Maia Shashviashvili

Ivane Javakhishvili Tbilisi State University, Georgia

The Advantage of Structured Literacy for Dyslexia Prevention in Multilingual Learners

ABSTRACT

In the modern education system, literacy and reading difficulties remain the most common challenge. It affects the present and future of students, regardless of their cultural, linguistic, or socio-economic background. Developing reading skills presents even more difficulties for children who grow up in a multilingual environment. This problem is especially acute for those who learn two or more languages at the same time. Additional difficulties arise in the process of learning to read, which requires clearly structured, scientifically proven learning methods. In this context, the Structured Literacy approach is recognized as one of the most effective ways to prevent and manage dyslexia in multilingual children.

Nothing is known about this method in Georgia yet. Information in Georgian can only be found in my dissertation (Shashviashvili, 2024). In Georgia, we do not have statistical data on dyslexia, nor does the education policy take effective measures to overcome reading difficulties. Therefore, students with dyslexia face significant difficulties, especially those who learn to read in two or more languages at the same time. The needs can be met in several regions of our country, such as Samtskhe-Javakheti, Marneuli and Kakheti. Dyslexia is a particular challenge in multilingual learners.

The aim of my research is to investigate best practices and approaches to the prevention of dyslexia in multilingual learners to overcome the challenges identified in learning to read in a second language. This is the structured literacy approach. This article will attempt to answer the main question: *How can structured literacy be an effective framework for the prevention of dyslexia in multilingual learners in Georgia?* To address this issue, I have researched international evidence supporting structured literacy.

A number of studies have been conducted in developed countries in this regard, but it is clear that we do not have a similar study in Georgia. Therefore, the information in the article is based only on international studies.

As part of my desk research, I did their analysis and summarized the benefits of structured literacy for the prevention of dyslexia in multilingual learners as the main findings of the study.

Finally, the article proposes strategic recommendations for the education of Georgian teachers, adapting classroom approaches, and integrating literacy into national policies aimed at strengthening early intervention, equity, and inclusive education.

Keywords: *Dyslexia, Structured Literacy, Multilingual Education,* dyslexia, *Georgia.*

.

Introduction

Reading is the cornerstone of all academic achievement and civic engagement. Against this backdrop, despite extensive educational research and advancements, reading difficulties remain one of the most common and often misunderstood learning challenges.

In many countries, reading difficulties have historically been attributed to poor learning or lack of motivation and non-neurodevelopmental causes. However, this paradigm shift has nevertheless occurred in recent decades: dyslexia is now widely recognized as a neurodevelopmental disorder that affects phonological processing and language comprehension. This recognition has led to a growing global focus on early screening, prevention, and literacy instruction and it paved the way for the integration of evidence-based preventive and interventional frameworks – in particular, structured literacy – into global educational practice. Structured literacy integrates linguistic science with explicit (explicit), cumulative and diagnostic instruction, providing a reliable framework that supports learners in learning to read in both monolingual and multilingual contexts.

Awareness about dyslexia in Georgia has begun to grow in recent years. The lack of systematic data on the prevalence of dyslexia has made it difficult to formulate a coherent educational policy. Nevertheless, a number of fundamental initiatives have been launched since 2024: the first Georgian "Questionnaire for Early Diagnosis of Dyslexia" for teachers and other specialists has been created. (Shashviashvili, 2024). In the same year, the "Georgian Dyslexia Research Center - Reading School" was founded, which became a member of the European Dyslexia Association in 2025. The Georgian Dyslexia Association and the Dyslexia Foundation were also established. The first conference on dyslexia was held in Georgia, but students with dyslexia still face significant difficulties, especially those who learn to read in two or more languages at the same time. They face additional difficulties, both in identifying problems and in the right support, and - both in school and in later life.

Current processes point to a growing demand for integrating research-based interventions into the education system. Nevertheless, Georgia still faces common challenges for many multilingual communities – such as identifying learning disorders (dyslexia, dyscalculia, dysgraphia) in bilingual and multilingual learners, preventing them, intervening and ways to overcome them.

