Challenges on teaching English to students with Autism Spectrum Disorder

Desafios no ensino de Inglês para alunos com Transtorno do Espectro Autista Desafíos en la enseñanza del Englés para estudiantes con Trastorno del Espectro Autista

Received: 07/02/2025 | Revised: 07/11/2025 | Accepted: 07/11/2025 | Published: 07/13/2025

Daniel Cruz do Nascimento

ORCID: https://orcid.org/0009-0008-8858-0308 Universidade Federal do Pará, Brasil E-mail: danielcdonascimento@gmail.com

Rosamaria Reo Pereira

ORCID: https://orcid.org/0000-0002-6134-2245 Universidade Federal do Pará, Brasil E-mail: rosareoufpa@gmail.com

Rosana Assef Faciola

ORCID: https://orcid.org/0000-0002-0987-4527 Universidade Federal do Pará, Brasil E-mail: rosanassef@gmail.com

Abstract

Working with inclusive education is still a challenge for both teachers and students, so it is necessary to have reflections, debates, and dissemination of knowledge on this subject. However, more focused studies are needed to translate theory into everyday classroom practices. This study aims to review the theme of teaching English to students with Autism Spectrum Disorder (ASD) through academic material available on the internet. Online research on academic sources, in the last ten years, including articles from the SciELO digital library and Google Scholar, was conducted to explore challenges faced by teachers in teaching English to students with ASD, with a focus on basic education and higher education. The articles were selected for their relevance to the topic and their focus on difficulties encountered by teachers and strategies that can help students with ASD. The results indicated that, although the context is completely different, the challenges are similar, the convergence of these studies is mainly due to the need for teacher training, curricular adaptation, methodology and technological resources as tools to facilitate learning. Given these findings, it is hoped that this study will emphasize the importance of further research and investment in inclusive education, particularly in foreign language teaching.

Keywords: Autism Spectrum Disorder; Challenges; Inclusive Education; Teaching.

Resumo

Trabalhar com educação inclusiva ainda é um desafio tanto para professores quanto para alunos, por isso é necessário que haja reflexões, debates e disseminação de conhecimento sobre esse assunto. No entanto, mais estudos são necessários para traduzir a teoria em práticas cotidianas em sala de aula. Este estudo tem como objetivo revisar o tema de ensino de inglês para alunos com Transtornos do Espectro Autista (TEA) por meio de material acadêmico disponível na internet. Uma pesquisa online em fontes acadêmicas, nos últimos dez anos, incluindo artigos da biblioteca digital SciELO e do Google Acadêmico, foi realizada para explorar os desafios enfrentados por professores no ensino de inglês para alunos com TEA, com o foco na educação básica e ensino superior. Os artigos foram selecionados por sua relevância para o tema e seu foco nas dificuldades encontradas pelos professores e estratégias que podem auxiliar os alunos com TEA. Os resultados indicaram que, embora o contexto seja completamente diferente, os desafios são semelhantes, a convergência desses estudos se deve principalmente à necessidade de formação de professores, adaptação curricular, metodologia e recursos tecnológicos como ferramentas para facilitar a aprendizagem. Diante desses achados, espera-se que este estudo enfatize a importância de mais pesquisas e investimentos em educação inclusiva, particularmente no ensino de línguas estrangeiras.

Palavras-chave: Transtorno do Espectro Autista; Desafios; Educação Inclusiva; Ensino.

