

# Developing Students' Professional Competencies Based On An Integrative Approach: Pedagogical Mechanisms

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**Annotation.** This article analyzes the pedagogical mechanisms for developing students' professional competencies based on an integrative approach. The theoretical foundations of the concept of professional competence are revealed, and the role of emotional-value-based relationships, levels of logical and semantic thinking, as well as a creative and active learning environment aimed at enhancing the effectiveness of individual learning is substantiated in the processes of its formation and improvement. By designing the educational process on the basis of an integrative approach, the possibilities for the harmonious development of students' professional, personal, and social competencies are demonstrated. In addition, the article highlights the factors that ensure the effectiveness of mechanisms for developing professional competencies based on pedagogical modeling.

**Keywords:** integrative approach, professional competence, pedagogical mechanisms, emotional-value-based relationships, individual learning, creative and active learning environment, pedagogical modeling, higher education.

To improve the opportunities for developing students' professional competencies, it is first necessary to study the existing possibilities for enhancing these competencies. Along with personal maturity, professional competence plays a crucial role in harmonizing all innovations occurring in society. Professional competence is formed and continuously improved in the process of a specialist's professional training. If education provided at a higher educational institution is considered the process of forming the foundations of professional competence, then training within the professional development system can be regarded as a process of further improvement and deepening of professional competence, which may be assessed as raising competence to a higher level. A teacher's professional activity encompasses complex types of pedagogical activities. These, in turn, require deep knowledge and well-developed skills in the teacher's field of specialization, as demanded by professional teaching practice in higher education. The successful fulfillment of these tasks depends on the teacher's professional competence and its continuous development. In this context, a teacher's professional and personal qualities are also considered important aspects of professional competence. If these two components – the teacher's professional duties and personal-professional characteristics – form the basis of competence, then its continuous improvement determines the level of the teacher's professional competence [5].

As additional opportunities for developing students' professional competencies, it should be emphasized that professional competence is the ability to act successfully in solving problems of a professional type of activity on the basis of practical experience, skills, and knowledge. Professional competence is assessed by the level of formation of professional and pedagogical skills [7].

Based on an integrative approach, we focus on improving the opportunities for developing students' professional competencies by identifying the logical and semantic levels of the development of emotional-value-based relationships.

The acquisition of new knowledge, in turn, manifests itself as development through the emotional interpretation of newly learned knowledge, moving from simple to more complex forms. When transitioning from one stage of development to another, emotions also develop. In the development of professional competencies, emotional-value-based relationships are realized through emotional intelligence. Emotional intelligence should be explained through the following components [4]:

– Awareness of emotions, that is, the ability to understand the language of one's own or others' emotional feelings;

– Identification of emotions, namely the ability to distinguish, differentiate, and correctly apply them in appropriate situations;

- The skill of recognizing the causes and consequences that give rise to emotional states;
- The ability to sufficiently slow down intense emotions and control the intensity of feelings;
- Easy understanding of expressive manifestations;
- Experience in eliciting certain emotions in one's activities and interactions.

A value-based attitude toward pedagogical activity, in a broad sense, expresses the orientation that forms the foundation of a teacher's personality [17].

A value is a concept used to indicate the universal, social-moral, cultural, and spiritual significance of certain phenomena of reality [15].

“Values are a set of individuals, relationships, states, material objects, and spiritual assets that possess authority, attention, respect, and prestige among people in society” [10].

In his scholarly works, Q. Nazarov emphasized the exceptional relevance of teaching values. According to him, axiology mainly studies values, the forms of their manifestation, the sense and feeling of appreciation, value-based attitudes toward reality and the axiological approach, changes in the sphere of values in the process of social development, problems of valuation and devaluation, the axiological understanding of history, and the characteristics of the functioning of value systems [11].

Values have a social nature and emerge in the course of all human activities. They arise in connection with a set of objects, phenomena, and spiritual processes that are necessary and useful for human activity in various spheres [3].

