

Challenges And Strategies For The Academic Inclusion Of Dyslexic Students In Higher Education

Maria Teresa Alves De Lima¹, Luiz Augusto Da Silva²,
Kelly Cristina Nogueira Soares², Bianca Raquel Garcia Fagundes Pereira¹

1. Graduation in Pedagogy, Centro Universitário Guairacá, Guarapuava, Paraná, Brazil.

2. Post-Graduation Program in Health Promotion, Centro Universitário Guairacá, Guarapuava, Paraná, Brazil.

Abstract

Dyslexia is a specific learning disorder affecting reading and writing, characterized as a neurobiological disorder that hinders the acquisition and development of these languages. The presence of dyslexia in higher education is a reality that impacts many students. Although it is often identified and addressed in the early school years, many students with dyslexia continue to face academic challenges upon entering higher education. The research aims to analyze the emotional and social barriers faced by students with dyslexia throughout their academic journey while also seeking to identify the best educational practices and curriculum adaptations capable of facilitating the learning and development of these students in the university context. The methodology employed in this study is of a basic nature with a qualitative approach, focusing on exploratory research. Initially, a collection of materials for theoretical grounding was conducted, followed by readings and note-taking. After selecting the topics, the search for activities and dynamics aligned with the project's objective of developing a proposal for an educational notebook was undertaken. Following the creation of an initial draft, feedback from the advisor regarding texts, images, and design suggestions was received. To make the necessary adjustments according to the feedback, further consultations with the materials were conducted, resulting in a new compiled version. Once this stage was completed, the text underwent formatting according to the standards of the Brazilian Association of Technical Standards (ABNT), followed by proofreading for spelling and grammar. After the final version was reviewed by the advisors, a design team performed the final editing of the product.

Keywords: Dyslexia; Higher Education; Inclusion; Academic Challenges; Educational Strategies.

Date of Submission: 24-11-2023

Date of Acceptance: 04-12-2023

I. Introduction

Dyslexia, a specific neurobiological learning disorder, significantly impacts individuals' reading and writing abilities, affecting 5 to 17% of the global population, with a prevalence of 4% in the Brazilian context (ABD, 2016). This disorder, characterized by unexpected difficulties in the phonological aspect of language, poses a cognitive challenge that goes beyond mere lack of effort or deficiency; instead, it is a neurological condition. Often undiagnosed in the early school years, this disorder persists into advanced stages of academic development, including Higher Education.

Early identification of dyslexia is crucial, as many cases are diagnosed only in high school or higher education. ABD (2016) highlights indicative signs such as inattention, distraction, disinterest in printed books, reading and writing difficulties, disorganization, delays in assignment submission, and vocabulary problems. In this scenario, there is a need to implement effective inclusion practices, providing support not only in theory but also in practice for dyslexic individuals who face not only academic obstacles but also psychological challenges arising from the misunderstanding of the disorder.

This research aims to critically address dyslexia in higher education, identifying the obstacles faced by these students and proposing strategies that promote inclusion, academic improvement, and equal opportunities. Therefore, the central question guiding this study emerges: "What is lacking for Higher Education Institutions to be truly inclusive?"

In this context, it is imperative to explore facilitating learning methods that meet the specific needs of dyslexics. The implementation of diversified strategies, including adaptations, personalized materials, and the exploration of new methodologies, emerges as an essential approach to enhance the learning of these students. With this purpose, the research aims to foster discussion about dyslexia in the higher academic context, highlighting challenges and proposing effective guidelines for promoting inclusion, seeking to guide educators in the use of pedagogical practices that make educational institutions more accessible to all students, regardless of their neurobiological conditions.

II. Methodology

The methodology employed in this research will be of a basic nature with a qualitative approach, while the focus of the study objects will be exploratory. The research aims to address the concept of dyslexia and the inclusion process of these individuals in Higher Education Institutions. To achieve this objective, this monograph will use citations from articles, books, manuals, and dissertations as a basis to explain what dyslexia is, the characteristics of dyslexic students, the role of the teacher in the face of this learning difficulty, and what public policies are available to support these students.

After the exploratory research, technological research was conducted, focusing on the application of the knowledge obtained from the data collection. This led to the development of a tangible product, which was a proposal for a pedagogical notebook

The main product of this project is an ebook presented in the form of a digital booklet. This booklet is available at the link

(<https://drive.google.com/file/d/1vZQihz7FGELStkbJ1Ki14W3Gy8Z2DESB/view?usp=sharing>) or QR code below, allowing easy access and utilization by teachers and other interested individuals.