Resumen

Trabajar con la educación inclusiva sigue siendo un desafio tanto para los docentes como para los estudiantes, por lo que es necesario fomentar reflexiones, debates y la difusión del conocimiento sobre este tema. Sin embargo, se requieren más estudios para traducir la teoría en prácticas cotidianas dentro del aula. Este estudio tiene como objetivo revisar el tema de la enseñanza del inglés a estudiantes con Trastorno del Espectro Autista (TEA) a través de material académico disponible en internet. Se realizó una investigación en línea en fuentes académicas de los últimos diez años, incluyendo artículos de la biblioteca digital SciELO y de Google Académico, para explorar los desafíos enfrentados por los docentes en la enseñanza del inglés a estudiantes con TEA, con un enfoque en la

educación básica y superior. Los artículos fueron selecionados por su relevancia para el tema y por su enfoque en las dificultades encontradas por los docentes y las estrategias que pueden ayudar a los estudiantes con TEA. Los resultados indicarán que, aunque el contexto sea completamente diferente, los desafios son similares; la convergencia de estos estudios se debe principalmente a la necesidad de formación docente, adaptación curricular, metodologias y recursos tecnológicos como herramientas para facilitar el aprendizaje. Ante estos hallazgos, se espera que este estudio enfatice la importância de más investigaciones e inversiones en educación inclusiva, particularmente en la enseñanza de lenguas extranjeras.

Palabras clave: Trastorno del Espectro Autista; Desafíos; Educación Inclusiva; Enseñanza.

1. Introduction

Special education creates an environment where differences are recognized, and it is just one part of inclusive education, and it is more than a curricular or methodological adaptation, it is a commitment to inclusion. According to Silva and Menezes (2022) inclusive education requires the school to adapt to the students' needs, difficulties, and potentialities, offering quality actions without labels and going beyond structural adjustments. This reality highlights the crucial role of inclusive education because our society is still not prepared to be inclusive, as not everyone has the necessary knowledge about inclusion.

When inclusive education is treated seriously, the students are the ones who win, preparing them for an independent life. The view of many people is to limit the capacity of a certain individual, believing that people with disabilities do not have the right or capacity to be educated. This happens due to stereotypes rooted in our society; limiting these rights means excluding these people from society, besides that, individuals have been left behind throughout history. Until recently, people with disabilities were socially segregated for not fitting into conventional standards and were often seen as intellectually incapable (Silva & Menezes, 2022).

In the school context, a professional without adequate qualifications to deal with a given situation in the classroom, or even without the help of a mediator, ends up neglecting the student because without the ability to properly teach the student will end up being harmed. Foreign language instruction for students with ASD may be hindered by insufficient teacher preparation, which ultimately affects the effectiveness and continuity of the teaching process (Bodnar, Cordeiro & Pesce, 2024, p. 13).

Moreover, it is worth remembering that the requirement for a qualified professional and a good school structure is not a privilege, public and educational policies have contributed to the fundamental rights of these students. According to the Brazilian law of inclusion (Law No. 13.146 of 2015) "the objective is to guarantee equal rights and fundamental freedoms for people with disabilities, promoting their social inclusion and citizenship" (Brasil, 2015).¹

This study is justified by the importance of a society without prejudice and discussing the topic necessary to promote a more inclusive and egalitarian place and contribute to the academic field, as it allows a more in-depth reflection on how to improve pedagogical practices and the challenges faced by teachers in teaching English to children with ASD.

In this sense, this study aims to review the theme of teaching English to students with autism spectrum disorder (ASD). More specifically, it seeks to identify the challenges faced by teachers. The study focused on both basic education and higher education.

2. The Brief Historical Development of Autism Studies

The studies on autism spectrum disorder are currently well advanced. One of the first studies was described by Leo Kanner (1943), who talked it as a unique condition that he called "inborn autistic disturbances of affective contact" (p.217).

¹ Translation from the original: é estabelecido o objetivo de garantir a igualdade de direitos e liberdades fundamentais para as pessoas com deficiência, promovendo sua inclusão social e cidadania (Brasil, 2015).

The study described cases of children with characteristics of social isolation and repetitive behaviors. According to Kanner (1943) the children did not interact due to the lack of affection from their mothers, which became known as refrigerator mothers.

Parallel to Kanner's studies, there are studies by Austrian pediatrician Hans Asperger, who studied a group of children in Europe with characteristics like the ones in Kanner's work, but, according to Côrtes and De Albuquerque (2020), Asperger was interested in the pedagogical processes related to children with disabilities and advocated an education based on understanding for special people. Asperger believed in the importance of pedagogical treatment that was differentiated and adapted to the specific needs of each child, allowing them to develop their potential within their limitations.