When values are understood as “everything that is significant for society, the individual, and humanity” [8], it becomes evident that this approach, which has long held a stable position, is relative in nature and cannot fully encompass culture.

In improving the opportunities for developing students' professional competencies based on identifying the logical and semantic levels of the development of emotional-value-based relationships, the motivational-value-based attitude serves as an aspect and motive of professional self-improvement. Therefore, a formed pedagogical consciousness that correctly reflects reality, along with the norms of a teacher's dialectical thinking, expresses readiness for professional activity [23].

A value-based attitude toward pedagogical activity, in a broad sense, reflects the orientation that constitutes the foundation of a teacher's personality [17].

Professional cultural relationships function as the main means for achieving positive interpersonal relations and contribute to the improvement of individual activity [14].

Pedagogical interaction, as an integral system, encompasses value-oriented components (pedagogical attitudes, value orientations, social perception, empathy, pedagogical orientation, and personal qualities) and operational-communicative components (motivational and value-oriented orientation, manifested pedagogical communication) [29].

According to A. Khayitov [16], personal development is the process of establishing mutually appropriate relationships with other individuals, society, and nature, and of mastering the culture that interconnects these relationships.

“The subject is a dynamic system of interactions with the world, in the course of which a mental image arises and is embodied in the object; through these images, the subject's relations with reality are realized” [12].

In improving the opportunities for developing students' professional competencies on the basis of identifying the logical and semantic levels of the development of emotional-value-based relationships, the logicality and semanticity (meaning-related aspects [12]) of emotional-value-based relationships at the logical and semantic levels are taken as leading foundations.

The more complex and logically structured a topic is in terms of its study, the more it serves as an intellectual “stimulus.” In such cases, subsequent complex topics are studied with sufficient interest [19].

These logical operations constitute the essence of logical thinking processes. Taking them into account in the creation of didactic methods helps to distinguish thinking as a general method on this basis. Researchers suggest that future primary school teachers should not be taught through general intellectual actions alone, but

rather through the formation of problem-solving skills first (gradually increasing their complexity to the level of creative communication) and teaching them through a concrete method of thinking [152].

Logical thinking is a thinking process that uses logical concepts; it is characterized by evidence and reasoning, and its purpose is to draw rational conclusions from existing situations. Logic (derived from Greek, meaning “reasoning” or “the art of thinking”) is the science that studies the forms, methods, and laws of intellectual cognition [6].

N.A. Podgorskaya [26] points to the skill of organizing one's actions in accordance with the laws of logic: “The skill of logical thinking includes the ability to orient oneself to the features of existing objects and phenomena, to obey logical laws, to organize one's actions in accordance with them, to perform logical operations and consciously define them, to construct hypotheses on this basis, and to draw conclusions about their consequences, among others. The skill of logical thinking comprises a number of components, including the ability to orient oneself toward the features of existing objects and phenomena” [26].

Based on these analyses, it can be concluded that, under an integrative approach, the opportunities for developing students' professional competencies are improved by identifying the logical and semantic levels of the development of emotional-value-based relationships.

Based on an integrative approach, we consider the issues of individual learning and a creative-active environment in improving the opportunities for developing students' professional competencies through pedagogical modeling of a creative-active environment aimed at increasing the effectiveness of individual learning.

In the process of development, an individual engages in self-expression, becomes more active, undergoes socialization, and discovers personal characteristics.

Individual learning is based on the learner's individual and psychological characteristics. In mastering invariant, variant, and content-based learning tasks, it requires strengthening the dialogical nature of instruction by creating another type of educational interaction that enables the design and use of an individually oriented learning trajectory. As a result, individual-personal and professionally significant qualities of the individual are integrated, and their manifestation under conditions of content diversity and unidirectional motivation of activity leads to productive outcomes.

Pedagogical modeling of a creative-active environment aimed at increasing the effectiveness of individual learning is grounded in the principle of individualization. The principle of individualization is implemented in the process of developing learners' individual characteristics [1].