It is important to note that several important steps were followed between the choice of the topic and the development of the product. Firstly, a collection of materials for theoretical grounding was conducted, followed by readings and notetaking. After selecting the topics, the search for activities and dynamics that aligned with the project's objective of developing a proposal for a pedagogical notebook. After creating an initial draft, feedback from the advisor regarding the texts, images, and design suggestions was received. To make the necessary adjustments according to the feedback, further consultations with the materials were conducted, and a new version was compiled. Once completed, the text underwent formatting according to the standards of the Brazilian Association of Technical Standards (ABNT), followed by proofreading for spelling and grammar. After the final version was reviewed by the advisor and co-advisor, a design team performed the final editing of the product.

III. Results and Discussion

The challenge faced by dyslexic students without early diagnosis engenders a series of characteristics that are often misunderstood or underestimated. Such students encounter significant obstacles in reading, writing, and spelling, even when endowed with appropriate cognitive and intellectual abilities. Lack of understanding from educators and peers can result in low self-esteem, frustration, and anxiety related to the school environment. In this context, it is imperative to identify these students early, providing them with the necessary support to develop learning strategies adapted to their individual needs. This will enable them to fully achieve their academic and personal potential.

Dyslexia, as discussed by Gonçalves et al. (2020), is intrinsically related to difficulties in the association between sound and letter, manifested in letter swapping or inversion of order. Additionally, dyslexic individuals may include or exclude letters in specific words. Investigation of brain activity patterns during reading reveals marked differences between those without dyslexia and those affected by this disorder. In particular, reduced activity in regions associated with letter identification and word meaning comprehension stands out, with compensation through increased activity in frontal areas and occasionally in the right hemisphere during the reading process (Cavalcante, 2019).

Brain imaging studies, as cited by Shaywitz et al. (2006), uncover differences in brain activation patterns between proficient readers and those with reading difficulties. Proficient readers activate three systems in the left hemisphere, while readers with difficulties show less activation in specific areas located in the posterior part of this hemisphere. These findings contribute to a deeper understanding of the challenges faced by dyslexic students.

The Brazilian Dyslexia Association (ABD, 2016) and the International Dyslexia Association (IDA, 2019) enrich the understanding of the dyslexic profile, highlighting difficulties in reading, visual and/or auditory

memory, as well as various manifestations that can occur in different developmental stages. These manifestations include delayed acquisition of oral language, pronunciation problems, confusion with temporal and spatial concepts, along with challenges in alphabet learning and activities related to reading and writing. Phonological awareness, insecurity in reading long words, and spelling errors are also emphasized characteristics.

It is observed that the signs presented by people with dyslexia vary in intensity from one individual to another, highlighting the complexity and heterogeneity of this disorder. In light of these considerations, it becomes essential to adopt pedagogical and support approaches that address the specific needs of these students, promoting a more inclusive educational environment conducive to the full development of their capacities.

IV. The Role of the Teacher in Dealing with Dyslexic Students

Dyslexia, predominantly manifested in the school context, poses a significant challenge for affected individuals. Unlike occasional manifestations in other scenarios, school emerges as an environment where reading and writing, constantly employed and valued, stand out as areas of exacerbated difficulty for dyslexics. However, the current educational structure is not adapted to meet the specific needs of this group, as school goals, content, teaching methods, organization, and evaluation neglect their particularities. As a result, difficulties in adaptation and discrimination are frequently observed among individuals with dyslexia, highlighting the inadequacy of the conventional school environment to meet their demands (ABD, 2016).

The urgency of knowledge about learning difficulties becomes evident to avoid labeling and stigmatizing students, wrongly attributing laziness to them. In this sense, the role of the educator plays a crucial role. Teachers adequately prepared and willing to understand the differences and difficulties of their students can create a welcoming learning environment. Recognizing that diverse skills manifest in areas beyond reading and writing, it is essential to value the unique abilities that each dyslexic student can offer, whether in painting, music, or other artistic spheres (ABD, 2016).

Litto (apud ABD, 2016) emphasizes the teacher's responsibility to stimulate the joy of learning, acting as an alchemist in contextualizing and giving meaning to knowledge, as well as being an expert in fostering student self-esteem. This pedagogical approach, focused on positive reinforcement, plays an essential role in promoting the academic and personal development of these students.