Furthermore, it is noted in their studies that these children, both those in Kanner's research and Asperger's, had flaws in their feelings, which altered their relationship with the environment. However, Asperger also realized that they were intelligent and could achieve intellectual performance in adult life. With this, studies on autism have evolved and helped society to understand more about the subject. As society learns more about autism, people also understand how important it is to include autistic people in all areas of life, especially in schools.

Furthermore, the schools need to do more than just allow access. Inclusive education is essential for the development of autistic students, as schools provide opportunities for them to expand their knowledge and build social connections that strengthen ties with both their local and family communities promoting their overall inclusion and educational growth (Nobrega, 2023). Thus, it is not an easy task to adapt the material to meet the needs of these students, because autism has three levels of support, as can been seen below, Table 1 presents the levels of severity of autism.

Restricted, repetitive behaviors **Severity Level** Social communication Level 3 Inflexibility of behavior, extreme difficulty coping with Severe deficits in verbal and nonverbal social communication skills cause severe impairments in change, or other restricted/ Repetition behaviors markedly Requiring functioning, very limited initiation of social interactions, interfere with functioning in all spheres. Great distress/ substantial support and minimal response to social overtures from others. difficulty changing focus or action. Level 2 Marked deficits in verbal and nonverbal social Inflexibility of behavior, difficulty coping with change, or Requiring communication skills; social impairments apparent even other restricted/ repetitive behaviors appear frequently substantial with support in place; limited initiation of social enough to be obvious to the casual observer and interfere support interactions; and reduced or abnormal responses to social with functioning in a variety of contexts. Distress and/ or overtures from others. difficulty changing focus or action. Level 1 Without support in place, deficits in social communication Inflexibility of behavior causes significant interference Requiring support cause noticeable impairments. Difficulty initiating social with functioning in one or more contexts. Difficulty interactions, and clear examples of atypical or switching between activities. Problems of organization and unsuccessful responses to social overtures of others. May planning hamper independence. appear to have decreased interest in social interactions.

Table 1 - Severity levels for autism spectrum disorder.

Source: Adapted from American Psychiatric Association (2013 p.52).

As shown in the table above, ASD is categorized into three levels of support needs, which reflect the degree of assistance required in social communication and behavior. This classification is essential for guiding educational strategies and individualized interventions and is aligned with the view that "the abilities and need of autistic people vary and can evolve over time. While some people with autism can live independently, others have severe disabilities and require life-long care and support" (World Health Organization, 2023). That is, it is observed that every individual is different from others, while some can develop a significant degree of autonomy, others require a more specialized type of care.

Furthermore, it is fundamental to discuss inclusive education in our society, as it promotes the integration of students with specific needs that will be understood if people know more about the subject "in the case of ASD, the family must be aware that the development process will be slow, but not impossible, it will happen at the pace that determined by the individual's limitations" (Silva & Menezes 2022, p. 236). Then, family are crucial role in the student's process, as it provides a safe environment, in addition to seeking appropriate support for development them. It is the family that provides the necessary information, as it knows the difficulties, preferences and what generates crisis in the students.

Moreover, seeking treatment early is the best thing to do, as this will help the student have more autonomy, sometimes without needing the help of someone in their daily lives. Of course, not everyone achieves this autonomy, but adequate monitoring and support are essential "although autism has no known cure and its causes remain uncertain, appropriate treatment can help control certain symptoms and may reduce the probability of the condition becoming more severe" (Silva & Menezes 2022, p. 233).

3. Training and Qualification in Brazil Context

n the Brazilian context where have challenges in inclusion of students with ASD, the analysis of these studies it is extremely important because that can bring to reality of Brazil. Teacher training properly is an important role in education for working with people with special needs. "Teachers' level of knowledge, training, and experience play an essential role in determining their attitudes towards inclusive education" (Alkinj; Pereira & Santos 2022, p.455).

