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## USING VOCAL TRAINING METHODS TO OVERCOME SPEECH BARRIERS IN CHILDREN

*In the context of the growing number of children with speech impairments, it is important to find innovative approaches to correctional and educational work, in particular within the framework of inclusive education. The purpose of the article is to provide a scientific substantiation of the feasibility of using vocal training to overcome speech barriers in primary school children. The study involves analyzing theoretical sources, identifying the correlation between vocal activity and speech development, and formulating recommendations for teachers and speech therapists. The methodology is based on an interdisciplinary approach that includes speech therapy, psycholinguistic and musicology analysis. The main methods were qualitative analysis of professional sources, content analysis of publications and synthesis of pedagogical practices. The study found that vocal exercises, in particular breathing, intonation and articulation chants, have a positive effect on articulatory accuracy, speech tempo and rhythm, prosodic expressiveness and vocal flexibility. Regular vocal lessons help to reduce dysfluencies, increase speech initiative, and improve the child's emotional well-being. Combining vocal training with traditional speech therapy methods is especially effective. This approach allows to achieve generalization of speech skills in spontaneous speech and forms motivation to communicate in the educational environment. Based on the systematization of scientific sources, practical recommendations for primary school teachers, speech therapists, teachers of inclusive education and organizers of extracurricular activities are formulated. The recommendations are adapted to the conditions of school speech therapy support and take into account the age and psychophysiological characteristics of children. It is proposed to use vocal training as an additional tool in working with children with speech disorders, aimed not only at correcting articulation disorders, but also at developing the child's confidence, emotional emancipation and cognitive activity. The scientific novelty lies in the generalization of the potential of vocal training as an interdisciplinary tool for speech development, capable of harmonizing the psychophysiological state of the child and activating different levels of speech activity. Prospects for further research are empirical testing of the effectiveness of vocal training for different categories of speech disorders and the development of differentiated vocal support programs in the system of inclusive education.*

**Key words:** vocal training, speech development, speech barriers, inclusive education, articulation, psycho-emotional support.

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## ВИКОРИСТАННЯ МЕТОДІВ ВОКАЛЬНОГО ТРЕНІНГУ ДЛЯ ПОДОЛАННЯ МОВЛЕННЄВИХ БАР'ЄРІВ У ДІТЕЙ

*У контексті зростання кількості дітей з порушеннями мовлення актуальним є пошук інноваційних підходів до корекційної та освітньої роботи, зокрема в межах інклюзивного навчання. Метою статті є наукове обґрунтування доцільності використання вокального тренінгу для подолання мовленнєвих бар'єрів у дітей молодшого шкільного віку. Дослідження передбачає аналіз теоретичних джерел, виявлення кореляції між вокальною активністю та мовленнєвим розвитком, а також формулювання рекомендацій для педагогів і логопедів. Методологія базується на міждисциплінарному підході, що охоплює логопедичний, психолінгвістичний і музикознавчий аналіз. Основними методами стали якісний аналіз фахових джерел, контент-аналіз публікацій і синтез педагогічних практик. У результаті дослідження встановлено, що вокальні вправи, зокрема дихальні, інтонаційні та артикуляційні розспівки, мають позитивний вплив на артикуляційну точність, темп і ритм мовлення, просодичну виразність і голосову гнучкість. Регулярні вокальні заняття сприяють зменшенню дисфлюенцій, підвищенню мовленнєвої ініціативи та покращенню емоційного самопочуття дитини. Особливо ефективним є поєднання вокального тренінгу з традиційними логопедичними методами. Такий підхід дозволяє досягти генералізації мов-*

леннєвих навичок у спонтанному мовленні та формує мотивацію до комунікації в освітньому середовищі. На основі систематизації наукових джерел сформульовано практичні рекомендації для вчителів початкових класів, логопедів, педагогів інклюзивної освіти та організаторів позашкільної діяльності. Рекомендації адаптовані до умов шкільної логопедичної підтримки і враховують вікові та психофізіологічні особливості дітей. Запропоновано використовувати вокальний тренінг як додатковий інструмент у роботі з дітьми з порушеннями мовлення, спрямований не лише на корекцію артикуляційних розладів, а й на розвиток упевненості, емоційної розкритості та когнітивної активності дитини. Наукова новизна полягає в узагальненні потенціалу вокального тренінгу як міждисциплінарного інструменту мовленнєвого розвитку, здатного гармонізувати психофізіологічний стан дитини та активізувати різні рівні мовленнєвої діяльності. Перспективою подальших розвідок є емпіричне тестування ефективності вокального тренінгу для різних категорій мовленнєвих порушень та розроблення диференційованих програм вокального супроводу в системі інклюзивної освіти.

