

# Content, Structural Components, And Development Criteria Of Methodological Competencies Of Future Primary School Teachers Based On Pedagogical Collaboration

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## ABSTRACT

This article examines the development of methodological competencies of future primary school teachers based on pedagogical collaboration from a scientific and theoretical perspective. The content, structural components, and development criteria of methodological competence are substantiated in accordance with modern pedagogical approaches. Pedagogical collaboration is interpreted as an effective mechanism for the integrated development of motivational, cognitive, and practical components of methodological competence. The study identifies criteria and indicators for assessing the level of methodological competence and highlights their role in enhancing the professional preparedness of future primary school teachers. The findings contribute to improving the quality and effectiveness of teacher education.

**Keywords:** Primary education, future teacher, pedagogical collaboration, methodological competence, structural components, development criteria.

## INTRODUCTION

The rapid development of the modern education system, along with the continuous renewal of educational content and technologies, is elevating the requirements for the professional training of primary education teachers to a qualitatively new level. Today, a future primary school teacher is expected not only to be a specialist with a solid mastery of subject knowledge, but also a competent professional capable of effectively designing the educational process, applying modern pedagogical technologies, engaging in collaborative interaction with learners, and conducting reflective analysis of their own professional activity. From this perspective, the development of methodological competencies in future primary education teachers is recognized as one of the pressing issues in contemporary pedagogical science.

Ensuring the effectiveness of the educational process requires a special emphasis on approaches based on pedagogical collaboration. Pedagogical collaboration

establishes relationships between teachers and learners grounded in equality, mutual respect, shared responsibility, and active communication, thereby organizing the educational process on the basis of subject-subject interaction. It is precisely this characteristic that allows pedagogical collaboration to function as an effective didactic tool in the professional development of future primary education teachers, fostering a conscious, creative, and responsible attitude toward methodological activity.

Methodological competence represents a key integrative quality that defines the professional preparedness of a future primary education teacher. It manifests through the harmonious integration of methodological knowledge, practical skills and abilities, professional motivation, and reflective activity. However, an analysis of pedagogical practice indicates that the content, structural components, and developmental criteria of methodological competence have not yet been sufficiently systematized, and there is a clear need for a scientifically grounded justification of the

mechanisms for its formation based on pedagogical collaboration. Therefore, identifying the content of developing methodological competencies in future primary education teachers through pedagogical collaboration, determining its structural components, and scientifically substantiating the criteria for its development constitute one of the significant tasks facing modern pedagogical research. This article examines the issue through the integration of pedagogical theory and practice and provides a scientific and theoretical justification of the impact of pedagogical collaboration on the development of methodological competencies.

## LITERATURE REVIEW

In modern educational theory, pedagogical collaboration is interpreted as a didactic approach that organizes the educational process on the basis of subject-subject relationships, strengthens the equality and responsibility of educational participants, and ensures the achievement of learning outcomes through mutual communication and cooperation. The theoretical roots of this idea are primarily grounded in social-constructivist and activity-based theories.

L.S.Vygotsky conceptualized education as a process based on social interaction, demonstrating that cognitive development emerges through interpersonal communication and joint activity. His concept of the “zone of proximal development” explains the expansion of learners’ capabilities under conditions of collaboration and provides a theoretical justification for the significance of pedagogical collaboration in deepening methodological preparation.

Within the framework of activity theory, A.N.Leontiev and S.L.Rubinstein emphasized that the formation of knowledge and skills occurs through the active engagement of the subject, particularly within processes of social collaboration. This approach reveals that the methodological competence of a future teacher is not merely a set of acquired knowledge, but rather a professional quality formed through collaborative practical activity.

In addressing the step-by-step organization of the didactic process, P.Ya.Galperin’s theory of the stage-by-stage formation of mental actions occupies an important place. This theory provides a scientific basis for the effective development of such components as planning of learning

activities, control and self-control, and reflection within collaborative learning environments.

The practical mechanisms of pedagogical collaboration are extensively elaborated within the concept of cooperative learning. In particular, D.Johnson and R.Johnson substantiate that the effectiveness of cooperative teaching is ensured through positive interdependence, individual accountability, face-to-face interaction, social skills, and group reflection. R.Slavin demonstrates that incentive structures and shared responsibility for collective outcomes in cooperative learning enhance educational motivation. Furthermore, J.Dewey advanced the idea of organizing education on the basis of experience and activity, emphasizing that collaboration-based learning promotes the development of independent thinking and problem-solving skills. Within the constructivist approach, J.Bruner argued that knowledge is not transmitted in a ready-made form but is constructed through collaborative activity, thereby reinforcing the role of cooperation in the formation of methodological thinking. In C.Rogers’ learner-centered educational perspective, collaboration grounded in trust and psychological safety is recognized as a crucial condition for professional growth.

In explicating the concept of methodological competence, general approaches within competence theory serve as an important methodological foundation. Scholarly interpretations of competence define it as an integration of knowledge, skills, experience, motivation, and values that enable the effective performance of professional tasks. In this regard, researchers such as J. Raven, R. Boyatzis, and L. Spencer & S. Spencer analyze competence through behavioral indicators and criteria of effective performance.

Within studies on pedagogical competence and professional preparation (particularly within the CIS scientific tradition), methodological competence is examined in close connection with teachers’ professional-psychological and methodological readiness. In this line of research, scholars such as N.V.Kuzmina, V.A.Slastenin, and A.K.Markova conceptualize professional teaching mastery as a system of components, identifying methodological preparation as the central element of professional competence.