In regular schools, our society face several challenges, such as schools that lack infrastructure and are inadequate to receive our students, whether due to the heat, lack of air conditioning, lack of school meals, infrastructure or even qualified professionals to meet the needs of students, according to Araujo and Larre (2022) when it comes to students with disabilities and disorders, these difficulties are even more evident, specially due to structural barriers and the lack of teacher preparation.

Ensuring this support becomes necessary as the number of students with ASD continues to grow, according to National Institute for Educational Studies and Research Anisio Teixeira (2022)³ the number of special education enrollments reached 1,5 million in 2022, an increase of 29,3% compared to 2018.⁴ This shows great progress in policies for integrating students with specific disabilities. However, there is a question as to whether these students are only being physically integrated or/and it shows that the quality of education is also essential for the development of these students. But how can ensure that students have a quality education? Another point that corroborates this is the issues of adequate teacher training, in the following lines, Graphic 1 is presented with the percentages of continuing teacher training.

² Translation from the original: "Em caso de ASD, a família deve ter consciência de que o processo de desenvolvimento será lento, mas não impossível, acontecerá seguindo o ritmo que a limitação desejar" (Silva & Menezes 2022, p. 236).²

³ Translation from the original: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira.

⁴ Translation from the original: o número de matrículas da educação especial chegou a 1,5 milhão em 2022, um aumento de 29,3% em relação a 2018.

50% 40% 36,0% 38,3% 39,9% 40,0% 40,9% 20% 20% 20% 20% 2018 2019 2020 2021 2022

Graphic 1 - Percentage of continuing teachers training- Brazil- 2018-2022.

Source: From National Institute for Educational Studies and Research Anisio Teixeira (2022).

As shown by the data presented in the graph, only 40,9% of teachers receive continuous training. The graph, there was a gradual improvement from 2018 to 2022, but it far from ideal. Unfortunately, this is a worrying fact, as it shows a gap in the preparation of teachers to deal with classroom challenges. However, it is essential to know about the subject, as it is possible to adapt classes and know which teaching methodology to use according to the students' specificities.

The teacher must always be seeking knowledge, because how can a teacher teach a class to a student with autism or other special needs if the teacher does not know the subject? (Soares, 2019). In special education, continuing training could not be only a numerical fact, but rather a strategy that exercises quality in education, so that teachers receive adequate training, so that they feel more prepared to adopt and adapt teaching approaches and practices appropriate to given context. Investing in the quality of education is an opportunity to overcome the challenges of our society.

4. The Challenges Faced by Teachers when Teaching Students with ASD

It is extremely important to recognize the work of teachers, as they will act as a facilitating agent for students, their role goes beyond transmitting content (Silva & Menezes 2022). The teachers help students with challenges in real life. However, for work with students with ASD, for teachers who have never worked in special education, it is a shock at first, despite this initial impact it is important to remain calm and seek knowledge, open communication with other professionals that are special education expert or talk to colleagues educators in the profession to ask for help or experience exchanges.

Considering the progress in research on autism, the needs of family assistance and the role of teachers, it is evident that teachers continue to encounter difficulties in the classroom, to contribute to this, society believes autistic children have difficulty in learning English, due to problems in their ability to interact socially and communicate.

Furthermore, studies and practical experiences show that students can learn. To better discuss this, the information from articles was structured and summarized in a table that presents the main aspects of each study, including the article year, title, authors, journal and book. This allows for a comparison of the studies and critical analysis of the results obtained.

5. Methodology

A qualitative research was carried out (Pereira et al., 2018) and of the specific type of narrative review (Casarin et al., 2020). According to Boccato (2006, p. 266) "bibliographic research seeks to survey and critically analyze documents published on the topic to be researched with the aim of updating, developing knowledge and contributing to the realization of the

research". However, the challenge for researchers "It is to identify which sources are appropriate to be included in academic research and how to determine whether the information provided is accurate, reliable and current" (Allen, 2017, p. 92).