Regarding pedagogical strategies, it is recommended that teachers adopt inclusive approaches, dividing classes into exposition, discussion, synthesis, or pedagogical games. Clear guidance on activity organization, appreciation of achievements, observation of the pace in performing written tasks, assistance in organizing notes, and promotion of conscientious use of an agenda are crucial strategies. The adoption of clear language in explanation, allowing the use of resources such as tables, calculators, and recorders when necessary, and avoiding repetitive fixation exercises are measures that align teaching with the perspectives of inclusive education (ABD, 2016).

In the school context, educators are expected to act as encouragers, becoming bridges for the continuous academic success of these students. Familiarity with the laws and rights applicable to these students is considered fundamental. The Pedagogical Proposal, as suggested by ABD (2016), proposes adapting the School Regulations to reflect the presence of dyslexic students, establishing an inclusive environment. Informing the educational community about dyslexia, its performance, characteristics, and support forms, as well as ensuring communication channels with specialized professionals, is essential to ensure adequate support for the student, covering areas such as speech therapy, psycho-pedagogy, and psychology, according to the type and level of dyslexia identified.

In the face of these challenges, it is up to the teacher to adopt strategies that meet the specific needs of the dyslexic student. Planning classes considering their particularities, understanding that evaluation methods may vary, conducting oral exams when possible, and otherwise using clear assessments with objective questions are essential practices. Valuing the student's prior knowledge and skills, recognizing that dyslexia does not compromise their intelligence, is fundamental. A teacher committed to understanding the difficulties faced by dyslexic students can effectively make a difference in their lives, contributing to breaking the stigma associated with the classroom as a place of apprehension and fear.

V. Final Considerations

Throughout this research, the rights of dyslexic students in the context of higher education were analyzed. Diving into the complexities of this educational challenge, we were able to distinguish not only the barriers faced by these students but also the strategies and pedagogical practices that prove effective in assisting them in overcoming the difficulties imposed by dyslexia.

This analysis revealed a varied panorama where educational inclusion is not only an ethical necessity but also an opportunity to enrich diversity and perspective within higher education institutions. It is clear that dyslexia, when addressed appropriately, should not be seen as an insurmountable obstacle but rather as a challenge that can be overcome with the right tools and adequate support. Awareness of the specific needs of students with

dyslexia is crucial not only for educators but also for the entire academic community.

The implementation of inclusive practices, such as material adaptations, the use of assistive technology, and emotional support, emerges as an essential component for the success of these students in the university environment. Furthermore, it is undeniable to recognize that dyslexia does not define a student's potential. Many individuals with dyslexia possess exceptional skills in areas such as creativity, problem-solving, and innovative thinking.

Therefore, by providing an inclusive and supportive learning environment, we are not only fulfilling our ethical duty to offer equal opportunities to all students but also enriching the academic environment with a variety of talents and perspectives. As researchers, educators, and members of society, we have the responsibility to continue refining our pedagogical practices, promoting awareness, and advocating for inclusive educational policies. Only through collective effort can we ensure that every student, including those with dyslexia, has access to quality higher education and the opportunities it provides.

In doing so, we not only transform individual lives but also enrich our world with diversity of thought and knowledge that each student brings. This study represents not just a step but a call to continuous action, aiming for the construction of a truly inclusive and equitable educational future for all.

