

METHODOLOGY FOR PREPARING FUTURE SPEECH THERAPISTS FOR PROFESSIONAL ACTIVITY BASED ON SPEECH ONTOGENESIS

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Abstract

This article examines the methodology for preparing future speech therapists for professional activity based on the study of speech ontogenesis. The relevance of the topic is determined by the growing need to train specialists who are able to understand the natural stages of children's speech development, identify deviations at early stages, and organize corrective and developmental work in accordance with individual educational needs. The article emphasizes that knowledge of speech ontogenesis is not only a theoretical component of speech therapy education, but also a practical foundation for diagnostic, corrective, preventive, and consultative activities. Special attention is paid to the integration of theoretical knowledge, observation skills, case analysis, pedagogical practice, and inclusive educational approaches in the training process. The study highlights the importance of developing professional competence through interactive methods, problem-based tasks, analysis of speech development cases, and cooperation with families, teachers, psychologists, and medical specialists. The proposed methodological approach contributes to the formation of future speech therapists' readiness to work with children who have different speech and communication difficulties. The article also underlines the need to connect academic modules with real professional situations, since effective speech therapy support requires not only knowledge of developmental norms, but also the ability to apply this knowledge in inclusive educational environments.

Keywords: Speech ontogenesis, speech therapy, professional competence, future speech therapists, inclusive education, speech development, corrective work, diagnostic skills.

Introduction

BO‘LAJAK LOGOPEDLARNI NUTQ ONTOGENEZI ASOSIDA KASBIY FAOLIYATGA TAYYORLASH METODIKASI

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Annotatsiya

Ushbu maqolada nutq ontogenezi asosida bo‘lajak logopedlarni kasbiy faoliyatga tayyorlash metodikasi yoritiladi. Mavzuning dolzarbligi bolalar nutqining tabiiy rivojlanish bosqichlarini chuqur biladigan, nutqdagi buzilishlarni erta aniqlay oladigan hamda individual ta’limiy ehtiyojlarga mos korreksion-rivojlantiruvchi ishlarni tashkil eta oladigan mutaxassislarni tayyorlash zarurati bilan belgilanadi. Maqolada nutq ontogenezi haqidagi bilimlar logopedik ta’limning faqat nazariy qismi emas, balki diagnostik, korreksion, profilaktik va maslahat berish faoliyatining muhim amaliy asosi sifatida talqin qilinadi. Bo‘lajak logopedlarni tayyorlash jarayonida nazariy bilimlar, kuzatish ko‘nikmalari, amaliy holatlarni tahlil qilish, pedagogik amaliyot va inklyuziv ta’lim yondashuvlarini integratsiyalash masalalariga alohida e’tibor qaratiladi. Tadqiqotda interaktiv metodlar, muammoli topshiriqlar, nutq rivojlanishiga oid keyslar tahlili hamda oila, pedagog, psixolog va tibbiyot mutaxassislari bilan hamkorlik orqali kasbiy kompetensiyani shakllantirishning ahamiyati asoslanadi. Taklif etilayotgan metodik yondashuv bo‘lajak logopedlarning turli nutqiy va kommunikativ qiyinchiliklarga ega bolalar bilan ishlashga tayyorgarligini kuchaytirishga xizmat qiladi.

Kalit so‘zlar: nutq ontogenezi, logopediya, kasbiy kompetensiya, bo‘lajak logopedlar, inklyuziv ta’lim, nutq rivojlanishi, korreksion ish, diagnostik ko‘nikmalar.

Introduction

The preparation of future speech therapists is one of the important directions of modern pedagogical education, especially in the context of inclusive education, where every child’s speech, communication, cognitive, and social development must be supported according to individual needs. Speech is not only a means of communication, but also a fundamental mechanism of thinking, social

interaction, emotional expression, learning activity, and personality development. Therefore, the professional training of future speech therapists should be based on a deep understanding of how speech develops in ontogenesis, what stages it passes through, what factors influence its formation, and how deviations from typical development can be identified and corrected in a timely manner.

Speech ontogenesis refers to the gradual development of speech from the earliest pre-verbal forms of communication to complex verbal, grammatical, semantic, and pragmatic abilities. This process includes the development of auditory perception, phonemic hearing, articulation, vocabulary, grammar, coherent speech, dialogic communication, and the ability to use language appropriately in different social situations. For future speech therapists, knowledge of these developmental stages is essential because speech correction cannot be effective without understanding the norm of speech development. A specialist must be able to distinguish between age-related temporary difficulties and stable speech disorders that require systematic intervention.