Since it generates knowledge, focusing on improving existing scientific theories, the articles between, the time frame of 2020 and 2025 in English and Portuguese that meet the research criteria will be analyzed; the analysis focuses on the findings of ten studies by Silva (2020); Ferreira, Tonelli (2020); Nóbrega (2023); Araújo, Larre (2022); Frasson, Bortolluzzi, Ghisleni (2022); Neves, Barroso (2024); Bodnar, Cordeiro, Pesce (2024), Hashim, Yunus, and Norman (2021), Brahim (2022), and Bidari, Yanti (2021). These works were found through searches on the Scientific Electronic Library Online (SciELO) and Google Scholar. Articles that deviate from the topic will be disregarded.

6. Results and Discussion

The articles focused on the theme of teaching English to students with autism spectrum disorder (ASD). Next, Table 2 presents the articles selected for review.

Table 2- Articles chosen for the literature review.

Year	Title	Author(s)	Jornals/ Books
2024	Teaching English as a foreign language to students with autism spectrum disorder	Amanda Suellen Bodnar, Aliciene Fusca Machado Cordeiro, Marly Krüger de Pesce.	Revista Eletrônica de Educação
2024	Building digital games in English for students on the autism spectrum disorder	Mônica Moura Neves, Márcia Regina Castro Barroso	Revista Eletrônica do Instituto de Humanidades
2023	Strategies for teaching English to students with Autism Spectrum Disorder ASD in Elementary School II: Transdisciplinarity as a teaching methodology	Vanja Luiza Marinho da Nóbrega.	Redes Revista educacional da Sucesso.
2022	The importance of assistive digital technologies associated from the English teacher's work with students targeted to special education	Simone Carloto Frasson, Valéria Iensen Bortoluzzi, Taís Steffenello Ghisleni.	Research, Society and Development
2022	Towards a more inclusive Applied Linguistics: research on the English teacher, autism and Assistive Technology	Laryssa Araújo, Julia Larre.	The Especialist Journal
2022	Teaching English to Students with Autism Spectrum Disorders: Challenges and Teaching Strategies	Mohammed Ghedeir Brahim.	English studies at New Bulgarian University (NBU).
2021	Visual Aids for Teaching English to Students with Autism Spectrum Disorder	Ni Putu Intan Bidari, Made Vera Yanti.	Journal of English Teaching and Applied Linguistic
2021	English as Secondary Language Learning and Autism Spectrum Disorder: The obstacles in Teaching and Learning the Language	Haida Umiera Hashim, Melor Md Yunus, Helmi Norman.	Arab World English Journal (AWEJ).
2020	Expanding horizons: teaching English to children with autism spectrum disorder	Otto Henrique Ferreira, Juliana Reichert Assunção Tonelli.	Revista Desenredo do Programa de Pós-Graduação em Letras da Universidade de Passo Fundo.
2020	English teaching and autism: challenges and possibilities	Edijane Maíla Martins da Silva	Linguística, letras e artes: cânones, ideias e lugares.

Source: Table created by the authors

⁵ Translation from the original: Boccato (2006) a pesquisa bibliográfica busca o levantamento e análise crítica dos documentos publicados sobre o tema a ser pesquisado com intuito de atualizar, desenvolver o conhecimento e contribuir com a realização da pesquisa.

⁶ Translation from the original: o desafio dos pesquisadores "é identificar quais fontes são apropriadas para serem incluídas em uma pesquisa acadêmica e como determinar se a informação fornecida é precisa, confiável e atual" (Allen,2017, p. 9).

