



## ОСВІТНІ ІННОВАЦІЇ: ІДЕЇ, РЕАЛІЇ, ПЕРСПЕКТИВИ

UDK 37.02:378:63

**Chaikovska O. V.**

*Candidate of Philological Sciences, Associate Professor,  
Head of the Foreign Languages Department  
Higher educational institution "Podillia State University"  
Kamianets-Podilskyi, Ukraine  
E-mail: [olgachaikovskaya@ukr.net](mailto:olgachaikovskaya@ukr.net)  
ORCID: 0000-0001-9161-4574*

### ENHANCING EDUCATIONAL ACCESSIBILITY FOR STUDENTS WITH DYSLEXIA IN UKRAINE AND BEYOND

#### *Abstract*

*Dyslexia is a neurological disorder characterized by persistent difficulties in reading and writing, affecting millions globally, with estimates ranging from 50 to 100 million people in the European Union alone. In the United States, approximately 15 to 20 percent of schoolchildren exhibit some degree of dyslexia symptoms. This condition primarily manifests as challenges in recognizing the order of letters in words, which can hinder reading fluency and comprehension. While typical students may overcome these difficulties by the end of the first grade, individuals with dyslexia often face such challenges throughout their educational journeys. This paper explores the experiences of various countries in addressing dyslexia and analyzes the specific measures being implemented in Ukraine to create accessible educational environments for all students. Historically, the understanding of dyslexia has evolved from early medical hypotheses, which attributed reading difficulties to brain damage or visual impairments, to contemporary interpretations focusing on phonological processing and linguistic factors. Research highlights that poor reading abilities stem from deficits in phonological word processing rather than visual issues, emphasizing the need for phonetic skills and morphological knowledge in reading development. With the rise of specialists such as speech therapists and pathologists, significant strides have been made in supporting individuals with dyslexia. Effective coping strategies and appropriate educational resources are essential for fostering high academic aspirations and self-esteem among these students. By learning from international best practices and focusing on inclusive educational frameworks, Ukraine can enhance support systems for students with dyslexia, ensuring equitable access to quality education and promoting a culture of understanding and acceptance in the academic community.*

**Key words:** *dyslexia, educational accessibility inclusive education, learning difficulties, academic support, Ukraine, international experience.*

**Introduction.** In the European Union, between 50 and 100 million people suffer from writing and reading difficulties. Between 15 and 20 per cent of schoolchildren in the U.S. have some degree of dyslexia symptoms [6, 7]. Dyslexia is a neurological disorder common among schoolchildren and less frequent among older students. It primarily refers to difficulties in reading and writing. Individuals with dyslexia often read slowly and struggle to recognize the order of letters in words, making it challenging to recall what they have read. While typical children may face such challenges by the end of the first grade—when reading skills become automated—those with dyslexia can experience these difficulties throughout their lives.

Ultimately, all students, whether they have dyslexia or not, have the right to equitable and high-quality education. When it comes to spelling, students with dyslexia—whether at the bachelor's or master's level—often have difficulty with proper accent placement or character spacing while writing. They may also encounter obstacles in expressing themselves on paper. Neurological disorders affecting speech formation can significantly influence a student's academic life. Individuals with dyslexia may struggle with reading, processing, and comprehending information, which affects their ability to

absorb learning materials, understand lectures, and write essays or research papers. These challenges can lead to a decline in academic performance and self-esteem, resulting in stress and anxiety. With appropriate support and effective coping strategies, individuals can overcome these difficulties and achieve high educational outcomes. In recent decades, the number of specialists, including speech therapists and pathologists, has increased significantly, providing essential support to dyslexic individuals navigating their learning challenges.

**Aim of the paper.** Through this article, we aim to explore the experiences of foreign countries and analyze the measures being taken in Ukraine to ensure accessible education for everyone.

**Research results.** Scientifically defined, dyslexia (from Greek *δύς*- "bad" and *λέξις*"speech") is a selective impairment in reading and writing skills while other learning abilities remain intact.

The first medical mention of a person with lost reading abilities, according to Gayán Guardiola, dates back to the 1670s [1]. A systematic study of this phenomenon began in the last third of the 19th century. In 1878, the German physician Adolf Kußmaul studied patients who had difficulty understanding a written text and using words in a particular context (later called "aphasia" [2]).

The term was first introduced by ophthalmologist Rudolf Berlin in his work "Über Dyslexie" published in the "Archiv für Psychiatrie" in 1887. He employed the term to describe a boy who struggled to learn to read and write despite demonstrating normal intellectual and physical abilities in other areas.

