencies, relationships existing in it, means and methods of achieving the goals set. The idea of having deep knowledge can include the skills of an individual to move freely in difficult professional conditions, manage their subject and object components, introduce new methods of activity, technologies. This, in turn, allows us to ensure the highest level of social and professional effectiveness of teaching staff.

Here are the stages of competence development we have reflected in Figure 1.

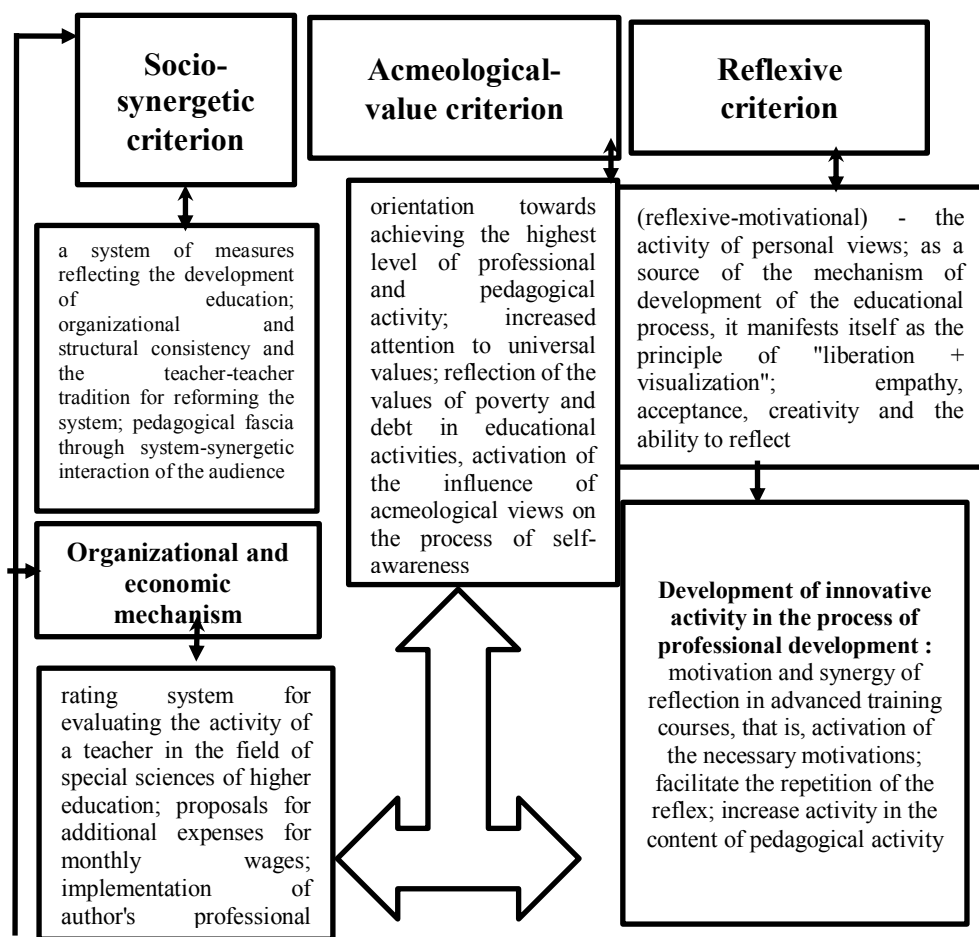


Fig. 1. Stages of competence development

The development of competencies is manifested and develops in such manifestations as pedagogical and scientific activity of the teacher, universal values in the team, personal reflection, self-awareness and self-esteem, taking into account reality, real circumstances and changes in the process. Social-synergetic criteria are developed on the basis of the systemic-synergetic significance of the audience through a purposeful pedagogical hobby. This criterion includes the goal of the level of educational activity, the gradual development of education and the formation of a competent specialist through the principle of adherence to the traditions of the teacher, the development of integrative and educational activities through the regular use of interactive methods and training. In addition, the specialty is an indicator not only of the professional competence of teachers of natural sciences, but also of the control and development of the quality of pedagogical knowledge

The acmeological criterion provides active access to various educational activities that are socially motivated and increase the creative activity of the individual, this criterion includes such concepts as acceptance of existence, systematic and directed thinking, the influence of actual creative activity on intellectual reflex, orientation of education to personality and systematic increase in educational innovation [9]. The reflexive criterion is determined by the content of the activity with an approach to personality, which ensures an improvement in the quality of the educational process in the process of professional

development; provides convenience and variability of educational programs in accordance with the needs of the audience; skills of self-awareness and activation in the development of personality, traditional practical assistance in the development of personal and professional potential through these laws.

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2 Methods

As part of the development of qualifications and skills, the concept of "competence" entered the educational sphere as a result of psychological research. Therefore, competence means "having a plan of action in non-standard situations, the expert himself in unexpected situations, entering into communication, a new way of interacting with competitors, performing ambiguous tasks, using information full of contradictions, consistently developing and complex processes." Also, the competence is the continuous enrichment of special knowledge, the study of new information, the understanding of specific social requirements, the search for new information, their processing and analysis

It is necessary to clarify beforehand the changes that have occurred in the qualifications system, which has a high professional level and is found and recognized ready to work at this level, for teaching staff, to the extent that the problems that have arisen should be eliminated.