These publications highlight diverse perspectives and approaches. The study by Bodnar, Cordeiro, Pesce (2024), developed in the public education system, located in Joinville, Santa Catarina. The qualitative research was conducted, with bibliographic review and semi-structured interviews conducted with three autistics students, two in the 9th grade, and one in the 1st year of high school, in addition to the participation of their mothers, it was observed that the subject reveals the difficulties that these students and their relatives encountered, also, that even with motivation, students presented challenges with textual interpretation and translation, which points to differentiated teaching methods, as shown below "in studying a foreign language, it becomes possible for students to socialize, appropriate and interact with and for the world from another perspective" (Bodnar, Cordeiro, & Pesce 2024, p.5).⁷

Unfortunately, the authors mention that "the relationship between the acquisition of the English language and the maintenance of class status is in line with the neoliberal perspective of education, which seeks to transform school education into a business" (Bodnar, Cordeiro, & Pesce 2024, p.7). Then, when the focus of education is on skills for the professional market, this perpetuates the social inequalities that already exist in Brazil. As the work itself explores, qualification should not be the reason to encourage students to learn languages, but to understand that language helps in the development of mental functions (Bodnar, Cordeiro, Pesce, & 2024, p.12).

Additionally, each student has their own characteristics, and sometimes one approach for everyone will not have a positive effect, as shown in the following passage "in the specificities of each individual interviewed, and of all students who are part of the school process, there are individual interests that can be used for the learning process" (Bodnar, Cordeiro, & Pesce, 2024, p.16). The difficulties presented by the students in the research were more related to written and assessment activities in the school environment, but when the students watched movies, played game, listened to music, etc., the students like to study English. Remember that teachers can use these personal interests as a tool. However, it is important to remember that working with personal interests can be a challenge, especially when the teacher has a very high demand from students.

Furthermore, the study by Neves and Barroso (2024) analyzes the importance of using digital technologies, more specifically the learningApps.org application. The article also presents a step-by-step guide on how to use the application, according to authors, "we cannot deny that today's students live in an interconnected world and both schools and teachers need to update their knowledge and acquire new skills" (Neves & Barroso 2024, p.72).¹⁰

The teacher must be prepared and organized "avoiding improvisations, which can generate internal disorganization and anxiety in this student. Orders and commands must also be simple, and the environment organized" (Neves & Barroso 2024, p.76). When instructions are clearer, this avoids confusion and student frustration, in addition to the well-structured space and routine contributing to the student's concentration, since students with autism tend to deal better with pre-established routines. The results of this study were considerably good, according to Neves and Barroso (2024) affirm that LearningApps.org is accessible and easy to use digital resources. Its simple interface allows educators to create interactive activities without the need for advanced knowledge of technology, facilitating personalized teaching according to the students' needs.

⁷ Translation from the original: "No estudo de uma língua estrangeira, torna-se possível aos estudantes a socialização, apropriação e interação com e para o mundo por outra perspectiva." (Bodnar, Cordeiro, & Pesce 2024, p.5).

⁸ Translation from the original: "A relação entre a aquisição da língua inglesa e a manutenção de condição de classe vai ao encontro da perspectiva neoliberal de educação, que busca transformar o ensino escolarizado em um negócio" (Bodnar, Cordeiro, & Pesce 2024, p.7).

⁹ Translation from the original: "Nas especificidades de cada indivíduo entrevistado, e de todos os estudantes que fazem parte do processo escolar, existem interesses individuais que podem ser utilizados para que o processo de aprendizagem" (Bodnar, Cordeiro, & Pesce, 2024, p.16).

¹⁰ Translation from the original: "não podemos negar que os alunos de hoje vivem num mundo interconectado e tanto a escola como o professor precisam atualizar conhecimentos e adquirir novas habilidades" (Neves & Barroso 2024, p.72.

¹¹ Translation from the original: "evitando improvisos, que podem gerar, nesse aluno, desorganização interna e ansiedade. Também as ordens e os comandos devem ser simples e o ambiente, organizado" (Neves & Barroso 2024, p.76).

The teaching environment must be prepared to integrate these forms of learning. LearningApps.org stands out as a valuable resource for teachers to use according to the specific needs of their students. The game features memory games, word searches, and interactive videos. These resources are important and strategic to facilitate students' understanding. These supports help in the learning process.