In the educational process, the module devoted to speech ontogenesis should not be limited to the memorization of theoretical information. It should become a methodological basis for forming diagnostic thinking, analytical skills, professional observation, corrective planning, and readiness for interdisciplinary cooperation. Future speech therapists need to learn how to observe children's speech behavior, analyze speech samples, compare individual development with age norms, identify risk factors, and select appropriate corrective and developmental methods. Such training is especially important in inclusive educational settings, where speech therapists work with children who may have delayed speech development, phonetic and phonemic disorders, general speech underdevelopment, stuttering, autism spectrum-related communication difficulties, hearing impairment, intellectual disabilities, or other developmental conditions.

The relevance of improving the methodology for preparing future speech therapists is also connected with the need to strengthen the practical orientation of higher pedagogical education. Students should acquire not only knowledge about the stages of speech development, but also the ability to apply this knowledge in real professional situations. This requires the use of interactive lectures, case studies, observation tasks, simulation exercises, analysis of video materials, problem-based learning, microteaching, and pedagogical practice.

Through these methods, students gradually develop professional competence, methodological flexibility, ethical responsibility, and the ability to work with children, parents, teachers, psychologists, and medical specialists.

In the conditions of educational modernization, speech therapy training must be aligned with the principles of humanistic pedagogy, early intervention, inclusive support, and child-centered correction. The future speech therapist should be prepared not only to correct speech disorders, but also to prevent secondary learning difficulties, support children's participation in the educational process, and create favorable conditions for communication development. Therefore, the methodology for preparing future speech therapists based on speech ontogenesis has theoretical, practical, and social significance. It contributes to the formation of specialists who are capable of understanding the child's speech development as a complex, dynamic, and individually variable process and who can organize effective professional support in inclusive education.

Methods

The study was organized on the basis of theoretical, methodological, and practice-oriented approaches aimed at improving the preparation of future speech therapists for professional activity through the module of speech ontogenesis. The methodological foundation of the research was formed by the principles of developmental pedagogy, speech therapy, inclusive education, competency-based learning, and child-centered correctional support. These principles made it possible to analyze speech ontogenesis not only as a theoretical academic discipline, but also as a practical basis for professional decision-making in diagnostic, corrective, preventive, and consultative speech therapy work.

Theoretical methods included the analysis of scientific, pedagogical, psychological, and speech therapy literature related to children's speech development, age-related speech norms, stages of language acquisition, early communication, phonetic and phonemic development, lexical and grammatical formation, coherent speech development, and speech disorders. Special attention was paid to the relationship between normal speech ontogenesis and different forms of speech underdevelopment. Through comparison, generalization, classification, and systematization, the content of the speech ontogenesis module was examined from the point of view of its professional significance for future speech therapists.

Empirical methods were used to determine the level of students' readiness for professional activity. Observation, questioning, diagnostic tasks, analysis of students' written works, practical assignments, and pedagogical experiment elements were applied. The participants were future speech therapists studying in a pedagogical university within the field of inclusive education and special pedagogy. During the educational process, students' knowledge of speech development stages, ability to identify age-related speech indicators, skills of analyzing children's speech samples, and readiness to design correctional activities were studied. Particular attention was given to how students connected theoretical knowledge with practical speech therapy situations.

The methodological improvement was implemented through interactive and professionally oriented learning activities. The module included problem-based lectures, practical seminars, case analysis, observation of children's speech behavior, analysis of audio and video materials, simulation of diagnostic situations, preparation of individual correctional plans, and discussion of interdisciplinary cooperation models. Students were encouraged to compare typical and atypical speech development, identify possible risk factors, and justify their pedagogical decisions. Such tasks helped them develop analytical thinking, diagnostic sensitivity, methodological flexibility, and professional responsibility. A competency-based approach was used to assess the effectiveness of the proposed methodology. The main criteria included cognitive readiness, diagnostic readiness, practical-methodological readiness, communicative readiness, and reflective readiness. Cognitive readiness was evaluated through students' understanding of the stages and mechanisms of speech ontogenesis. Diagnostic readiness was assessed through their ability to recognize speech development indicators and possible deviations. Practical-methodological readiness was studied through the preparation of correctional and developmental tasks. Communicative readiness was analyzed through students' ability to interact with children, parents, teachers, and specialists. Reflective readiness was determined by their ability to evaluate their own professional actions and identify ways of improvement.