The principle of individualized instruction implies the following: as a result of individualization, learners' levels of knowledge are not equalized; rather, their individual differences gradually increase. Mastery of methods of learning activity and goal-setting techniques by learners enables the development of their individuality [20].

Pedagogical modeling of a creative-active environment aimed at enhancing the effectiveness of individual learning creates conditions for the development of students' professional competencies while taking into account their individual characteristics.

In the explanatory dictionary of the Uzbek language, the word “environment” is interpreted as:

- 1) a set of natural or social conditions in which life and activity take place;
- 2) material conditions in which events, processes, and similar phenomena occur [12].

An analysis of various definitions of the category “environment” across different fields of science shows that the leading role in defining it derives from the specific context at a given time [2]. In particular, numerous approaches related to the content of the concept of “environment” have been examined and generalized, including social (D.J. Markovich [24] and others), philosophical, and psychological (G.M. Andreyeva [18] and others) perspectives. Our analyses indicate that there is no single, unified conception of the environment.

Ideas about the influence of the environment on personality can be found in the works of Dj. Locke [30]. The general position underlying these works conveys the meaning that “the environment is a condition for the optimal self-development of the human personality.” Relying on the studies of earlier theorists, K.N. Wentsel [21] emphasized the necessity of creating an educational environment. In particular, he supported the view that it is appropriate to form a set of specific conditions for learners.

The next stage in the study of the influence of the environment on personality began in the first half of the last century. A distinctive feature of this period was the examination of the surrounding environment and its direct impact on the individual [22].

By the late twentieth and early twenty-first centuries, the number of studies devoted to examining the internal structure of the educational environment and its influence on personality increased. This trend emerged as a result of the processes of humanization and гуманитаризация in education. In addition, it can be explained by the growing attention of domestic and foreign scholars to the environmental approach, the integration of education with ecology, the strengthening of learner-centered orientation, informatization, and the development of eco- and infopsychology. It should be noted that in modern pedagogy, the essence of the concept of the educational environment is revealed through its affiliation with the socio-cultural space, educational systems, their components, and the interaction of subjects of the educational process [22].

In pedagogical modeling of a creative-active environment aimed at increasing the effectiveness of individual learning, we focus on the issue of a creative-active environment. A.Z. Rahimov characterizes creativity as the development of human activity directed toward discovering new or improved knowledge and new ideas in the process of solving a particular problem [28].

In the works of E.G. Goziev, attention is paid to the psychology of creativity, the creative process, and creative products [9]. Z.T. Nishanova studied the psychological aspects of developing creative abilities [25].

In a broad sense, creativity is understood as the active and consistent influence of a subject (an individual, a social group, or society) on an object (the entire surrounding environment or a more or less isolated, specific part of it). In the course of this influence, the subject transforms the surrounding environment and creates or discovers something new, previously unseen, unknown, unexplored, and original. During the creative process, a person not only changes the world but also discovers oneself as a creator. Creativity realizes an individual's constructive and creative potential. Through creative activity, a person generates innovations, poses and solves diverse problems, and finds unique solutions and sometimes new approaches and methods to such solutions. In creative activity, the uniqueness and originality of the researcher, creator, and scholar are manifested [13].

Research identifies three factors in the development of students' creativity:

genetic factors (which assign the primary role to heredity in the determination of genetic and psychological traits);

environmental factors (which consider the environment and its participants as decisive external conditions in the development of creative abilities);

genotype–environment interaction (the dependence of adaptation to the environment on hereditary aspects) [31].

One of the main characteristics of the development of learning activity is a goal-oriented intellectual activity unique to it, through which active interaction with the objects of the surrounding reality is carried out.

Thus, pedagogical modeling of a creative–active environment aimed at increasing the effectiveness of individual learning creates conditions for the development of students' professional competencies while taking into account individual characteristics of the personality.

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