In addition, Nobrega's study (2023) a case study was carried out to investigate the difficulties of English teachers who had autistic students, more specially in the 7th and 8th grades, in addition to proposing transdisciplinarity strategies to assist in student learning, according to Nobrega (2023) the use of playful activities, communicative creativity, media resources, sensory materials, etc., these examples, help teachers who have difficulties. With this, the teacher can use these tools to adapt the class according to the students' needs, making them included, and not just integrated.

The learn process is not isolated, but deeply rooted in social interaction, as shown "inserted into these groups, they acquire their identity as a human being and become capable of learning and transmitting meanings" (Nobrega, 2023, p.3). ¹² By interacting with other people and actively participating in the inclusive educational environment, the student can build their identity, in addition to developing their cognitive skills. This interaction also helps students feel accepted and grow emotionally.

Another contribution comes from Frasson, Bortolluzi, Ghisleni (2022), whose study, conducted through a bibliographic review, and addresses the use of assistive technology as support tool for English teachers with a focus on special education, the authors explain that "technologies have occupied an important space in our lives, in which they exert influences in different spheres" (Frasson, Bortolluzi, & Ghisleni, 2022, p.2).¹³ The work helps to reflect on how technologies can contribute to learning.

It is important to recognize how technology can serve as an ally toward a more inclusive classroom, as emphasize by the authors "technology has advanced a lot, in order to provide resources that enable the independence and autonomy of these students, regardless of whether they have any physical, mental, intellectual or sensory impairment" (Frasson, Bortolluzi, & Ghisleni, 2022, p.2). ¹⁴ In the context of teaching English, this technology becomes fundamental, for example, the student can enjoy language learning, through games or applications that can meet the needs of students.

However, according to Frasson, Bortolluzi, Ghisleni (2022) teachers need to be attentive when selecting resources, ensuring that it is appropriate for their students by considering both their skills and their age ranges, since students have different social, cognitive and even emotional characteristics, that is, the professional cannot treat an autistic adolescent student as if they were a child, this will cause a negative impact, loaded with stereotypes, affecting the independence and autonomy of this student, underestimating their abilities.

Not many assistive tools are made just for teaching English "during the research, no type of assistive technology related to teaching English was found" (Frasson, Bortolluzi, & Ghisleni 2022, p.7). However, several assistive technologies can be adapted to teaching English, such as the communication board, which allows students with speech challenges to form words or sentences by pointing, enabling work with specific vocabulary. In addition, equipment with robotic voices that assist students with speech problems, and films can be used as a strategy for social interaction (Frasson, Bortolluzi, & Ghisleni, 2022, p.7).

¹² Translation from the original: "Inserido nesses grupos, ele adquire sua identidade enquanto ser humano e torna-se capaz de aprender e transmitir significados" (Nobrega, 2023, p.3).

¹³ Translation from the original: "As tecnologias têm ocupado um espaço importante em nossas vidas, na qual exercem influências em diferentes esferas" (Frasson, Bortolluzi, & Ghisleni, 2022, p.2).

¹⁴ Translation from the original: "A tecnologia avançou muito, de forma a fornecer recursos que possibilitem a independência e a autonomia desses alunos, independente de terem algum impedimento de natureza física, mental, intelectual ou sensorial". (Frasson, Bortolluzi, & Ghisleni, 2022, p.2).

¹⁵ Translation from the original: "durante a pesquisa não foi encontrada nem um tipo de tecnologia assistiva, relacionada ao ensino de inglês" (Frasson, Bortolluzi, & Ghisleni 2022, p.7).

Inclusion requires a collective commitment, and structures planning is necessary to break down the barriers of prejudice "the inclusion of students with disabilities in the Municipal education system requires a lot attention, from the adaptation of these students to the management team, teachers and school staff" (Frasson, Bortolluzi, Ghisleni, 2022, p.8). ¹⁶ The school must be a space where everyone feels welcomed and supported, and with qualified professionals, it will reflect in the appreciation of students regardless of their disability or not.