**Ключові слова:** вокальний тренінг, мовленнєвий розвиток, мовленнєві бар'єри, інклюзивна освіта, артикуляція, психоемоційна підтримка.

**Statement of the problem.** One of the pressing problems of modern education is the growing number of children with speech barriers of various origins – from phonetic and phonemic disorders to complex speech development disorders caused by neuropsychological, psychoemotional or social factors. This problem is especially relevant in the context of inclusive education, which requires new, innovative approaches to overcoming children's speech difficulties.

At school age, speech performs not only a communicative but also a cognitive function, ensuring the formation of thinking, learning activities, and socialization. Violation of this function reduces learning motivation, affects the child's self-esteem and psychological comfort in the educational environment. In this context, the potential of vocal training as a means of developing speech expressiveness, articulatory motor skills, breathing, auditory control, and emotionality of speech deserves special attention. For example, methods of singing psychotechnics create conditions for synchronizing the psychophysiological processes that underlie speech activity, which makes vocal pedagogy promising for speech therapy practice (Obukh, 2021).

Despite the growing number of studies on speech therapy, the topic of using vocal training to overcome speech barriers remains underdeveloped in the Ukrainian scientific discourse. According to The National Institute on Deafness and Other Communication Disorders, more than 8% of school-age children in the United States have some kind of speech disorder: 5.0% have speech disorders, 3.3% have language disorders, and 1.4% have voice disorders (The National Institute on Deafness, 2025). A similar trend is observed in Ukraine, but there is no consistent practice of using vocal techniques as a systemic tool for speech therapy. At the same time, according to the observations of N. Alzrayer and co-authors, vocal elements, even when working with children with autism spectrum disorders, demonstrate significant effectiveness in improving spontaneous vocalization and communication activity (Alzrayer et al., 2021).

Thus, the study of the possibilities of using vocal training methods to overcome speech barriers in children is scientifically and practically justified. This approach not only improves the quality of speech but also has a positive effect on the child's mental health, self-confidence, and social adaptation, which are important tasks of modern pedagogy and speech therapy.

**Literature review.** The problem of speech disorders in children and ways to overcome them is a subject of active study in pedagogy, speech therapy, psychology and related fields. In the modern scientific discourse, there is an increased interest in the integration of musical methods into the practice of speech correction, in particular, in the use of vocal training.

The basis for understanding the deep nature of children's speech disorders is the work on psycholinguistics and special pedagogy. In particular, E. Danilavičiute and co-authors emphasize the importance of diagnosing speech disorders and the use of didactic technologies in working with younger students (Danilavičiute et al., 2022). Their approach involves the use of elements of game activities and multisensory stimulation but without a separate emphasis on the musical or vocal component. Similar approaches are presented in the research of Zavitrenko & Snisarenko (2023), where speech skills are considered as a subject of correction within a special school, without the involvement of vocal instruments (Zavitrenko & Snisarenko, 2023). A similar idea is supported in a collective monograph edited by T. Zhuk and co-authors, where the authors described psychological and pedagogical technologies for supporting children with special needs, focusing on the individualization of the educational process, which is relevant to the topic of vocal speech support (Zhuk, 2020).

The study by O. Kasianenko & D. Dzhus (2024) reveals the importance of early intervention in the case of speech disorders but emphasizes mainly speech therapy practices of the traditional type (Kasianenko & Dzhus, 2024). Instead, the works of Martsynovska

(2023) and Chepka (2023) introduce alternative means of communication into scientific circulation, which indicates an attempt to expand the toolkit of specialists, although the vocal methodology remains underrepresented Martsynovska (2023), Chepka (2023). In the same context, it is worth mentioning the study by Raichuk, Mishchenko, and Kryvenko (2021), who used the game on the trumpet as a means of speech correction, which is close in effect to vocal training by stimulating breathing and articulatory motor skills (Raichuk, Mishchenko & Kryvenko, 2021). It is worth noting that Panychok and Tsaryk (2023) emphasize the importance of overcoming language barriers not only in the pedagogical but also in the broader socio-cultural context, which allows us to consider vocal training as a means of developing communicative competence in a globalized environment (Panychok & Tsaryk, 2023).

In modern research, more and more attention is paid to the role of music in the development of speech activity. According to Tsymbal-Slatvinska & Kozii (2021), musical art has a positive effect on speech development by stimulating both auditory and verbal memory (Tsymbal-Slatvinska & Kozii, 2021).

Similarly, Sytnyk (2021) emphasizes that music lessons with children with special educational needs not only promote social adaptation but also form new speech strategies (Sytnyk, 2021). Although these authors do not provide an in-depth characterization of vocal training, their findings provide a theoretical basis for integrating vocals into correctional practice.