The collected materials were analyzed qualitatively and quantitatively. Qualitative analysis made it possible to describe changes in students' professional thinking, while quantitative comparison helped determine the growth of indicators before and after the implementation of the improved methodology. The

combination of theoretical analysis, empirical study, and practice-oriented training ensured a comprehensive approach to preparing future speech therapists for professional activity based on speech ontogenesis.

Results

The results of the study showed that the systematic use of speech ontogenesis as a methodological basis in the training of future speech therapists contributes to the development of their professional readiness for diagnostic, corrective, developmental, and consultative activities. At the initial stage, many students demonstrated a mainly theoretical understanding of speech development. They were able to name general stages of children's speech formation, but experienced difficulties in explaining the practical significance of these stages for speech therapy work. In particular, students often found it difficult to distinguish between age-related speech immaturity and signs of stable speech disorders requiring targeted intervention.

After the implementation of the improved methodology, positive changes were observed in students' cognitive, diagnostic, practical-methodological, communicative, and reflective competencies. Students began to understand speech ontogenesis not as a sequence of isolated developmental stages, but as a dynamic and interconnected process involving auditory perception, articulation, phonemic hearing, vocabulary development, grammatical structure, coherent speech, and communicative behavior. This allowed them to analyze children's speech more systematically and to connect observed speech characteristics with age norms and individual developmental conditions.

The most significant progress was identified in students' diagnostic readiness. Through the analysis of speech samples, case situations, video observations, and practical assignments, future speech therapists learned to identify important indicators of speech development. They became more attentive to the quality of sound pronunciation, the formation of phonemic perception, the richness of vocabulary, the structure of sentences, the coherence of speech, and the child's ability to participate in dialogue. As a result, students' answers became more evidence-based, and their ability to justify diagnostic assumptions improved.

The study also revealed growth in practical-methodological readiness. Students who participated in problem-based and case-oriented tasks were more successful in designing correctional and developmental exercises appropriate to a child's

speech level. They learned to select tasks according to the child's age, type of speech difficulty, communicative needs, and educational environment. For example, when working with cases related to delayed speech development, students proposed exercises aimed at expanding vocabulary, developing imitation, stimulating dialogic speech, and strengthening communication motivation. In cases connected with phonetic and phonemic difficulties, they suggested articulation exercises, phonemic perception tasks, sound differentiation activities, and game-based correctional methods.

Communicative readiness also improved during the study. Students became more aware of the importance of cooperation with parents, educators, psychologists, and medical specialists. They understood that effective speech therapy support in inclusive education depends not only on individual sessions with the child, but also on the creation of a supportive communicative environment. This was reflected in their ability to prepare recommendations for teachers and parents, explain the child's speech difficulties in accessible language, and propose joint actions for supporting speech development in everyday communication.

Reflective readiness developed through self-analysis tasks, discussion of professional situations, and evaluation of pedagogical decisions. Students gradually learned to assess the strengths and weaknesses of their own work, recognize methodological mistakes, and search for alternative correctional strategies. The results confirmed that the integration of theoretical knowledge about speech ontogenesis with practical, interactive, and professionally oriented learning activities increases the effectiveness of preparing future speech therapists for work in inclusive educational settings.

Discussion

The findings of the study indicate that the professional preparation of future speech therapists becomes more effective when the module of speech ontogenesis is organized as a practice-oriented and competency-based component of higher pedagogical education. Speech ontogenesis should not be understood only as a theoretical description of how a child's speech develops from early vocal reactions to coherent communication. For future speech therapists, this module has direct methodological importance because it forms the basis for recognizing developmental norms, identifying deviations, planning correctional work, and supporting children in inclusive educational environments.

One of the main issues revealed during the study is the gap between theoretical knowledge and practical application. Students may know the stages of speech development, but this knowledge does not automatically become professional competence. A future speech therapist must be able to use developmental knowledge in real diagnostic and corrective situations. For example, it is not enough to know that vocabulary, grammar, phonemic perception, and coherent speech develop gradually. The specialist must understand how delays or distortions in these areas affect a child's communication, learning activity, social adaptation, and emotional well-being. Therefore, the teaching of speech ontogenesis should be connected with case analysis, observation, practical diagnostics, and correctional planning.

