


## PEDAGOGICAL PRACTICES FOR THE INCLUSION OF NEURODIVERGENT STUDENTS (ASD, ADHD, DYSLEXIA)

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### ABSTRACT

This book chapter aims to analyze inclusive pedagogical practices directed at the schooling of neurodivergent students, focusing on Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), and dyslexia within the context of basic education. The methodology is based on a qualitative bibliographic review grounded in national and international scientific literature by recognized authors such as Vygotsky, Mantoan, Barkley, and Lyon, as well as official documents related to inclusive education policies. The results indicate that pedagogical practices grounded in curriculum flexibility, active learning methodologies, adapted teaching resources, and recognition of individual strengths significantly enhance student engagement, learning outcomes, and socioemotional development. The findings also emphasize the relevance of continuous teacher education and collaborative work involving schools, families, and multidisciplinary teams. It is concluded that effective inclusion of neurodivergent students requires attitudinal, pedagogical, and organizational changes, moving beyond standardized teaching models toward an equitable, accessible, and diversity-centered educational approach.

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## INTRODUCTION

The diversity present in educational contexts has expanded significantly in recent decades, requiring schools to adopt pedagogical practices that address students' singularities. In this scenario, neurodiversity emerges as a fundamental concept for understanding neurological differences, recognizing conditions such as Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), and dyslexia not as deficits but as variations of human functioning (Armstrong, 2012). Inclusive education, therefore, takes on the challenge of ensuring access, retention, and meaningful learning for these students in mainstream school environments.

Despite legal and regulatory advances, such as the National Policy on Special Education within the Perspective of Inclusive Education, a gap is still observed between inclusive discourse and the practices effectively implemented in the classroom. Many teachers report difficulties in curricular adaptation, choosing appropriate methodologies, and pedagogical management when faced with the specific educational needs of neurodivergent students, which underscores the need to deepen the debate on inclusive pedagogical practices.

In this context, the research problem guiding this chapter is to understand: which pedagogical practices favor the inclusion and learning of neurodivergent students with ASD, ADHD, and dyslexia in regular education? The general objective is to analyze inclusive pedagogical practices aimed at the schooling of these students. The specific objectives are to: (a) discuss the theoretical foundations of neurodiversity and inclusive education; (b) identify effective pedagogical strategies for serving students with ASD, ADHD, and dyslexia; and (c) reflect on the role of the teacher and teacher training in the school inclusion process.

The justification for this study is based on the social and educational relevance of the theme, since the school plays a central role in promoting equity and valuing human diversity. Understanding and disseminating inclusive pedagogical practices contribute to overcoming attitudinal and pedagogical barriers, as well as to building more democratic and welcoming educational environments.

From a theoretical standpoint, this chapter is supported by Vygotsky's contributions (1997), which emphasize the importance of pedagogical mediation and social interaction in human development; by Mantoan (2015), who advocates for a school that teaches everyone without discrimination; and by Barkley (2013) and Lyon (2003), whose studies provide subsidies for understanding the specificities of ADHD and dyslexia, respectively. These theoretical contributions underpin the analysis of inclusive pedagogical practices discussed throughout the chapter..



## **METHODOLOGY**

### **TYPE OF RESEARCH**

This chapter is characterized by a qualitative approach, bibliographic in nature, and with a descriptive-analytical character. Qualitative research proves adequate as it enables an in-depth understanding of complex educational phenomena—such as inclusive pedagogical practices aimed at neurodivergent students—while considering their social, cultural, and institutional contexts (Minayo, 2014). The choice of bibliographic research is justified by the need to systematize and analyze knowledge already produced on inclusive education, neurodiversity, ASD, ADHD, and dyslexia.

### **DATA COLLECTION PROCEDURES**

Data collection was carried out through the survey and selection of scientific works published in books, articles in indexed journals, dissertations, theses, and official documents. Recognized databases in the fields of education and health—such as SciELO, Google Scholar, and CAPES journals—were consulted, prioritizing national and international publications from the last 15 years, without neglecting classic works relevant to the theoretical framework.

### **INCLUSION AND EXCLUSION CRITERIA**

The inclusion criteria adopted were: (a) studies addressing inclusive pedagogical practices in the school context; (b) works related to the schooling of students with ASD, ADHD, and dyslexia; and (c) research grounded in recognized theoretical frameworks in inclusive education. Studies with no direct relation to the educational context or limited exclusively to clinical approaches, without interface with pedagogical practice, were excluded.

### **ANALYSIS TECHNIQUES AND INSTRUMENTS**

Data analysis was conducted using content analysis, as proposed by Bardin (2016), allowing for the organization, categorization, and interpretation of the information collected. The analytical categories emerged from the systematic reading of the selected material, highlighting themes such as curricular flexibility, active methodologies, adaptation of teaching resources, inclusive assessment, and teacher training. Analytical fiches (note cards/summaries) were used to organize the data, enabling the comparison and synthesis of the main findings.

### **GROUNDING DISCUSSION OF THE DATA**

The discussion of the data was conducted in light of theoretical frameworks supporting inclusive education and the neurodiversity perspective. Vygotsky's contributions (1997) ground the understanding



of learning as a socially mediated process, underscoring the importance of the teacher's role in promoting development. Mantoan (2015) supports the analysis of the inclusive school as a space that values differences, while Armstrong (2012) contributes to understanding neurodiversity as a legitimate expression of human diversity. Studies by Barkley (2013) and Lyon (2003) provide theoretical support for analyzing the specificities of ADHD and dyslexia in the educational context, enabling a critical and reflective articulation between theory and pedagogical practice.