The pedagogical aspect of dyslexia as a learning difficulty that is not caused by trauma was addressed by British therapist W. Pringle Morgan. In 1896, he published an article in the "British Medical Journal" titled "Congenital Verbal Blindness"[3], which detailed a specific psychological disorder that hampers the ability to learn reading skills. The article described a 14-year-old male who, despite having a normal level of intelligence, was unable to read, a condition not uncommon among children.

The historical study of dyslexia dates back to 1925 when neurologist Samuel T. Orton began his investigations. He predicted the existence of a syndrome unrelated to brain damage that impairs the ability to read and write. Orton noted that reading difficulties in dyslexia were not due to visual impairments. According to his theory, these challenges could arise from interhemispheric asymmetry in the brain. This theory incited controversy among scientists of the time, many of whom believed that various visual processing issues were the primary cause of the disorder.

After the 1970s, the focus shifted from the explanation of the medical factors of dyslexia, such as asymmetry of the two hemispheres of the brain or ophthalmic disorders, to the linguistic description and interpretation of the phenomenon. It became clear that reading difficulties were related to phonological word processing, not visual impairment or brain processes. The cognitive explanation of dyslexia is based on the recognition of the fact that poor reading abilities arise due to a certain defect in the phonological (speech) processing of words.

This explains the fact that in phonetically consistent languages such as Greek, Italian or Spanish, the percentage of people who suffer from dyslexia is much lower [4].

The most important place in the process of learning to read is occupied by the formation of phonetic skills, the acquisition of knowledge about the morphology of the native language, as well as the development of vocabulary. For example, studies have shown that in English-speaking six-year-olds, the ability to read both common and irregular words was largely due to knowledge of the meanings of words [11].

The approach to teaching students with dyslexia varies significantly across different countries, often reflecting cultural attitudes toward education and disability. Several countries have implemented effective strategies and programs that prioritize inclusivity and support for students with dyslexia.

The U.S. has made considerable strides in addressing dyslexia through legislation such as the Individuals with Disabilities Education Act (IDEA), which mandates that schools provide appropriate accommodations and services for students with learning disabilities. Many schools employ specialized reading programs, such as Orton-Gillingham and Wilson Reading System, which focus on phonics, structured literacy, and multisensory approaches to support dyslexic students. Early screening and intervention are emphasized to help identify students at risk for reading difficulties.

The British Dyslexia Association, for example, provides resources and training for educators to understand dyslexia and implement effective teaching strategies. Interventions may include the use of assistive technology, individualized education plans (IEPs), and the creation of dyslexia-friendly classrooms that incorporate varied teaching methods and resources.

Finland is known for its progressive educational system, Finland emphasizes individual learning pathways for students, including those with dyslexia. Finnish teachers are trained to provide differentiated instruction and are equipped with strategies to support diverse learners. Early intervention programs focus on identifying reading difficulties, and reading recovery initiatives often utilize a combination of phonemic awareness and engaging reading materials to promote literacy skills.

Australia has adopted a whole-school approach to supporting students with dyslexia, anchored in programs like the "Dyslexia Working Party" that provides guidelines for schools. The use of evidence-based practices, such as the Structured Literacy approach and explicit phonics instruction, has gained popularity. Additionally, professional development for teachers plays a crucial role in enhancing their ability to recognize dyslexia and implement effective teaching strategies.

According to the Israeli Ministry of Education, dyslexia is the most common type of learning disorder identified in schools, often recognized by primary school teachers. As a result, pedagogical colleges in Israel train future educators to identify dyslexia and notify the appropriate authorities to ensure that affected students receive the necessary support [12].

According to the Osvitoria educational website [10], Masaryk University, named after the first president of the Czechoslovak Republic, is recognized for its high level of inclusivity, providing psychological and physical comfort for various groups of students, including those with special educational needs (SEN), students with special talents, and international students with unique cultural requirements. Applicants simply need to be aware of their needs and provide the necessary documentation, allowing for exam adaptations to ensure they have the same opportunities as other students. Additionally, students can request that all study materials be provided in accessible formats. There are three options for support available at the university. Standard lectures and seminars can be translated into formats that are convenient for individual needs. Assisted learning provides a pre-designed universal program that helps students acquire additional skills and knowledge, such as learning sign language or Braille. For students with vision impairments or dyslexia, embossed tactile maps are necessary for nearly every topic, particularly with legal texts that require adaptations (e.g., Braille, sign translation, and audio formats). In cases of dyslexia, entrance written exams and other written assignments are also modified, and audio recordings are supplied. The university utilizes the Easy Tutor computer program, which converts electronic text into sound.