More specialized studies analyze vocal methods directly. The researcher Koliada (2022) draws attention to the formation of vocal culture in the educational process, although her focus is shifted to student youth, which requires the adaptation of methods to the school environment (Koliada, 2022). Particularly relevant to the research topic are the results of Sukholova (2023), in which stage speech is interpreted as a component of vocalist training but contains useful provisions on breathing, diction, and intonation, which are common to speech therapy exercises (Sukholova, 2023). Foreign authors have made a significant contribution to the study of vocal influence on children's speech. Fabbron) emphasize the role of game strategies in the formation of vocal health in distance learning (De Oliveira, Fabbron, 2024). A. Hseu and co-authors draw attention to the barriers to access to voice therapy, which once again confirms the need for alternative and flexible approaches, including vocal ones (Hsue et al., 2023).

The analysis of scientific sources shows that there is a significant theoretical basis for musical speech correction, but there is a critical lack of studies that

comprehensively examine vocal training at school age as a method of overcoming speech barriers. There are also certain differences in the interpretation of vocal influence: some authors emphasize cognitive mechanisms, others – psycho-emotional ones, but there are no comprehensive empirical models for evaluating effectiveness. Thus, further research should be devoted to the creation of methodologically sound vocal training programs for school-age children with speech barriers, as well as to the evaluation of their effectiveness in the context of the child's cognitive, speech, and emotional development.

**Research methodology.** The methodological basis of the study is an interdisciplinary approach that combines speech therapy, psychological and pedagogical, and musicological analysis. This allows us to study the problem in the context of modern correctional and educational practices.

A qualitative analysis of scientific sources by Ukrainian and international authors covering aspects of vocal training, speech development, and music therapy was used. The main attention is paid to the works analyzing the role of musical and vocal techniques in overcoming speech barriers in school-age children.

Additionally, content analysis was used for professional publications, pedagogical approaches, and cultural practices related to the formation of vocal expression and respiratory motor skills in children. This approach provides a comprehensive understanding of the functional and psycho-emotional mechanisms of the impact of vocal training on speech.

The paper summarizes systematized approaches to vocal speech therapy, analyzes related psychological and pedagogical factors, and identifies promising areas for further research. The limitation of the study is its theoretical nature, which necessitates future empirical testing of the proposed hypotheses in pedagogical practice.

**The purpose of the article.** The study aims to provide scientific substantiation of the effectiveness of using vocal training methods to overcome speech barriers in school-age children. Achieving this goal involves the following scientific tasks:

- 1) to analyze the theoretical foundations of the use of vocal training in speech therapy, pedagogical and musical practice;
- 2) to identify the links between systematic vocal training and the reduction of language barriers in primary school children based on a qualitative analysis of domestic and international sources;
- 3) to formulate scientifically based recommendations for integrating vocal training into speech therapy and general education practice to support children's speech and emotional development.

**Results and discussion.** Systematic vocal training helps to improve children's speech skills. In particular, singing requires clear articulation of sounds and active movements of the articulatory apparatus, which trains the pronunciation of complex sound combinations. When singing, children are forced to pronounce words more clearly, following the rhythm and melody, so that speech sounds are practised more intensively (Obukh, 2021). Vocal exercises include elements of speech therapy: breathing practices, diction and intonation exercises, which are common to vocal and speech pedagogy (Sukholova, 2023). Regularly performing singing breathing exercises strengthens the diaphragm and develops breath control, which is necessary for continuous speech. As a result, children acquire greater voice power and longer phonation exhalation, which facilitates the formation of phrases in speech.

In addition, vocal chants expand the range of the voice and teach how to control pitch, which develops prosodic expressiveness. Research confirms that vocal training of younger students develops their linguistic expressiveness and artistry and increases confidence in vocal expression (Tkachenko & Kekhan, 2023). As shown in Table 1, various authors note the positive impact of vocal training on the components of the speech function. Therefore, vocal training is a multi-component tool that simultaneously improves articulation skills, respiratory support of the voice and intonation and emotional colouring of children's speech.

Singing practice improves speech intelligibility in children with articulation disorders and stimulates vocalization in non-verbal preschoolers with special needs. Even short-term interventions that combine music and speech lead to statistically significant gains in speech skills. In particular, children who participated in music classes demonstrated 20% higher

vocabulary growth and 17% higher verbal memory activity compared to the control group (School of Rock, 2023). Theoretical generalizations also confirm that vocal techniques create conditions for more effective work of the articulatory apparatus and voice (Obukh, 2021). Thus, the results of various studies are consistent in that vocal training is an effective tool for developing children's speech in several areas simultaneously.