## RESULTS AND DISCUSSION

The analysis of the selected scientific works made it possible to identify a set of recurrent and effective pedagogical practices for the inclusion of neurodivergent students, particularly those with Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), and dyslexia. The results indicate that the realization of school inclusion is directly related to curricular flexibility, the adoption of diversified methodologies, and the teacher's mediating stance.

### INCLUSIVE PEDAGOGICAL PRACTICES IDENTIFIED

Among the main findings, curricular flexibility stands out as a central strategy to meet different ways of learning. Studies indicate that adaptations in objectives, content, strategies, and assessment modes promote greater participation and meaningful learning among neurodivergent students (Mantoan, 2015). For students with ASD, for example, the use of structured routines, visual supports, and predictable activities favors cognitive and emotional organization. In the case of ADHD, practices involving dynamic activities, task fragmentation, and frequent feedback contribute to maintaining attention and engagement. For students with dyslexia, strategies such as the use of adapted texts, shared reading, and multisensory resources prove effective.

Table 1 – Inclusive pedagogical practices for neurodivergent students

Condition	Identified pedagogical practices
ASD	Use of visual supports; structured routines; individualized mediation
ADHD	Active methodologies; short tasks; organized environment
Dyslexia	Multisensory resources; textual adaptation; differentiated assessment

### TEACHER TRAINING AND PEDAGOGICAL MEDIATION

Another relevant finding concerns teacher training as a determining element for the implementation of inclusive practices. The literature shows that teachers with continuing education in inclusive education demonstrate greater confidence and competence to adapt pedagogical strategies and



deal with diversity in the classroom (Pimenta; Ghedin, 2012). In this perspective, pedagogical mediation plays a fundamental role, as per Vygotsky's historical-cultural theory (1997), by emphasizing that learning occurs through social interaction and intentional teacher action.

## CHALLENGES AND POSSIBILITIES FOR SCHOOL INCLUSION

Despite the advances identified, the analyzed studies reveal persistent challenges, such as the scarcity of material resources, teacher workload, and the fragility of institutional support policies. These factors hinder the systematic consolidation of inclusive pedagogical practices. However, the literature also points to possibilities for overcoming these challenges through collaborative work among teachers, multiprofessional teams, and families, as well as through the strengthening of public policies for inclusive education (Armstrong, 2012).

In general, the results corroborate the understanding that the inclusion of neurodivergent students does not depend exclusively on diagnoses, but on the reorganization of pedagogical practices and the valuing of differences as educational potential. Thus, the discussion of the findings reaffirms the need for a school that recognizes diversity as a constitutive element of the teaching–learning process, promoting equity and social justice.

## CONCLUSION

This chapter aimed to analyze pedagogical practices directed at the inclusion of neurodivergent students—focusing on Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), and dyslexia—within the context of basic education. Based on a qualitative approach and a bibliographic review grounded in classic and contemporary authors in inclusive education, we sought to understand which pedagogical strategies contribute to the realization of the teaching–learning process of these students in regular education.

The main results showed that pedagogical practices based on curricular flexibility, the use of active methodologies, the adaptation of teaching resources, and inclusive assessment processes favor participation, engagement, and meaningful learning among neurodivergent students. The relevance of pedagogical mediation and teachers' continuing education also stood out as central elements for building inclusive educational environments capable of respecting students' singularities and strengths.

As a contribution, this study reinforces the understanding of neurodiversity as a legitimate expression of human diversity, moving beyond deficit-based and medicalizing perspectives. By systematizing theoretically grounded inclusive pedagogical practices, the chapter offers support to teachers, administrators, and researchers interested in promoting more equitable, democratic, and accessible education, and contributes to strengthening public policies on inclusive education.



Finally, we suggest conducting empirical research that investigates the application of these pedagogical practices in specific school contexts, as well as studies that analyze continuing teacher education and the impact of collaborative actions among school, family, and multiprofessional teams. Such investigations may broaden the understanding of the challenges and possibilities of school inclusion for neurodivergent students, strengthening the construction of increasingly effective and humanized educational practice



## REFERENCES

1. Armstrong, Thomas. *Neurodiversity in the Classroom: Strength-Based Strategies to Help Students with Special Needs Succeed in School and Life*. Alexandria: ASCD, 2012.
2. Bardin, Laurence. *Análise de conteúdo [Content analysis]*. Tradução de Luís Antero Reto e Augusto Pinheiro. São Paulo: Edições 70, 2016.
3. Barkley, Russell A. *Transtorno de déficit de atenção/hiperatividade: manual para diagnóstico e tratamento [Attention-deficit/hyperactivity disorder: handbook for diagnosis and treatment]*. 4. ed. Porto Alegre: Artmed, 2013.
4. Lyon, G. Reid. *Reading Disabilities: Why Do Some Children Have Difficulty Learning to Read?* Baltimore: Paul H. Brookes Publishing, 2003.
5. Mantoan, Maria Teresa Eglér. *Inclusão escolar: o que é? por quê? como fazer? [School inclusion: what is it? why? how to do it?]*. São Paulo: Moderna, 2015.
6. Minayo, Maria Cecília de Souza. *O desafio do conhecimento: pesquisa qualitativa em saúde [The challenge of knowledge: qualitative research in health]*. 14. ed. São Paulo: Hucitec, 2014.
7. Pimenta, Selma Garrido; Ghedin, Evandro. *Professor reflexivo no Brasil: gênese e crítica de um conceito [Reflective teacher in Brazil: genesis and critique of a concept]*. 7. ed. São Paulo: Cortez, 2012.
8. Vygotsky, Lev Semionovich. *A formação social da mente [The social formation of mind]*. Tradução de José Cipolla Neto et al. São Paulo: Martins Fontes, 1997.