Reading difficulties are more common than anyone thinks, writes expert Nicola Wolf Nelson (2016). Statistics of developed countries also show this condition. About 35% of students with special educational needs in the United States are students with learning

disabilities. 75-80% of them have reading difficulties (LDA-Learning Disabilities Association of America) In Europe, statistics vary by country. The variability is related to the spelling transparency of the language and assessment practices. However, the general trend here also shows that dyslexia is a widespread problem. According to the European Dyslexia Association, it affects about 9–12% of the European population. These statistics underscore the importance of dyslexia in special education services, which unequivocally identifies the need for early diagnosis and intervention.

Literature Review

Multilingual Education and Reading Challenges

Multilingual education aims to provide access to academic content in two or more languages, considering the principle of linguistic equality (García & Wei, 2014). Modern studies emphasize that a bilingual environment provides a child with significant cognitive advantages (Bialystok, 2018), but at the same time creates special challenges for the development of reading and writing skills. In a multilingual environment, students have to learn phonologically, spelling, and syntactically differently navigating systems. This process increases cognitive load, especially when a child tries to process the phonological structure in one language and uses completely different linguistic rules in another language (Koda, 2007). As a result, early signs of reading difficulties in multilingual learners are often disguised by normal language learning processes, making dyslexia difficult to diagnose.

In Georgia, the multilingual context is particularly evident in regions such as Kvemo Kartli, Samtskhe-Javakheti, and Kakheti, where a significant proportion of children acquire Georgian as a second language. His limited knowledge of teaching (a second language) has a dramatic impact on the reading process — especially on text comprehension and vocabulary.

The phonological system established in the first language often does not coincide with Georgian: for example, in Azerbaijani and Armenian, the frequency of vowels and consonants, the correspondence of sounds and letters are different. In addition, the child often learns English at the same time, which increases the multilingual cognitive load.

At the same time, Georgian orthography **is transparent,** which means that the number of letters corresponds to the sounds, both Azerbaijani and Armenian languages are relatively transparent, and English is classified as one of the opaquest language systems, where there are more than 170 exceptions to letter-sound correspondence (Ziegler & Goswami, 2005).

Studies have shown that dyslexia in transparent languages can be detected by reading slowly but accurately, and in opaque systems - by quick and frequent errors.

Such discrepancies pose a serious diagnostic dilemma: a multilingual child may look dyslexic in one language but not in another, leading to either insufficient or excessive identification (Paradis, Genesee & Crago, 2021). Assessing reading skills in the case of a second language is a more difficult process than in a native language, because it requires not only knowledge of reading ability, but also knowledge of a second, foreign language. (Lisbeth, Rolf, Glenn, 2016).

The Dyslexia Association of Ireland (DAI, 2023) and the British Dyslexia Association (BDA, 2022) highlight the picture of dyslexia in multilingual learners should be considered by considering the differences between language systems. This is why the International Dyslexia Association (IDA, 2019) recommends the Structured Literacy Framework as a best practice in multilingual environments, as it teaches the structure of language clearly and consistently.

Structured literacy addresses these challenges by systematically and explicitly teaching the structural elements of language—phonology, morphology, syntax, semantics, and spelling—that provide equal support in both monolingual and multilingual contexts. A structured literacy approach reduces cognitive load, enhances decoding skills, and facilitates the development of language-to-language transferable skills (Castles, Rastle & Nation, 2018).

In general, students with dyslexia read and write less in a second language than students with typical development. Their learning process is statistically slower in mastering vocabulary and developing spelling. (Helland & Morken, 2016). Learning a second language can be challenging, especially for students with primary school dyslexia, as they also experience difficulties in phonological analysis, reading, and writing while learning their native language.

A growing stream of empirical studies also shows that structured literacy is particularly effective precisely in environments where students must learn two or more languages with different spelling systems (Goodwin & Jiménez, 2020). Consequently, integrating structured literacy into a multilingual educational environment is not only a beneficial but also a necessary strategy that can significantly reduce the long-term learning and social barriers of children with dyslexia.