Furthermore, these students receive additional training in their native and foreign languages, as they will need these skills throughout their lives. The Faculty of Pedagogy has a Department of Social Pedagogy that prepares future assistant teachers. Active tutoring, which involves providing individualized support in specific subjects, is crucial in the realm of inclusion. Students in the Faculty of Pedagogy participate in this tutoring for a year, selecting children in need of support from a database. The Faculty of Pedagogy has fostered ties with Ukraine, particularly with Borys Grinchenko University in Kyiv, for several years. Czech experts note that there are significant barriers to developing inclusive education in Ukraine, as well as a lack of research concerning children with special educational needs. However, they are eager to share their experiences, believing that a future will come when health issues will no longer hinder young people from receiving a quality education. Overall, the foreign experience in teaching students with dyslexia underscores the importance of early identification, tailored interventions, and a school culture that values inclusivity and understanding. By learning from these countries, educators and policymakers can work towards improving support systems and educational outcomes for students with dyslexia in their contexts.

In Ukraine, dyslexia began to be taken seriously as a condition requiring intervention only in 2017. Ukrainian researchers [11] have conducted substantial studies to create a barrier-free educational environment. To assess teachers' awareness of inclusive education, particularly regarding teaching children with dyslexia, a survey was conducted, involving 197 teachers from various regions, including Kyiv, Chernivtsi, Kharkiv, Lviv, Luhansk, and Kirovohrad. Only 5% of respondents provided a complete answer to the first question: "What is dyslexia?" Meanwhile, 80% could not define the concept. When asked about the prevalence of dyslexia in the population, 44% believed that it affected 1-5% of people. However, modern studies indicate that approximately 20% of the population is dyslexic, representing 80-90% of individuals with learning disabilities. Researchers assert that dyslexia is the most common learning disorder associated with persistent neuro-cognitive difficulties.

It is evident that many pedagogical practitioners recognize their lack of knowledge in the realm of inclusive education and the specific challenges faced by children with dyslexia. Ukrainian researchers have also examined dyslexic disorders in primary school students and developed recommendations for their education and socialization [9]. The findings indicate that an individualized approach, acceptance, and appropriate assistance, combined with enhanced visual focusing abilities and phonetic skills training, are essential for supporting these students effectively [8].

The features of superficial dyslexia and ways of its diagnosis through modern technologies, such as web quests, cases and tests, are investigated [12; 13].

**Conclusion.** In conclusion, dyslexia remains a significant challenge affecting millions of individuals, particularly students, across the globe. This neurological disorder not only impacts reading and writing abilities but also has profound implications for academic performance and self-esteem. Historical perspectives have evolved from medical explanations focusing on brain functions to a deeper understanding rooted in phonological processing and linguistic factors. This shift underscores the importance of tailored educational approaches that accommodate different learning needs. In Ukraine, as explored in this paper, ongoing efforts aim to create an inclusive educational environment that supports students with dyslexia. By examining successful strategies implemented in other countries, we can identify effective measures to enhance accessibility and ensure that all students, regardless of their challenges, receive equitable opportunities for high-quality education. Promoting awareness and providing adequate resources, such as specialized support from speech therapists and educators, is crucial in helping individuals with dyslexia overcome their difficulties and thrive academically. Ultimately, fostering an inclusive educational landscape not only benefits those with dyslexia but enriches the entire learning community, promoting a culture of understanding and support for diverse learning needs.

**Чайковська О. В.**

кандидат філологічних наук, доцент,  
завідувач кафедри іноземних мов  
Заклад вищої освіти «Подільський державний університет»  
Кам'янець-Подільський, Україна  
E-mail: [olgachaikovskaya@ukr.net](mailto:olgachaikovskaya@ukr.net)  
ORCID: 0000-0001-9161-4574