The analysis of the structural elements of vocal training shows that it directly impacts overcoming speech barriers in primary school children. Our research, conducted through an interdisciplinary content analysis of scientific sources, has shown that regular vocal exercises can significantly reduce the frequency of speech errors and increase the fluency and expressiveness of children's speech.

The greatest effect is observed in the case of a combination of breathing, articulation and intonation singing exercises. In particular, systematic vocal training helps normalise speech's pace, reduce tension during speech, and improve the ability to formulate extended speech units. Children who participated in vocal programs demonstrated a higher level of speech initiative, fewer dysfluencies, and smoother articulation of phrases compared to their peers who did not attend such classes.

These results are confirmed by observations of speech therapy and pedagogical practice described in the works of Ukrainian researchers. In particular, Tkachenko & Kekhan (2023) found that group vocal lessons have a positive effect on students' diction, intonation expressiveness, and emotional emancipation, which indirectly affects the reduction of speech difficulties (Tkachenko & Kekhan, 2023). Sukholova (2023) also draws attention to the effectiveness of

Table 1

### Examples of the impact of vocal training on children's speech performance

Participants / research methodology	The method of vocal training	Effects on children's speech
Children with apraxia of speech	Singing given (repeated) words	Clearer articulation and higher comprehension of statements during singing compared to normal speaking (significant improvement)
Children with autism	Natural vocal game strategies	Increase in spontaneous vocalization and communication activity of children after the course of singing games (improvement of the quality of communication)
Children with speech disorders	Online program "Sing and Talk"	Significant increase in the number of correctly reproduced words after music and speech training
Younger students without speech pathologies	Group singing classes	Development of vocal expressiveness, better diction and emotional relaxation in speech, increased confidence in the voice
Overview of methods (theoretical study)	Psychotechnics of singing (vocal exercises)	Synchronization of psychophysiological processes of speech through singing; formation of skills of even breathing and voice delivery, which improves the quality of speech

Source: based on research (Obukh, 2021; Tkachenko, & Kekhan, 2023; Alzrayer et al., 2021; School of Rock LLC, 2023; The National Institute on Deafness, 2025).

breathing and prosodic vocal exercises in the context of preparation for speech activity (Sukholova, 2023). The results demonstrate that even without special speech therapy, vocal training has a lasting positive effect on children with mild speech disorders.

According to the data presented (Table 2), the effectiveness of traditional speech therapy practices and vocal training methods used in modern educational and speech therapy activities was compared. It was found that methods that include vocal elements have a more pronounced complex effect: they improve breathing, articulation, speech fluency and expressiveness and contribute to increasing the child's emotional confidence in the speech process.

The use of vocal exercises combined with audio feedback can increase speech clarity by 30–40% in children aged 5–10 years (Forbrain, 2023). Such techniques are especially effective for automating complex sounds and developing speech-motor skills. Thus, it has been established that vocal training can be an effective means not only for articulation training but also for overcoming language barriers in children. This confirms the expediency of its integration into the system of speech therapy and general pedagogical support for primary school students.

Generalization of the results of the analysis of scientific sources allowed us to identify applied recommendations for the implementation of vocal training in the educational process. These proposals are aimed at speech therapists, primary school teachers and specialists in inclusive education. They are developed in accordance with the third objective of the study – the formation of practical recommendations for overcoming speech barriers through vocal training. The recommendations, systematized in Table 3, are supported by the results of an interdisciplinary content analysis and are aimed at widespread use in pedagogical and speech therapy practice.

The formulated recommendations are the result of a comprehensive analysis of pedagogical, speech

therapy, and musical approaches identified in the course of interdisciplinary research. They take into account both the practice of targeted speech therapy and the potential of musical and vocal activities as a tool for speech and psycho-emotional support for children. The integration of vocal training into school and correctional practice involves taking into account the age characteristics of children, the level of speech development and the presence of emotional or psychosocial barriers.

The recommendations are structured by target audiences – primary school teachers, speech therapists, inclusive education teachers, and organizers of clubs. Each of them is accompanied by a description of a specific pedagogical tool, its functional purpose and expected results. This allows us to create a coherent methodological framework for the implementation of vocal techniques in the daily work with children with speech development difficulties. The proposed approach is based on the results of the studied scientific sources and the generalization of effective educational practices that have the potential to be adapted in an inclusive and general educational environment.

Thus, the practical application of vocal training in general and special schools can be an important tool for optimizing children's speech development. These recommendations are of an applied nature and can be integrated into speech therapy, music education, and speech support programs for children with different levels of speech difficulties. The implementation of such measures will not only increase the effectiveness of overcoming phonetic-phonemic and prosodic disorders but also strengthen the child's psychological confidence in speech interaction.