The results also show that professionally oriented tasks strengthen students' diagnostic thinking. In speech therapy practice, diagnosis is not limited to naming a disorder. It requires a careful analysis of the child's communicative behavior, speech production, comprehension, interaction with adults and peers, and the influence of the educational environment. When students analyze real or simulated cases, they begin to understand that speech development is influenced by biological, psychological, pedagogical, social, and linguistic factors. This broader understanding is especially important in inclusive education, where children may have different developmental profiles and need individualized support.

Another important aspect is the formation of interdisciplinary cooperation skills. A speech therapist rarely works in isolation. Effective professional activity requires cooperation with teachers, psychologists, defectologists, medical workers, parents, and caregivers. The study confirmed that students who were involved in collaborative tasks and situational discussions better understood the role of each specialist in supporting the child. They also became more prepared to explain speech difficulties to parents and teachers in a clear, ethical, and constructive manner. This is significant because speech therapy support is more successful when correctional work continues not only during individual sessions, but also in classroom interaction, family communication, and everyday educational practice.

The discussion of the results also allows emphasizing the importance of reflective readiness. Future speech therapists should be able to evaluate their own decisions, correct methodological mistakes, and adapt exercises to the child's changing

needs. Reflection helps students move from mechanical use of methods to conscious professional action. In this regard, self-analysis, peer discussion, observation diaries, and feedback-based assignments are useful tools for developing mature professional thinking.

Thus, the improvement of the methodology for preparing future speech therapists should be based on the integration of theory, practice, reflection, and inclusive values. The module of speech ontogenesis becomes effective when it helps students understand the child's speech development as a complex and individual process. Such an approach prepares future specialists not only to correct speech disorders, but also to create conditions for successful communication, learning, and social participation of children with different speech and developmental needs.

Conclusion

Preparing future speech therapists for professional activity based on speech ontogenesis is an important condition for improving the quality of inclusive and special pedagogical support. The study confirmed that speech ontogenesis should be considered not only as a theoretical subject describing the stages of children's speech development, but also as a methodological foundation for forming professional competence. A future speech therapist must clearly understand how speech develops from early communicative reactions to complex verbal interaction, because this knowledge allows the specialist to distinguish normal developmental features from speech disorders requiring correctional intervention. The results showed that the effectiveness of professional preparation increases when theoretical knowledge is connected with practical activities. Students develop stronger professional readiness when they analyze speech samples, observe children's communicative behavior, solve case-based tasks, design correctional exercises, and reflect on their own pedagogical decisions. Such a practice-oriented approach helps future specialists understand the real complexity of speech therapy work. It also develops their ability to assess a child's speech development comprehensively, taking into account phonetic, phonemic, lexical, grammatical, semantic, pragmatic, cognitive, emotional, and social factors.

The improved methodology contributes to the formation of several important components of professional competence. Cognitive readiness is strengthened through systematic knowledge of speech development stages and mechanisms.

Diagnostic readiness is developed through the ability to identify speech indicators, recognize risk factors, and compare individual speech development with age-related norms. Practical-methodological readiness is formed through the selection and design of correctional and developmental tasks. Communicative readiness is improved through cooperation with parents, teachers, psychologists, medical specialists, and other participants of the inclusive educational process. Reflective readiness is developed through self-analysis, correction of methodological errors, and evaluation of professional actions.

The study also demonstrated that the preparation of future speech therapists must be closely connected with inclusive values. In modern educational conditions, speech therapy support is aimed not only at correcting separate speech defects, but also at ensuring the child's participation in communication, learning, play, and social interaction. Therefore, future specialists should be prepared to work with children who have different developmental needs, including delayed speech development, phonetic and phonemic disorders, general speech underdevelopment, stuttering, hearing impairment, autism spectrum-related communication difficulties, and other complex conditions. This requires methodological flexibility, ethical responsibility, patience, empathy, and the ability to organize individualized support.

Thus, the methodology for preparing future speech therapists based on speech ontogenesis should include interactive lectures, practical seminars, observation assignments, case analysis, simulation exercises, pedagogical practice, interdisciplinary cooperation tasks, and reflective activities. These methods create conditions for transforming theoretical knowledge into professional action. The main pedagogical value of this approach lies in its orientation toward the child's individual development and communicative needs. By mastering speech ontogenesis as a professional basis, future speech therapists become more prepared to diagnose speech difficulties, plan effective correctional work, cooperate with families and specialists, and support children's successful inclusion in the educational environment.

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