## ПІДВИЩЕННЯ ДОСТУПНОСТІ ОСВІТИ ДЛЯ СТУДЕНТІВ З ДИСЛЕКСІЄЮ В УКРАЇНІ ТА ЗА ЇЇ МЕЖАМИ

### Анотація

Дислексія – це неврологічний розлад, що характеризується постійними труднощами в читанні та письмі. За останніми даними, від 50 до 100 мільйонів людей мають дислексію лише в Європейському Союзі. У Сполучених Штатах від 15 до 20 відсотків школярів мають симптоми дислексії. Цей стан насамперед проявляється як проблеми з розпізнаванням порядку літер у словах, що може перешкодити розумінню прочитаного. Якщо звичайні учні можуть подолати ці труднощі до кінця першого класу, то люди з дислексією часто стикаються з такими проблемами протягом усього свого освітнього процесу. У цій статті досліджується досвід різних країн у розв'язанні проблем дислексії та аналізуються конкретні заходи, які впроваджуються в Україні для створення доступного освітнього середовища для всіх здобувачів освіти. Історично розуміння дислексії еволюціонувало від ранніх медичних гіпотез, які пояснювали труднощі читання пошкодженням мозку або порушеннями зору, до сучасних інтерпретацій, зосереджених на фонологічній обробці та лінгвістичних факторах. Дослідження підкреслюють, що низькі здібності до читання виникають через дефіцит фонологічної обробки слів, а не через візуальні проблеми, наголошуючи на необхідності фонетичних навичок і морфологічних знань у розвитку читання. З появою таких фахівців, як логопеди та патологоанатоми, було досягнуто значних успіхів у підтримці людей з дислексією. Ефективні стратегії подолання труднощів та відповідні освітні ресурси мають велике значення для формування високих академічних прагнень та самооцінки у цих студентів. Вивчаючи найкращі міжнародні практики та зосереджуючись на інклюзивних освітніх рамках, Україна може вдосконалити системи підтримки учнів з дислексією, забезпечуючи рівний доступ до якісної освіти та сприяючи культурі розуміння і прийняття в академічній спільноті.

**Ключові слова:** дислексія, доступність освіти, інклюзивна освіта, труднощі у навчанні, академічна підтримка, Україна, міжнародний досвід.

### References

1. Gayán Guardiola, J. (2001). The Evolution of Research on Dyslexia. *Anuario De Psicología*, 32, 3-30.
2. Miles, T. R., & Miles, E. (1999). *Dyslexia in a hundred years* (2nd ed., rev.). Buckingham.
3. Morgan, W. P. (1896). A case of congenital word blindness. *British Medical Journal*, 7 (2), 1378–1389.
4. Paulesu, E., Demonet, J. F., Fazio, F., McCrory, E., Chanoine, V., Brunswick, N. et al. (2001). Dyslexia: cultural diversity and biological unity. *Science*, 291, 2165–2187. DOI: 10.1126/science.1057179
5. Ricketts, J., Davies, R., Masterson, J., Stuart, M., Duff, F. J. (2016). Evidence for semantic involvement in regular and exception word reading in emergent readers of English. *Journal of Experimental Child Psychology*, 150, 330–345. DOI: 10.1016/j.jecp.2016.05.013
6. Stein, D. S., Blum, N. J., Barbares, W. J. (2011). Developmental and behavioral disorders through the life Span. *In Pediatrics*, 128, 364–373.
7. The International Dyslexia Association: Dyslexia Basics: website. URL: <http://www.interdys.org/ewebeditpro5/upload/DyslexiaBasicsREVMay2012.pdf>
8. Dandan, L., Shaojie, D. (2022). Dyslektychni rozlady u shkolariv pochatkovoї shkoly: osoblyvosti navchannia ta sotsializatsii [Dyslexic Disorders in Primary School Schoolchildren: Features of Learning and Socialization]. *Bulletin of Taras Shevchenko National University of Kyiv. Psychology*, 2(16), 10–13 [in Ukrainian].
9. Ilyana, V. M. (2023). *Dysleksiia: pidtrymka dytyny z osoblyvymy movlennievymy potrebamy v osvitnomu seredovyshchi [Dyslexia: support for a child with special speech needs in the educational environment]*. Kyiv [in Ukrainian].
10. Osvitnii sait «Osvitoria» [Osvitoria educational website]. URL: <https://osvitoria.media/ru/experience/cheskyj-universytet-imeni-masaryka-yak-zrobyty-navchannya-dostupnym-dlya-vsih-2/> [in Ukrainian].
11. Prosina, O. V., Budagyan, A. S. (2022). Aktualni aspekty profesiinoї diialnosti pedahoha: dysleksiia yak realiiia suchasnoї shkoly [Current aspects of professional activity of a teacher: dyslexia as a reality of a modern school]. *Innovative Pedagogy*, 44 (2), 92–97. DOI: 10.32843/2663-6085/2022/44/2.19 [in Ukrainian].
12. Romanuk, L.P. (2012). Vyvchennia poshyrenykh rozladiv navchannia maibutnimy vchyteliamy inozemnykh mov v Izraili [Studying Common Learning Disorders Among Future Foreign Language Teachers in Israel]. *Modern Information Technologies and Innovative Teaching Methods in Training Specialists: Methodology, Theory, Experience, Problems*, 29, 455–459 [in Ukrainian].
13. Shcherba, N. S. (2020). *Inshomovna osvita ditei z osoblyvymy potrebamy: veb-kvesty,keisy ta testy [Foreign Language Education of Children with Special Needs: Web Quests, Cases and Tests]*. Zhytomyr: Vyd-vo ZhDU imeni Ivana Franka [in Ukrainian].