**Conclusions and Prospects for Further Research.** The growing number of children with speech barriers in an inclusive educational environment actualizes the need to introduce innovative and interdisciplinary approaches to speech support. One

Table 2

**Comparison of approaches to overcoming speech barriers in children  
(traditional speech therapy and vocal training)**

Approach to correction	Main characteristics of the method	Expected effect on overcoming speech difficulties in children
Traditional speech therapy	Articulation gymnastics, logorhythmics, mechanical production of sounds	Improvement of pronunciation of individual phonemes; development of motor skills of the speech apparatus
Vocal training	Vocal exercises, chants, breathing exercises, intonation	Improvement of breathing, smoothness of speech, voice expressiveness; increase in speech initiative and reduction of dysfluencies
A combined approach	A set of speech therapy and vocal exercises in correctional work	Generalization of skills in spontaneous speech; increase of motivation to speak; development of the emotional component of communication

Source: based on research (Danilavičiute et al., 2022; Obukh, 2021; Tkachenko, & Kekhan, 2023; Tsymbal-Slatvinska & Kozii, 2021; The National Institute on Deafness, 2025; Forbrain, 2023).

Table 3

**Recommendations for implementing vocal training to overcome speech barriers in children**

Addressee of the recommendation	Content of the recommendation	Expected effect
Primary school teachers	Introduce short vocal warm-ups at the beginning of the lesson (breathing exercises, singing vowels)	Activation of the speech apparatus, improvement of diction and voice tone
Speech therapists	Use singing phrases or lyrics to music when working with stuttering	Reducing speech tension, developing fluency
Speech therapists	Use syllable or word chanting to automate sounds in children	Improvement of articulation, development of sound imitation skills
Teachers of inclusive education	Include choral musical games (singing with rhythm, dancing) in educational classes with children	Socialization, increasing confidence in speaking in the presence of peers
Teachers-organizers of clubs	Introduce music and vocal clubs for children with speech disorders as a form of speech therapy	Motivation to communicate, development of speech expression in an informal environment

Source: author's development.

such area is vocal training, which combines musical, speech therapy, and psychological and pedagogical elements. The results of the study confirmed its significant potential as a means of comprehensive impact on a child's speech:

- the theoretical foundations of the use of vocal training in speech therapy and educational practice are analyzed. It has been established that vocal exercises have a positive effect on articulation, prosodic expressiveness, respiratory support and voice control. Singing stimulates the synchronous work of auditory, motor and emotional components of speech and thus contributes to the harmonious development of the child's communicative sphere;

- the links between systematic vocal training and the reduction of speech difficulties have been identified. Theoretical and empirical sources have shown the effectiveness of vocal training for children with speech disorders, particularly in overcoming dysfluencies, improving the tempo and rhythm of speech, and increasing speech initiative. Singing also helps to reduce anxiety and increase a child's self-esteem, which is an important factor in overcoming secondary psychological barriers;

- a set of practical recommendations adapted to the conditions of general education and inclusive education was formulated. The recommendations are applied and take into account the age characteristics of students, types of speech disorders, and the level of teachers' readiness to use vocal techniques. Models for implementing vocal training for teachers, speech therapists and organizers of extracurricular activities are proposed. This provides practical value and the possibility of scaling the results in pedagogical practice.

The scientific novelty of the study lies in the interdisciplinary understanding of vocal training as a tool for speech therapy within the educational environment. The work expands the understanding of the functional resources of music in speech therapy and offers a systematic basis for pedagogical actions aimed at overcoming speech barriers in school-age children. Promising areas for further research are the experimental testing of the proposed vocal techniques in the real educational process, the development of differentiated vocal accompaniment programs for different types of speech disorders, and the study of the effectiveness of vocal training in the context of children's mental health.

**BIBLIOGRAPHY**

1. Данілавичюте Е., Трофименко Л., Ільяна В., Рібцун Ю., Мартинюк З., Грибань Г. Психолінгвістичні дидактичні технології діагностики і подолання мовленнєвих порушень у молодших школярів з тяжкими порушеннями мовлення : навчально-методичний посібник. Київ : Інститут спеціальної педагогіки і психології НАПН України, 2022. 847 с. URL: <https://ispukr.org.ua/?p=11432> (дата звернення: 28.04.2025).
2. Завітренко Д., Снісаренко І. Формування мовленнєвих навичок учнів спеціальної школи. *Наукові записки. Серія: Педагогічні науки*. 2023. № 209. С. 169–175. DOI: <https://doi.org/10.36550/2415-7988-2022-1-209-169-175>.
3. Кас'яненко О., Джус Д. Раннє виявлення і основні напрями профілактики мовленнєвих порушень в перші роки життя дитини. *Освіта і наука*. 2024. № 1(36). С. 98–111. URL: <https://msu.edu.ua/educationandscience/uk/2024/06/11/1362024/> (дата звернення: 28.04.2025).
4. Коляда Ю. Методичні аспекти подолання бар'єрів у формуванні вокальної культури здобувачів вищої освіти музичних спеціальностей. *Академічні студії. Серія «Педагогіка»*. 2022. № 1. С. 30–34. DOI: <https://doi.org/10.52726/as.pedagogy/2022.1.5>.
5. Марціновська І. Альтернативні та додаткові засоби комунікації у корекції мовленнєвих порушень. *Психолого-педагогічний супровід дітей з інтелектуальними порушеннями в умовах спеціальної та інклюзивної освіти*. 2023. С. 168–171. URL: <https://kaf-korped.kpnu.edu.ua/wp-content/uploads/2023/12/tezy-2023.pdf> (дата звернення: 28.04.2025).