Methodology

Within the framework of the research, I used a desk research design based on the systematic principles of literature review. The methodology included identifying, selecting, and synthesizing peer-reviewed studies from major academic databases as well as from the

resources of the Dyslexia International, European, British, and other countries' associations. Within the framework of the exploratory research, empirical or meta-analytical studies published in 2000-2025 were used, which include *Structured literacy,* dyslexia, *reading science, multilingual education, dyslexia prevention, reading intervention, and more.*

After collecting the data, the thematic analysis of the literature allowed me to synthesize research-based information, which combined the theoretical, empirical, and applied perspectives of my research issue, which is necessary for the development of adaptive and effective recommendations for the Georgian educational system.

Through the evidence-based strategies presented in the article, educators can help students with dyslexia unlock their linguistic potential, sharing the benefits of multilingualism and giving them a chance to develop even more in these settings. Creating such a positive and inclusive learning environment is essential for students with dyslexia to feel comfortable in the learning process, which in turn will increase confidence and motivation to learn.

Embracing these challenges is crucial for teachers and education policymakers to support students with reading difficulties on their path to learning Georgian as a second language.

Discussion

About dyslexia

ICD-11 (International Classification of Diseases, 11th Revision) defines dyslexia as a form of "developmental learning disorder" with impairment in reading, coded 6A03.0. Learning difficulties during reading disorders are manifested in the following:

1. Accuracy in reading words,
2. Express Reading Fluently
3. Impairment of reading comprehension.

A diagnosis of a disorder of learning development should be made only when,

When learning limitations significantly exceed the expected indicators for an individual's level of intellectual functioning.

The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition) defines dyslexia under the umbrella of "Specific Learning Disorder" under the umbrella of "Impairment in reading." 315.00 (F81.0) which I am in the following difficulties:

- Word Reading Accuracy
- Comprehension of reading comprehension
- Reading speed and reading fluently.

In addition, it is characterized by difficulties in phonological awareness, verbal memory, and verbal processing speed. This affects the comprehension and memorization of the

information seen and heard, which in turn can affect learning and the acquisition of literacy skills.

The European Dyslexia Association (EDA) defines it this way - dyslexia is of neurobiological origin. This term refers to a disorder that is mainly characterized by severe difficulties in acquiring reading, spelling, and writing skills. Based on more than 10 years of intensive research experience, three distinct disorders have been distinguished: reading disorder, spelling disorder, and combined reading and spelling disorder. Many people associate dyslexia with a combination disorder used. The prevalence rate of all three disorders is about 3-4%. Its spread is influenced by genetic and environmental factors. It is caused by phonological processing difficulties and affects verbal working memory, rapid naming, and consistency skills. The good thing is that it responds to structured, evidence-based intervention (EDA).

The International Dyslexia Association writes that dyslexia is a specific learning ability disorder characterized by difficulties in reading words and/or spelling, which includes reading accuracy, speed, or both, and depends on spelling. These difficulties manifest themselves in a variety of severity, continuously, and continue even when there is an effective learning process for his (the student with dyslexia) for his or her peers. The causes of dyslexia are complex and include combinations of genetic, neurobiological, and environmental factors that interact with an individual throughout the entire period of development. The main difficulties of phonological and morphological processing are frequent, but not universal. Early weaknesses in oral language often predict literacy difficulties. Secondary outcomes include problems with reading comprehension and reduced reading and writing experiences, which can hinder the growth of language, knowledge, written expression skills, and overall academic achievement. It can also affect psychological well-being and employment opportunities. Identification and targeted learning are important at any age. Language and literacy support before and during early education is particularly effective. (IDA)

It should be noted that these definitions were updated by the world's largest organizations as recently as October of this year.

The British Dyslexia Association echoes these definitions in the following way – as each person is unique, so is the experience of each dyslexia. It can have different effects and may be accompanied by other specific learning difficulties. It is usually common in families and is a lifelong condition.

It's important to remember that disparate thinking has upsides. Many people with dyslexia show strengths in areas such as thinking, visual, and creative areas. (BDA)

Dyslexia and Multilingual Education

More than 60% of the world's population regularly uses two or more languages (Grosjean, 2010). Multilingualism is more common than monolingualism because it is a social phenomenon and is driven by globalization, migration, and economic dependence.

Multilingual education refers to the process of teaching and learning in two or more languages, where all languages are recognized and used for educational purposes. This type of education takes into account the cultural and linguistic background of the student and seeks to deepen knowledge of both (or more) languages. In Europe, multilingualism is often seen as "a resource, not a problem to be solved" (Hornberger, 2000).