Of course, in order for a teacher to be mature, such concepts as professional, pedagogical and technological competence should be reflected in it, we will consider them in turn. Competence is a set of knowledge, skills, qualifications, views on the field, values and qualities of a person, the ability to show qualifications or influence it.

Knowledge of the types of competence in pedagogy and psychology; self-improvement; ability to plan, evaluate and restore communication in the educational process; formation of motivation among students; knowledge of ICT; innovation in the educational environment; excellent knowledge of their own science.

Personal competence includes such concepts as: communication; tolerance; leadership; activity and initiative; flexibility; commitment to a healthy lifestyle; responsiveness; skill; humanism [11].

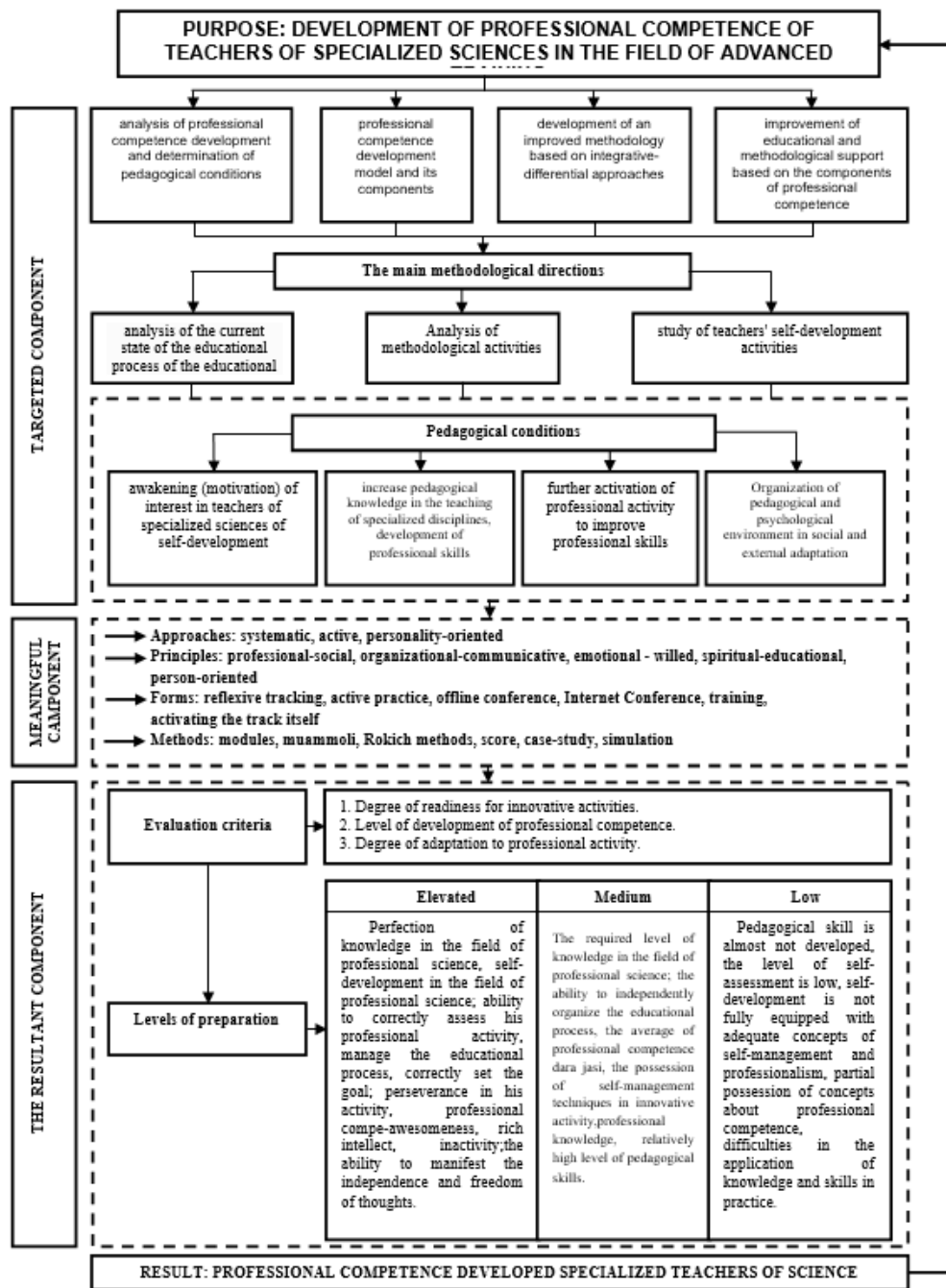


Fig. 2. A model for improving the professional competence of teachers.