6. Обух Л. Психотехніка співу як сучасний напрям вокальної педагогіки. *Наукові записки. Серія: Педагогічні науки*. 2021. № 195. С. 106–110. DOI: <https://doi.org/10.36550/2415-7988-2021-1-195-106-110>.
7. Психолого-педагогічні засади технологій супроводу дітей з особливими освітніми потребами у процесі їх соціальної інтеграції : колективна монографія / за ред. Т. Жук, Т. Ілляшенко, Т. Каменчук, А. Обухівська, Г. Якимчук. Київ : Ніка-Центр, 2020. 244 с. URL: [https://lib.iitta.gov.ua/id/eprint/723321/1/монографія\\_psy-ped-suprovid\\_2020.pdf](https://lib.iitta.gov.ua/id/eprint/723321/1/монографія_psy-ped-suprovid_2020.pdf) (дата звернення: 28.04.2025).
8. Райчук М., Міщенко О., Кривенко А. Особливості корекції мовлення дітей із тяжкими порушеннями мовлення засобами гри на трубі. *Актуальні проблеми гуманітарних наук*. 2021. Вип. 44(3). С. 179–186. DOI: <https://doi.org/10.24919/2308-4863/44-3-28>.
9. Ситнік О. Важливо й можливо: як музикувати з дітьми з особливими освітніми потребами. *Нова українська школа*. 2021. URL: <https://nus.org.ua/2021/10/31/vazhlyvo-j-mozhlyvo-yak-muzykuvaty-z-ditmy-z-osoblyvymy-osvitnimy-potrebamy/> (дата звернення: 28.04.2025).
10. Сухолова М. Сценічна мова як елемент фахової підготовки майбутнього викладача вокалу. *Педагогічна освіта: теорія і практика*. 2023. № 34. С. 341–354. DOI: <https://doi.org/10.32626/2309-9763.2023-34-341-354>.
11. Ткаченко І., Кехань П. Розвиток артистичних здібностей дітей молодшого шкільного віку на заняттях з хореографії та вокалу. *Педагогічні науки: теорія, історія, інноваційні технології*. 2023. № 1(125). С. 142–150. URL: [https://pedscience.sspu.edu.ua/wp-content/uploads/2023/03/Ткаченко\\_Пан-Кехан.pdf](https://pedscience.sspu.edu.ua/wp-content/uploads/2023/03/Ткаченко_Пан-Кехан.pdf) (дата звернення: 28.04.2025).
12. Цимбал-Слатвінська С., Козій О. Розвиток мовлення засобами музичного мистецтва. *Наукові записки. Серія: Педагогічні науки*. 2021. № 192. С. 23–26. DOI: <https://doi.org/10.36550/2415-7988-2021-1-192-23-26>.
13. Чепка О. Ігрові технології у корекційно-розвивальній роботі з дітьми з тяжкими порушеннями мовлення. *Психолого-педагогічні проблеми сучасної школи*. 2023. № 2(10). С. 57–66. DOI: [https://doi.org/10.31499/2706-6258.2\(10\).2023.290571](https://doi.org/10.31499/2706-6258.2(10).2023.290571).
14. Alzayer N., Aldabas R., Alhossein A., Alharthi H. Naturalistic teaching approach to develop spontaneous vocalizations and augmented communication in children with autism spectrum disorder. *Augmentative and Alternative Communication*. 2021. Vol. 37. No. 1. P. 14–24. DOI: <https://doi.org/10.1080/07434618.2021.1881825>.
15. De Oliveira A., Fabbro E. Play-based strategies for speech therapy and vocal health face-to-face and distance learning actions for children: an integrative literature review. *Journal of Voice*. 2024. Vol. 38. No. 2. P. 538.e1. DOI: <https://doi.org/10.1016/j.jvoice.2021.09.016>.
16. Hseu A., Spencer G., Woodnorth G., Kagan S., Kawai K., Nuss R. Barriers to voice therapy in dysphonic children. *Journal of Voice*. 2023. Vol. 37. No. 3. P. 410–414. DOI: <https://doi.org/10.1016/j.jvoice.2021.01.008>.
17. Kids & music: Effects of music on child development. School of Rock LLC. 2023. URL: <https://www.schoolofrock.com/resources/music-education/kids-music-effects-of-music-on-child-development> (date of access: 28.04.2025).
18. Panychok T., Tsaryk O. Überwindung von Sprachbarrieren im Rahmen der interkulturellen Kommunikation. *Наукові записки НУОА. Серія: Філологія*. 2023. № 18(86). С. 101–104. DOI: [https://doi.org/10.25264/2519-2558-2023-18\(86\)-101-104](https://doi.org/10.25264/2519-2558-2023-18(86)-101-104).
19. Quick statistics about voice, speech, language. *The National Institute on Deafness and Other Communication Disorders*. 2025. URL: <https://www.nidcd.nih.gov/health/statistics/quick-statistics-voice-speech-language> (date of access: 28.04.2025).
20. Speech therapy for kids: Enhancing communication skills. *Forbrain*. 2023. URL: <https://www.forbrain.com/speech-therapy-for-kids/> (date of access: 28.04.2025).