Multilingual education in Georgia has been going on since 2009. It aims to promote the acquisition of the state language for ethnic minorities and to ensure their equal access to higher education.

It is known that in a multilingual environment, children may face language confusion, which creates difficulties in the process of mastering reading. Multilingual children with dyslexia who have difficulty reading in one language are more likely (with a correlation of about 85%) to have difficulties in the other language as well (Genesee, 2015). Learning a second language is cognitively challenging. Learners with dyslexia who have already impaired phonological processing abilities have particularly difficulty in phonological awareness of a foreign language, decoding words, developing vocabulary, and comprehending grammatical structures (Kilpatrick, 2015; EAB, 2021). On average, students with dyslexia need twice as many repetitions to grasp a new word firmly as their peers (Ramus & Szenkovits, 2008).

Dyslexia, as a specific learning difficulty with a neurodevelopmental nature (International Dyslexia Association, 2002), does not disappear when a child is proficient in many languages. It affects the complexity of the language acquisition process, creating unique barriers for multilingual learners (Peer & Reid, 2000).

Multilingual children who are still developing language competence are particularly at risk. The detection of dyslexia in them may be delayed or misinterpreted as a general delay in language development. Because of this, it is necessary to double the assessment in both languages (Shashviashvili, 2023).

Studies, especially in the European context, show that more than 50% of foreign language teachers consider themselves incompetent to work with students with dyslexia, as they have not received specialized training on the principles of second language learning (Atar & Amir, 2023). This confirms that the methods used in the school are not tailored to their needs. The

methods they use are often more likely to hinder a child with dyslexia than help them succeed in learning a foreign language (Schneider, 2009).

Studies have shown that the structured literacy approach improves the early detection of dyslexia and offers effective strategies even for children who have not yet been diagnosed (Torgesen, 2005).

All students with dyslexia have different strengths and weaknesses, but it can generally be said that their problems with learning a foreign language occur due to two main reasons: the peculiarity of dyslexia and the way in which foreign languages are taught at school (Schneider, 2009. Lina Knudsen, 2012).

The grammatical structures of a foreign language are often abstract and require a metalinguistic awareness of the language.

- Morphological difficulties: Students with dyslexia have difficulty recognizing and using morphological rules (e.g., suffixes, prefixes), affecting both vocabulary comprehension and spelling (Carlisle, 2000).
- Syntactic Processing: Processing long, complex sentences, while learning a second language, presents additional difficulty, as the student has to decipher new vocabulary and complex structure at the same time.

For multilingual children with dyslexia, a fundamental change in teaching methodology is necessary. Researchers emphasize that students with dyslexia who receive structured literacy-based instruction improve interlanguage interchangeability and enhance those phonological skills that are impaired by dyslexia (Torgesen, 2005).

That is why the integration of the principles of structured literacy into the process of learning a foreign language is the only effective way to overcome methodological conflict and promote multilingual learners with dyslexia in complete literacy.

Structured Literacy

Structured literacy is based on the notion that reading is learned, not an innate process. As **Seidenberg (2017)** and **Moats (2020)** argue, effective reading instruction should make invisible linguistic structures obvious.

Structured Literacy is an evidence-based learning approach that is recognized as one of the most effective approaches for the prevention and management of dyslexia in multilingual learners. It is an evidence-based approach (Brady, 2011; Fletcher et al., 2007; Foorman et al., 2016; IDA, 2018; NRP, 2000; TKI 2020a), which is based on the science of teaching reading and how the brain acquires and processes information (Reyna, 2004; Seidenberg, 2017).

Structured Literacy encompasses explicit, systematic, and coherent instruction based on the thorough teaching of language structure: phonology, grapheme-phonemic matching, morphology, syntax, and semantics (Spear-Swerling, 2019). It employs multisensory strategies and considers the cognitive processes that become necessary in teaching reading and writing. All elements of language (sound, letter, morpheme, etc.) It is taught in a pre-planned sequence - from simple to complex.

Studies conducted in the USA have shown that as a result of the use of structured literacy programs, the reading skills of students at risk of dyslexia improved by an average of 67% within 6 months (Torgesen, 2005). It has also been proven that in bilingual children, a structured approach significantly reduces reading lag and enhances vocabulary and grammatical development.