3 Results and discussion

As for special competence, such qualities mean knowledge of special methods of a teacher in their subject; stratification of education; knowledge of the needs of students; knowledge of the characteristics of different ages. The concept of didactic competence includes the

management of the learning environment and the learning process in the classroom, the planning of the coverage of the content of the subject, the assessment of the achievements and development of students, motivation and assistance to students, as well as the development of students' knowledge.

The teaching skills of another teacher are determined by the following requirements::

- * Professional dignity and erudition;
- * Psychological and pedagogical training;
- * The ability to teach teachers independent thinking and the acquisition of new knowledge;
- * Knowledge of forms and types of educational literature;
- * Mastering new pedagogical and information technologies,

Thus, within the framework of personality-oriented methodological work aimed at the development of pedagogical activity and the personality of teachers, as well as at improving the professional competence of lyceum teachers, a proactive approach was developed in the organization of the use of pedagogical technologies had a dual purpose:

1. Correctional: identification and elimination of difficulties in the pedagogical activity of specific teachers based on the development of pedagogical technologies.
2. Prognostic, carried out in two directions: the identification of new difficulties of teachers in the organization of theoretical training and educational and production activities and the selection of appropriate technologies to eliminate them; the choice of undeveloped skills, skills and competencies of students and the selection of technologies that form them [12-13].

Such gradual development of pedagogical technologies, their systematization, from the point of view of conscious application, is the basis for the formation of the readiness of the teaching staff and each teacher to transition from the traditional organization of the educational process to competence-based learning.

Strengthening, improving and expanding the sphere of education at the modern stage it is necessary to include the country in the list of priority areas of development of the educational system, the reason for which it is the most basic condition for overcoming persistent situations in society, taking into account the economy, culture and science

Modeling of the professional development process can be considered optimal if the work is carried out in the following areas:

- the target table highlights a number of skills, skills, and competencies that teachers can form with the same technology, and we plan to implement it in this cycle;
- information support of the educational process begins with the author's programs, which are gradually developed on the basis of content modeling technology and modular technologies. The program determines the number of hours needed to study each module. The allocation of hours requires separate testing, because it can be adequate or inadequate to the goals set, and is determined by the complexity of competence and the effectiveness of the applied pedagogical technology. Teachers are engaged in the creation of an electronic textbook, a methodological guide on the subject; workbooks, develop training exercises and other forms that ensure the formation of students' developed competence; for the transition to competence-based education, correction and development of pedagogical activity and the personality of the teacher is necessary, which requires clear step-by-step planning, a personality-oriented approach and the organization of monitoring;
- to determine the effectiveness of teachers' professional development, monitoring tools are being developed to determine at the stage of entrance, current, and final control, the dynamics of the development of professional competence, pedagogical activity, the personality of the teacher,;
- for the organization of a personality-oriented approach to the professional development of teachers and the implementation of the activity principle in its organization, it is necessary to choose a set of methods and forms, training sessions for the development of pedagogical technologies. The activity of a teacher in the monitoring mode has a cyclical nature, is carried

out strictly in stages with regular monitoring of completed tasks and mastered types of pedagogical activity competencies are a set of tasks that a specialist must solve, and competence is a set of competencies that he must possess. Competence is a kind of integrative complex characteristic of a personality, its ability to solve specific practical problems arising in various spheres of life. The importance of the competence approach is that it involves the transition from the assessment of knowledge to the assessment of competencies. Thus, the theoretical substantiation of the features of the development of cultural competence of teachers in the system of advanced training is based on the following approaches: systemic, activity-based, personality-oriented [14].

In order to reveal the features of the development of cultural competence of teachers in the system of professional development, the most significant is the cultural approach, which consists in considering, along with the competence approach, that the basic factor of professional and personal development of teachers in the "lifelong education" model is the formation of their own professional and general personal competence.

In this regard, in the model of development of professional competence of teachers of specialized sciences, we have divided the following components: purposeful, meaningful and productive components. 1. The purpose of the target component is to develop the professional competence of teachers of specialized sciences, which includes goals and objectives.

4 Conclusion

The main goal is to develop the professional competence of teachers of specialized sciences in advanced training courses. And the main tasks were identified as follows: analysis of the development of professional competence and the definition of pedagogical conditions, analysis of the current state of advanced training courses and the current state of the theoretical and methodological foundations of the Bund and modern approaches, as well as clarification and justification of pedagogical conditions; development of an improved methodology for improving educational and methodological support.

In conclusion, in order to achieve the necessary level of professionalism in the field of modern society, it is necessary to have a continuous professional base. This gives a continuous effect for the professional growth of a modern teacher, which includes such concepts as professional, personal competence.

The implementation of the competence approach is a set of actions through which the formation of competencies is carried out during the learning process, their assessment: the formation of competencies by modules; the level differentiation of students' competencies and their presentation in the form of a competence schedule; the definition of all types of training sessions (both classroom and independent), on the basis of which competencies are supposed to be formed; the construction and organization of the educational process focused on the formation of competencies; building competency assessment systems and their components, including the development of assessment methods and procedures, the choice of means for documenting learning outcomes.

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