## REFERENCES

1. Danilavičiute E., Trofymenko L., Iliana V., Ribtsun Yu., Martyniuk Z., Hryban H. (2022) Psyholinhvistychni dydaktychni tekhnolohii diahnostryky i podolannia movlennievkykh porushen u molodshykh shkoliariv z tiazhkymy porushenniamy movlennia. [Psycholinguistic didactic technologies of diagnosing and overcoming speech disorders in younger students with severe speech disorders] Instytut spetsialnoyi pedahohiky i psykhohohiyi NAPN Ukrayiny. 847. URL: <https://ispukr.org.ua/?p=11432> [in Ukrainian].
2. Zavitrenko D., Snisarenko I. (2023) Formuvannia movlennievkykh navychok uchniv spetsialnoi shkoly. [Formation of speech skills of special school students] Naukovi zapysky. Serii: Pedahohichni nauky. 209. 169–175. <https://doi.org/10.36550/2415-7988-2022-1-209-169-175> [in Ukrainian].
3. Kasianenko O., Dzhus D. (2024) Rannie vyjavlennia i osnovni napriamy profilaktyky movlennievkykh porushen v pershi roky zhyttia dytyny. [Early detection and main directions of prevention of speech disorders in early childhood] Osvita i nauka. 1(36). 98–111. URL: <https://msu.edu.ua/educationandscience/uk/2024/06/11/1362024/> [in Ukrainian].
4. Koliada Yu. (2022) Metodychni aspekty podolannia barieriv u formuvanni vokalnoi kultury zdobuvachiv vyshchoi osvity muzychnoho profilu. [Methodological aspects of overcoming barriers in vocal culture formation among music students] Akademichni studii. Serii: «Pedahohika». 1. 30–34. <https://doi.org/10.52726/as.pedagogy/2022.1.5> [in Ukrainian].
5. Martsynovska I. (2023) Alternatyvni ta dodatkovy zasoby komunikatsii u korektsii movlennievkykh porushen. [Alternative and additional means of communication in correction of speech disorders] Psykhohoho-pedahohichniy suprovid ditei z intelektualnymy porushenniamy. 168–171. URL: <https://kaf-korped.kpnu.edu.ua/wp-content/uploads/2023/12/tezy-2023.pdf> [in Ukrainian].
6. Obukh L. (2021) Psykhotekhnika spivu yak suchasnyi napriam vokalnoi pedahohiky. [Singing psychotechniques as a modern direction of vocal pedagogy] Naukovi zapysky. Serii: Pedahohichni nauky. (195). 106–110. <https://doi.org/10.36550/2415-7988-2021-1-195-106-110> [in Ukrainian].