According to the IDA (International Dyslexia Association), structured literacy is the gold standard for dyslexia. They state that this approach should be used for both English-speaking and multilingual children, especially if the two languages differ phonologically and graphically. (IDA, 2019)

A study conducted in Israel found that Hebrew-English multilingual children diagnosed with dyslexia were successful in learning with a structured literacy approach when paying attention to the specific difficulties of both languages: the consonant-grammar system of Hebrew and the dysphonetic characteristics of English (Katzir, 2015). Research conducted on English-Spanish multilingual children also shows that multilingual children with dyslexia respond better to methods that clearly reflect phonemic and morphological structures in both languages. Structured learning is effective for them (Kovelman, Baker, & Petitto, 2008)

The Essence of Structured Literacy

The term "structured literacy" was coined by the International Dyslexia Association (IDA) in July 2014. The IDA Board of Directors has chosen "structured literacy" as an umbrella term that encompasses all reading teaching approaches that align with the IDA's Standards of Knowledge and Practice for Reading Teachers (KPS). IDA developed KPS in 2010. It specifically outlines and identifies the knowledge/skills that teachers must have in order to teach their students how to become competent readers. Structured literacy does not rely solely on the natural principle of language development (natural reading acquisition), but also intentionally teaches language structure, which is especially important for children at risk of

dyslexia. Unfortunately, popular reading approaches such as directed reading or balanced literacy, which think that reading develops naturally through exposure, are not effective for readers who have reading problems, as they do not focus on the decoding skills these students need to succeed in reading. Structured literacy not only helps students with dyslexia, but there are important things to consider. Structured literacy not only helps students with dyslexia, but there are important ones. Evidence that it is effective for other readers as well.

Structured Literacy is a research-based approach that includes explicit, systematic, and coherent instruction based on the thorough teaching of language structure:

> ➢ Phonology
> ➢ Grapheme-phonemic correspondence (sound-symbol correspondence)
> ➢ Teaching grains.
> ➢ Morphology
> ➢ Syntax
> ➢ Semantics

Structured literacy prepares students to decode words in a clear and systematic way. Decoding and understanding the structure of language are at the core of structured literacy. Teaching structured literacy is characterized by several elements:

Phonology. Phonology is the study of the sonic structure of spoken words, which is a critical element of structured language teaching. An important aspect of phonological awareness is phonetic awareness, that is, the ability to divide words into their constituent sounds, which are called phonemes. Understanding the individual speech sounds (phonemes) that make up words is a critical foundation for learning reading and spelling. A phoneme is the smallest unit of speech that can change the meaning of a word. It can differ from other sounds of the same language. In Georgian, for example, the word "road" has three phonemes (g-z-a). Phonological awareness includes the ability to understand a rhyme, count words in a sentence, and clapping to distinguish syllables - in words.

Correspondence of sound-symbol (phoneme-graphene). Sound-symbol association. Once students have developed an awareness of the phonemes of a spoken language, they should learn to correspond to phoneme symbols or printed letters. Teaching and mastering the association of sound-symbols should take place in two directions: from visual to auditory (reading) and from auditory to visual (spelling). In addition, students should master combining sounds and letters into words, as well as dividing whole words into separate sounds. Teaching is called phonetics. The basic code for written words is a system of correspondence between phonemes and graphemes. This system is often referred to as an alphabetic code or a system of

written characters. The correspondence between letters and speech sounds in English is more complex and variable than in some languages, such as Spanish or Italian. Nevertheless, conformities can be explained and taught through systematic, explicit, cumulative instruction, which can take several years to complete.

Teaching syllables. A syllable is an oral or written language unit with a single vowel. Instruction includes teaching on the types of syllables. Knowing the types of syllables is an important organizational idea. With knowledge of the type of syllable, the reader can better identify the vowel sound in a syllable. The rules for dividing syllables raise the reader's awareness - a long, unfamiliar word can be divided - into syllables, to read the word accurately. Through explicit instruction and practice, students with dyslexia can learn to understand and remember the rules for using letters in the writing system. Recognizing the patterns of written syllables helps readers break down long words into readable parts and understand spelling rules.