In substantiating the specifically “methodological” nature of methodological competence, L.Shulman’s concept of pedagogical content knowledge is of particular significance. According to this concept, effective teaching

is determined not only by mastery of subject content, but also by knowledge of methodological approaches to teaching that content, the ability to anticipate learners' errors and difficulties, and the capacity to select appropriate instructional strategies. This perspective justifies the inclusion of lesson design, method selection, differentiated instruction, assessment, and reflection as essential elements of the methodological competence of future primary education teachers. At the same time, experiential learning ideas are elaborated in D.Kolb's model, which explains mechanisms that strengthen the practical and reflective dimensions of methodological competence through cycles of experience, analysis, conceptualization, and experimentation.

In scholarly literature, methodological competence is often interpreted as a multi-component integrative system. In substantiating its structural composition, the following approaches are commonly distinguished:

Motivational-value dimension (professional motivation, needs, interests, responsibility);

Cognitive dimension (methodological knowledge, didactic concepts, theoretical thinking);

Activity-practical dimension (methodological skills, lesson design, application of technologies);

Reflective-evaluative dimension (analysis of one's own activity, self-development).

This structural approach is logically aligned with the theory of pedagogical collaboration: under collaborative conditions, motivation is enhanced, knowledge is jointly constructed, practical actions are refined through cooperative activity, and reflection is deepened through group analysis and peer assessment.

In addressing the assessment of methodological competence, many researchers propose diagnostic models based on a criterion-indicator-level (low/medium/high) framework. Bloom's taxonomy serves as a methodological foundation for the classification and standardization of learning outcomes, demonstrating that outcomes manifest across cognitive, affective, and psychomotor domains. This classification substantiates the necessity of assessing methodological competence not only at the level of knowledge, but also in terms of motivation, practical activity, and reflective analysis.

Within cooperative learning theories, assessment-related aspects such as individual accountability, group outcomes, peer assessment, and reflection are also emphasized. This confirms the scientific validity of including indicators such as collaborative engagement, communication culture, collective planning, and analytical skills among the assessment criteria for methodological competence developed through pedagogical collaboration.

The analysis of the reviewed sources demonstrates that the concept of pedagogical collaboration and the theory of methodological competence are intrinsically interconnected, and that their integration strengthens the professional preparation of future primary education teachers. At the same time, scholarly literature often addresses the content, structural composition, and developmental criteria of methodological competence separately, while the need remains to substantiate them as a unified system closely linked to the mechanisms of pedagogical collaboration. This situation necessitates a scientific justification of the components and criteria of methodological competence in relation to the didactic potential of pedagogical collaboration, which constitutes the focus of the present article.

## RESULTS

Methodological competence is one of the leading integrative qualities that determine the professional preparedness of a future primary education teacher, manifesting in the ability to effectively master educational content and to organize the teaching process in a didactically sound manner. This competence encompasses the future teacher's capacity to purposefully convey subject content through appropriate teaching methods, plan lessons and instructional activities, analyze pedagogical situations, assess learning outcomes, and implement modern innovative pedagogical technologies in practice.

An educational process organized on the basis of pedagogical collaboration serves as a significant factor in enriching the content of methodological competence. Under collaboration-based learning conditions, the future teacher perceives methodological activity not as a passive executor but as an active subject of the educational process. This, in turn, promotes the conscious acquisition of methodological knowledge and skills, their integration with practical activity, and the development of professional pedagogical thinking. Based on research findings, methodological competence is interpreted as a complex,

multi-component pedagogical phenomenon, within which the following core structural components are distinguished:

The motivational component is characterized by the future primary education teacher's positive attitude toward professional activity, a conscious need to engage in methodological work, aspiration for professional growth, and motivation to actively participate in pedagogical collaboration. This component functions as the internal driving force behind the formation of methodological competence.

The cognitive component encompasses a system of methodological knowledge, didactic concepts, principles of education, teaching methods and forms, as well as theoretical knowledge related to organizing the pedagogical process. This component plays a crucial role in shaping the future teacher's methodological thinking and professional worldview.

The practical (activity-based) component includes the application of methodological knowledge in practice, the design and organization of lessons, the effective implementation of pedagogical collaboration within the educational process, the use of interactive teaching methods, and the independent and creative resolution of methodological tasks.

The reflective component reflects the future teacher's ability to analyze and evaluate their own methodological activity, identify and eliminate shortcomings, and engage in reflective thinking aimed at the continuous improvement of professional practice.

Pedagogical collaboration ensures the interconnection and integration of these components, thereby facilitating the holistic and systematic development of methodological competence.

In order to determine the level of development of methodological competence in future primary education teachers, the following criteria were developed and substantiated:

The motivational-normative criterion is characterized by the future teacher's interest in professional activity, a positive attitude toward methodological work, and the level of active participation in pedagogical collaboration.

The cognitive-content criterion reflects the depth and systematic nature of methodological knowledge, the level of understanding of didactic concepts, and the ability to relate theoretical knowledge to practical pedagogical situations.

The activity-practical criterion is determined by the formation of methodological skills and abilities, independence in lesson design and implementation, and the effectiveness of applying pedagogical collaboration technologies.

The reflective-evaluative criterion expresses the degree to which the future teacher is able to analyze and evaluate their own activity, demonstrate a commitment to self-development, and adopt a critical approach toward the outcomes of professional practice. These criteria enable step-by-step assessment and continuous monitoring of the development of methodological competence within a pedagogical collaboration framework.

## CONCLUSION

In conclusion, the development of methodological competencies in future primary education teachers on the basis of pedagogical collaboration constitutes a scientifically and methodologically grounded, systematic, and goal-oriented pedagogical process. Identifying the content, structural composition, and developmental criteria of methodological competence contributes to enhancing future teachers' professional preparedness, fostering a conscious and creative attitude toward methodological activity, and increasing the overall effectiveness of the educational process.

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