7. Zhuk T., Illiashenko T., Kamenshchuk T., Obukhivska A., Yakymchuk H. (Eds.) (2020) *Psykhologo-pedahohichni zasady tekhnolohii suprovodu ditei z osoblyvymy osvitnimy potrebamy u protsesi yikh sotsialnoi intehtatsii*. [Psychological and pedagogical principles of support technologies for children with special educational needs in the process of social integration] Kyiv: Nika-Tsentr. URL: [https://lib.iitta.gov.ua/id/eprint/723321/1/монографія\\_psy-ped-suprovid\\_2020.pdf](https://lib.iitta.gov.ua/id/eprint/723321/1/монографія_psy-ped-suprovid_2020.pdf) [in Ukrainian].
8. Raichuk M., Mishchenko O., Kryvenko A. (2021) *Osoblyvosti korektsii movlennia ditei iz tiazhkymy porushenniamy movlennia zasobamy hry na trubi*. [Features of speech correction of children with severe speech disorders using trumpet play] *Aktualni problemy humanitarnykh nauk*. 44(3). 179–186. <https://doi.org/10.24919/2308-4863/44-3-28> [in Ukrainian].
9. Sytnyk O. (2021) *Vazhlyvo i mozhyvo: yak muzykivaty z ditmy z osoblyvymy osvitnimy potrebamy*. [Important and possible: how to make music with children with special educational needs] *Nova Ukrainska Shkola*. URL: <https://nus.org.ua/2021/10/31/vazhlyvo-j-mozhlyvo-yak-muzykivaty-z-ditmy-z-osoblyvymy-osvitnymy-potrebamy/> [in Ukrainian].
10. Sukholova M. (2023) *Stsenichna mova yak element fakhovoi pidhotovky maibutnoho vykladacha vokalu*. [Stage speech as an element of professional training of future vocal teachers] *Pedahohichna osvita: teoriia i praktyka*. 34. 341–354. <https://doi.org/10.32626/2309-9763.2023-34-341-354> [in Ukrainian].
11. Tkachenko I., Kekhan P. (2023) *Rozvytok artystychnykh zdbnostei ditei molodshoho shkilnogo viku na zaniattiakh z khoreohrafi ta vokalu*. [Development of artistic abilities of primary school children in choreography and vocal classes] *Pedahohichni nauky: teoriia, istoriia, innovatsiini tekhnolohii*. 1(125). 142–150. URL: [https://pedscience.sspu.edu.ua/wp-content/uploads/2023/03/Ткаченко\\_Пан-Кехан.pdf](https://pedscience.sspu.edu.ua/wp-content/uploads/2023/03/Ткаченко_Пан-Кехан.pdf) [in Ukrainian].
12. Tymbal-Slatvinska S., Kozii O. (2021) *Rozvytok movlennia zasobamy muzychnoho mystetstva*. [Speech development through musical art] *Naukovi zapysky. Seriya: Pedahohichni nauky*. 192. 23–26. <https://doi.org/10.36550/2415-7988-2021-1-192-23-26> [in Ukrainian].
13. Chepka O. (2023) *Ihrovi tekhnolohii u korektsiino-rozvyvalnii roboti z ditmy z tiazhkymy porushenniamy movlennia*. [Game-based technologies in correctional work with children with severe speech disorders] *Psykhologo-pedahohichni problemy suchasnoi shkoly*. 2(10). 57–66. [https://doi.org/10.31499/2706-6258.2\(10\).2023.290571](https://doi.org/10.31499/2706-6258.2(10).2023.290571) [in Ukrainian].
14. Alzayer N., Aldabas R., Alhossein A., Alharthi H. (2021) *Naturalistic teaching approach to develop spontaneous vocalizations and augmented communication in children with autism spectrum disorder*. *Augmentative and Alternative Communication*. 37(1). 14–24. <https://doi.org/10.1080/07434618.2021.1881825>
15. De Oliveira A., Fabbro E. (2024) *Play-based strategies for speech therapy and vocal health face-to-face and distance learning actions for children: an integrative literature review*. *Journal of Voice*. 38(2). 538.e1. <https://doi.org/10.1016/j.jvoice.2021.09.016>
16. Hseu A., Spencer G., Woodnorth G., Kagan S., Kawai K., Nuss R. (2023) *Barriers to voice therapy in dysphonic children*. *Journal of Voice*. 37(3). 410–414. <https://doi.org/10.1016/j.jvoice.2021.01.008>
17. School of Rock LLC. (2023) *Kids & music: Effects of music on child development*. URL: <https://www.schoolofrock.com/resources/music-education/kids-music-effects-of-music-on-child-development>
18. Panychok T., Tsaryk O. (2023) *Überwindung von sprachbarrieren im rahmen der interkulturellen kommunikation*. [Overcoming language barriers in the context of intercultural communication] *Naukovi zapysky Natsionalnoho universytetu «Ostrozka akademiya»: seriya «Filolohiya»*. 18(86). 101–104. [https://doi.org/10.25264/2519-2558-2023-18\(86\)-101-104](https://doi.org/10.25264/2519-2558-2023-18(86)-101-104) [in Ukrainian].
19. The National Institute on Deafness and Other Communication Disorders. (2025) *Quick statistics about voice, speech, language*. URL: <https://www.nidcd.nih.gov/health/statistics/quick-statistics-voice-speech-language>
20. Forbrain. (2023) *Speech therapy for kids: Enhancing communication skills*. URL: <https://www.forbrain.com/speech-therapy-for-kids/>