Morphology. Morpheme is the smallest but most important unit of language. In the structured literacy approach, morphemic awareness is considered one of the key important components for effective reading learning. A structured literacy curriculum involves the study of key words, roots, roots, prefixes, and suffixes. Children with developed morphemic awareness are more likely to understand the meaning of unknown words because they are divided into parts (Carlisle, 2000). Structured literacy relies on morphemic structure so that children can easily convert phonemic knowledge (sounds) into graphemic knowledge (writing). The morphemic structure helps the child to perceive words more steadily and accurately while recording, as he follows language as a systematic and logical unit (Gillon, 2017).

Syntax. Syntax is a set of principles that define the sequence and function of words in a sentence to convey its meaning. Learning syntax involves understanding parts of speech, grammar rules, and the use of words in sentences. This is essential for the correct development of writing, reading, speech, especially in cases of foreign language learning and/or reading specific problems (e.g., dyslexia). Knowledge of syntax improves the accuracy of communication, the construction and interpretation of texts. Also, through syntax, the child learns the function of words in a sentence, which makes it easier to create grammatically correct texts.

Semantics. Semantics is an aspect of language that deals with meaning. Meaning is conveyed both in individual words and phrases and sentences. Understanding of both oral and written language develops through learning to interpret the meanings of words (vocabulary),

phrases and sentences, and to understand the organization of text. Reading comprehension is a product of both word recognition and language comprehension. Throughout the teaching of structured literacy, students should have support in working with different types of texts – stories, informational text, poetry, drama, etc.., in understanding the meanings (vocabulary) of foreign words, even if this text is read aloud to students who cannot yet read it independently. Reading valuable texts that stimulate deep thinking is a critical component of structured literacy.

With all this in mind, the explicit and systematic instruction offered by structured literacy at all levels of language structure (phonology, spelling, morphology, syntax, semantics) ensures that:

1. Phonological deficits can be overcome by teaching clear phonological awareness and grapheme-phonemic conformity.

2. Enhance linguistic comprehension through in-depth, structural analysis of morphology, syntax, and semantics.

Principles and Methods of Teaching Structured Literacy:

Obvious. Teaching structured literacy requires "explicit teaching"—targeted teaching of all concepts, with continuous student-teacher collaboration. In teaching structured literacy, the teacher explains each concept directly and clearly. Lessons include an instructional routine, and the student uses each new concept in reading and writing words and text, under the direct supervision of the teacher, who gives immediate feedback. Students are not expected to discover or intuitively understand language concepts simply by reading.

For students to grasp a large, new concept, it must be broken down into smaller parts, where each part is taught systematically and explicitly. Explicit learning is carried out through the "I do, we do, you do" framework. When teachers support students' ability to sort out information, this acquired knowledge is transferred to long-term memory and frees up working memory to engage in the next "new steps."

Systematic and cumulative

The teaching of structured literacy is systematic and cumulative. Systematic means that the organization of the material follows the logical sequence of the language. The sequence should start with the simplest and most basic concepts and elements and methodically move on to more complex concepts and elements. Cumulative means that each step must be based on previously learned concepts. The goal of systematic teaching is to use language knowledge

automatically and fluently to incorporate what is read into the content. A consistent learning routine reduces confusion and provides students with a foundation for new knowledge.

Practical, engaging, and multimodal

Structured literacy teaching should be enriched with multisensory strategies to incorporate visual, auditory, and tactile/kinesthetic sensations into learning to improve memory. Methods often involve hands-on learning, such as using cards, hand gestures to establish the memory of associations, constructing words with magnetic letters, assembling sentences with words written on cards, color-coding sentences into paragraphs, etc. Listening, speaking, reading, and writing are often paired together to promote new learning.

Diagnostic and responsive

The teacher must be skilled in individual teaching. This is teaching that meets the diverse needs of the learner. Teaching is based on careful and continuous assessment, both informally (e.g., observation) and formally (e.g., with standardized measurements). The content presented must be assimilated to the degree of automation. Automation is critically important to free up the learner's attention and cognitive resources. The teacher uses students' response rates to determine the pace in the lesson, the volume and content of the presentation, and the number of practical tasks. The teacher monitors progress through observations and short quizzes that measure the recall of what has been learned.