References

- [1]. American Psychiatric Association. (2014). *Diagnostic And Statistical Manual Of Mental Disorders (5th Ed.)*. DSM-5, Porto Alegre: Artmed. P. 66-74.
- [2]. Arruda, A. T. F. P.; Castro, E. L. De; Barretto, R. F. (2020). Inclusion In Higher Education: A Challenge For Teaching. *Ensino Em Perspectivas*, 1(2), 1-6.
- [3]. Associação Brasileira De Dislexia. (2017). *Statistical Information About Dyslexia: Database 2013-2021*. São Paulo.
- [4]. Associação Brasileira De Dislexia. (2016). *What Is Dyslexia?* São Paulo.
- [5]. Associação Brasileira De Dislexia. (2016). *Who We Are?* São Paulo.
- [6]. Associação Internacional De Dislexia. (2021). *IDA Dyslexia Guide: What Every Family Should Know*. P. 3-11.
- [7]. Borba, A. L.; Braggio, M. Á. (2016). *How To Interact With Dyslexic Students In The Classroom*. Associação Brasileira De Dislexia, São Paulo.
- [8]. Brasil. (2021). Law No. 14,254, Of November 30, 2021. Provides For Comprehensive Monitoring For Students With Dyslexia Or Attention Deficit Hyperactivity Disorder (ADHD) Or Another Learning Disorder. Brasília, DF: President Of The Republic.
- [9]. Brasil. (2017). Bill No. 8489/2017, Of September 5, 2017. Provides For The Conditions For Taking Exams For People With Dyslexia Proven By Means Of A Medical Report. Brasília, DF: Chamber Of Deputies.
- [10]. Castanho, D. M.; Freitas, S. N. (2006). Inclusion And Teaching Practice In Higher Education. *Revista Educação Especial*, N. 27, 1-4. Federal University Of Santa Maria, Santa Maria, Brazil.
- [11]. Cavalcante, J. R. S. (2018). *Dyslexia, An Approach For Family Members*. Family, 2018.
- [12]. Conde, É. P.; Soares, M. V. (2021). The Teacher And The Potentialities Of The Dyslexic Student. *Revista Educação Pública*, 21(30).
- [13]. Ferrari, M. A. L. D.; Sekkel, M. C. (2007). Inclusive Education In Higher Education: A New Challenge. *Psicologia: Ciência E Profissão*, 27(4), 636-647.
- [14]. Furlan, F.; Ribeiro, S. M. (2015). The Process Of Inclusion In Higher Education: Meetings And Disagreements Of The Subjects Participating In This Process. *POIÉSIS-Unisul, Tubarão*, 9(16), 384-398.
- [15]. Gonçalves, P.; Peixoto, A. (2020). 10 Questions And Answers To Understand Dyslexia. *Dialética E Realidade Publisher, Curitiba*, 1, 1.
- [16]. Matta, C. G. S. Da; Perrut, R. M. P.; Alcântara, E. F. S. De. (2018). DYSLEXIA: A Different Way Of Learning. *Episteme Transversalis*, 8(2).
- [17]. Menezes, C. C. De; Januário, M. Do S. A.; Sobral, M. Do S. C. (2018). Teaching/Learning Of Dyslexic Children In The Early Grades Of Elementary School. *Id On Line Rev. Mult. Psic. V.12, Nº 42, Supl. 1*, 536-547.
- [18]. Moura, A. R. De; Guedes, I. C.; Cruz, J. L. S. Da; Ferreira, M. Da C.; Paz, R. C. P. Da; Calomeni, M. R. (2012). Differential Characteristics Of Learning Difficulties In Reading And Writing. *Efdeportes.Com, Digital Magazine, Year 17 · No. 174 | Buenos Aires*.
- [19]. Neurosaber. (2018). *How To Understand Dysorthography And Dysgraphia?* Neurosaber Institute, Paraná.
- [20]. Omote, S. (2016). Attitudes Towards Inclusion In Higher Education. *J Res Spec Educ Necessidades*, 211-215.
- [21]. Poker, R. B.; Valentim, F. O. D.; Garla, I. A. (2018). Inclusion In Higher Education: The Perception Of Teachers From A Public Institution In The Interior Of The State Of São Paulo. *Psicologia Escolar E Educacional*, 22(Spe), 127-134.
- [22]. Resende, V. B. De. (2014). *Dyslexia*. Center For Literacy, Reading, And Writing-CEALE, Minas Gerais.
- [23]. Rocha, M. A. M.; Cabussú, M. A. S. T.; Soares, V. G.; Lucena, R. (2009). *Dyslexia: Inclusion Attitudes*. *Revista Psicopedagogia, Bahia*, 26(80), 242-53.
- [24]. Rodrigues, S. D.; Ciasca, S. M. (2016). *Dyslexia In School: Identification And Possibilities Of Intervention*. *Revista Psicopedagogia, São Paulo*, 33(100), 86-97.
- [25]. Santos, M. (2020). Teaching Methodologies And Inclusion Of Students With ADHD And Dyslexia In Higher Education. *International Meeting On Management, Development, And Innovation (EIGEDIN)*, 4(1).
- [26]. Shaywitz, S. E.; Shaywitz, B. A. (2006). *Early Dyslexia And Its Impact On Early Socioemotional Development*. Learning Disorders, USA.
- [27]. Signor, R. (2015). *Dyslexia: A Historical And Social Analysis*. *Revista Brasileira De Linguística Aplicada*, 15(4), 971-999. [Link](Insert The Link Here) Accessed On: November 21, 2021.
- [28]. Siqueira, G. M. De O.; Silva, L. R. Da; Ribeiro, P. M. (2016). Inclusive Education In Higher Education: Challenges And Possibilities. *Revista Científica Facmais*, 5(1).
- [29]. Thomas, A. Da S. (2005). Inclusion In Higher Education: "-Nobody Was Prepared To Work With These Students (...) This Certainly Requires A Special Policy...". *GT: Special Education, Rio Grande Do Sul*, N. 15.