Thus, structured literacy is a comprehensive theoretical framework that explicitly and systematically links the structure of language with the ability to comprehend reading, making it the most effective tool for preventing reading difficulties.

Research Results

More than two decades of empirical evidence and international findings confirm structured literacy as the most effective model for reading disorders. It also demonstrates that for multilinguists, key elements of structured literacy require thoughtful adaptation. Practitioners should assess phoneme-graphemic relevance in different languages, consider spelling depth (i.e., transparency and opacity), and use bilingual assessments to ensure that second language proficiency is not associated with dyslexia.

Torgesen (2005) showed that at-risk learners who receive structured literacy-based interventions improve reading accuracy by an average of 67% over six months. Similarly, the

National Center for Literacy Improvement (NCIL) and other leading research organizations have identified the crucial role of structured literacy in multilingual populations:

- Strictly systematic and explicit instruction in structured literacy reduces the risk of Cross-Linguistic Interference, which often confuses second language learners. Structured literacy clearly teaches what elements are different between the first and second languages, thereby preventing misuse of the rules of one language in another.

- Structured literacy not only enhances phonological processing but also teaches morphology clearly (e.g., stems, prefixes, suffixes). This approach is particularly important because morphological awareness is one of the most transferable skills among languages (Bialystok, 2018).

- These findings are validated across diverse linguistic settings, suggesting that structured literacy is not limited to the spelling of one particular language, but rather is based on universal cognitive principles (Spear-Swerling, 2019).

Cross-linguistic interference is particularly problematic in the context of dyslexia. Due to the phonological deficiency, they have difficulty recognizing the sound system of a new second language independently, therefore, they often resort to guessing and the use of first language norms, which increases the number of errors and hinders the accuracy and speed of reading.

Structured literacy is effective precisely because it explicitly teaches the student what differences exist between languages (thereby reducing negative interference) and how to use common linguistic skills (morphology learned in the mother tongue) in favor of the second language.

A meta-analysis conducted by **the International Dyslexia Association (IDA)** and **the National Reading Panel (2000**) further confirms the advantage of structured literacy over exposure-based methods. Structured literacy instruction provides a double gain in deciphering and comprehension compared to *balanced literacy* (Kilpatrick, 2015).

Impact on Georgia and the Multilingual Context

Integrating structured literacy into Georgian education can dramatically change national literacy outcomes. To achieve sustainable impact, implementation must take place in several dimensions:

1. Introduce structured literacy modules in universities and give teachers access to resources and lesson plans for this approach.

2. To develop a national curriculum for literacy development, considering the principles of reading science and in accordance with the specific Georgian phonological and orthographic content.

3. To establish bilingual and culturally sensitive screening tools for the early detection of reading difficulties in Georgian, Armenian, and Azerbaijani-speaking populations.

Through these efforts, Georgia can establish itself as a regional leader in the field of structured, evidence-based reading teaching that supports both literacy and social inclusion.

It is worth considering the fact that despite the strong evidence, the implementation of structured literacy requires systemic transformation. Teachers need specialized training to interpret language data, provide multisensory instruction, and monitor progress.

The Ministry of Education can pilot structured literacy programs in multilingual regions to assess outcomes and scalability.

Conclusion

As part of my desk research, significant concurring evidence indicates that explicit, systematic, cumulative learning—key features of structured literacy—improves decoding, word reading accuracy, spelling, and reading comprehension in students with dyslexia.

Therefore, it should be assumed that in Georgia, the introduction of an evidence-based approach to structured literacy, especially in multilingual education, will not only help prevent dyslexia, but also improve the quality of literacy as a whole.

The introduction of structured literacy will not only improve individual outcomes but also strengthen the national culture of literacy, ensuring that no child's potential will be limited by fewer reading abilities or different learning outcomes.

References

Atar, S., & Amir, O. (2023). *Teachers' preparedness for teaching students with dyslexia in foreign language classrooms*. Journal of Learning Disabilities, 56(2), 145–160.

Bialystok, E. (2018). *The bilingual adaptation: How minds accommodate experience*. Psychological Bulletin, 144(7), 567–579.

Brady, S. (2011). *Efficacy of phonics teaching for reading outcomes: Indications from*

randomized controlled trials. Perspectives on Language and Literacy, 37(1), 20–26.

Carlisle, J. F. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing: An Interdisciplinary Journal, 12*, 169–190.

Castles, A., Rastle, K., & Nation, K. (2018). Ending the reading wars: Reading acquisition from novice to expert. *Psychological Science in the Public Interest, 19*(1), 5–51.

Fletcher, J. M., Lyon, G. R., Fuchs, L. S., & Barnes, M. A. (2007). *Learning disabilities: From identification to intervention*. Guilford Press.

Foorman, B. R., Koon, S., Petscher, Y., Mitchell, A., & Truckenmiller, A. (2016). Examining general and specific factors in the dimensionality of oral language and reading in 4th–10th grades. *Journal of Educational Psychology, 108*(6), 884–899.

Garcia, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.

Genesee, F. (2015). Myths about early childhood bilingualism. *Canadian Psychology, 56*(1), 6–15.

Gillon, G. (2017). *Phonological awareness: From research to practice* (2nd ed.). Guilford Press.

Goodwin, A. P., & Jiménez, R. T. (2020). *Word learning in multilingual classrooms*. Routledge.

Grosjean, F. (2010). *Bilingual: Life and reality*. Harvard University Press.

Helland, T., & Morken, F. (2016). Neurocognitive development and learning to read in dyslexia. *Journal of Learning Disabilities, 49*(2), 89–102.

Hornberger, N. H. (2000). *Multilingual education policy and practice*. Multilingual Matters.

International Dyslexia Association. (2002). *Definition of dyslexia*. IDA.

International Dyslexia Association. (2018). *Structured literacy: Effective instruction for students with dyslexia and related reading difficulties*. IDA.

International Dyslexia Association. (2019). *Knowledge and practice standards for teachers of reading*. IDA.

Katzir, T. (2015). Reading and writing in bilingual children with dyslexia. *Annals of Dyslexia, 65*(2), 127–141.

Kilpatrick, D. A. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Wiley.

Koda, K. (2007). Reading and language learning: Crosslinguistic constraints on second language reading development. *Language Learning, 57*(1), 1–44.

Kovelman, I., Baker, S. A., & Petitto, L. A. (2008). Bilingual and monolingual brains compared. *Journal of Cognitive Neuroscience, 20*(1), 153–169.

Lisbeth M. Brevik, Rolf Vegar Olsen, Glenn Ole Hellekjær. (2016). "The complexity of second language reading: Investigating the L1-L2 relationship".

Moats, L. C. (2020). *Teaching reading is Rocket science* (2020 update). American Federation of Teachers.

National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment*. National Institute of Child Health and Human Development.

Nickola Wolf Nelson. (2016). *Language disorders in school-age children and adolescents*. Pearson.

Paradis, J., Genesee, F., & Crago, M. (2021). *Dual language development and disorders* (3rd ed.). Brookes.

Peer, L., & Reid, G. (2000). *Multilingualism, literacy, and dyslexia*. David Fulton.

Ramus, F., & Szenkovits, G. (2008). What phonological deficit? *Dyslexia, 14*(1), 1–9.

Reyna, V. F. (2004). Memory in education. *Psychological Science in the Public Interest, 5*(1), 3–58.

Schneider, E. (2009). *Foreign language learning and dyslexia*. Multilingual Matters.

Seidenberg, M. S. (2017). *Language at the speed of sight*. Basic Books.

Shashviashvili, M (2023). Difficulties in learning a second language and ways to overcome them in pupils with dyslexia. *International Journal **of Multilingual** Education*, (24), 77–86.

Shashviviashvili, M (2024). Reading Development Strategies Elementary School Students with Reading Difficulties. Tbilisi State University.

Spear-Swerling, L. (2019). *A literacy lens on special education*. Brookes.

Torgesen, J. K. (2005). Preventing reading disabilities in young children. *American Educator, 29*(3), 8–19.

Ziegler, J. C., & Goswami, U. (2005). Reading acquisition and developmental dyslexia across languages. *Psychological Bulletin, 131*(1), 3–29.