Additionally, the work by Araújo and Larre (2022), who carried out a review of theses and dissertations, available in Coordination for the Improvement of Higher Education Personnel (*CAPES*)¹⁷ theses and dissertation catalog and in the Digital Library of Theses and Dissertations, focusing on the English teacher, autism and assistive technology, the results showed that there is little research related to this topic, according to Araujo and Larre (2022) point out that most English teacher education programs fail to include content related to ASD and assistive technology. With these gaps in teacher training, and without adequate knowledge, professionals may feel insecure or helpless when dealing with students with ASD.

Furthermore, the lack of familiarity with assistive technologies creates challenges in inclusive teaching, which can prevent teachers from using this resource, which could facilitate student learning. Therefore, according to Araújo and Larre (2022) research is needed that does not only involve theoretical research, but that can address the real daily life of a classroom.

Moreover, the study by Brahim (2022) was qualitative research with structured questionnaires for data collection, focusing on exploring the challenges faced by English teachers when teaching students with ASD, and proposing teaching strategies to overcome these challenges. The study was conducted at the University of El Oued, Algeria, with 12 English teachers. According to Brahim (2022) 100% of teachers agreed that lack of training is a major challenges to teaching students with ASD, where the teacher will have difficulty to identify and understanding the students' needs, 91.66% highlighted difficulties in communication and social interaction as the main challenges, which can lead to social isolation, causing the student to be excluded, but, 75% believe that development of social skills is crucial for the academic success of student with ASD, and 100% of teachers recommended the use of audiovisual resources, since students are predominantly visual learners

The results indicated that teachers had difficulty dealing with the communication and social interaction deficit of students with ASD, and that the use of visual and audiovisual resources are effective strategies, in addition to the lack of support from other professionals such as psychologists, occupational therapists, and speech therapists' support.

Complementary to these finds, the study by Bidari and Yanti (2021) shows the importance of visual aids. It was a bibliographic review, and the authors conclude that the use of visual aids, such as pictures, videos, and real objects, is effective in teaching English to students with autism spectrum disorder ASD, as these students tend to be visual learners. As follows, one of the strategies was the use of power cards, which contained clear instructions that helped in carrying out structured activities, in addition, social stories that helped students deal with emotional situations, through narratives that describe specific steps, such as taking a deep breath to control anger (Bidari & Yanti, 2021).

Another effective visual resource for teaching vocabulary to students with ASD is the use of images and flashcards, since students are more visual and benefit from more colorful and attractive elements that help capture their attention. The authors also point out that world wall pictures can also be used to teach vocabulary (Bidari & Yanti, 2021). For example, if the teacher is talking about red, the teacher can show the image of an apple, other resource, are real objects and interactive whiteboards made learning more interesting for students, such as games like "wheel of fortune" and "who wants to be a millionaire" (Bidari & Yanti, 2021, p. 30).

9

¹⁶ Translation from the original: "A inclusão de alunos com deficiência, na Rede Municipal de Ensino, requer muita atenção, desde a adaptação desses estudantes, da equipe diretiva, dos professores e dos funcionários da escola" (Frasson, Bortolluzi, & Ghisleni, 2022, p.8).

¹⁷ Translation from the original: Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES).

Another important point is the study by Hashim, Yunus, Norman (2021) which was conducted qualitative research involving observation and interviews with 45 autistic students and 14 teachers in Malaysia. The results showed that students have difficulties in social interactions and vocabulary acquisition, which could harm the student since the teacher cannot keep the student focused, but students with ASD tend to learn more quickly than their native language, as the linguistic structure of English, with few syllables and simplicity, facilitates its acquisition (Hashim, Yunus, & Norman, 2021).

However, teachers needed to adapt teaching materials to motivate students with ASD, but they faced difficulties due to the constant need for repetition in teaching, which was exhausting (Hashim, Yunus, Norman, 2021). In other words, this can compromise the teacher's engagement and end up compromising the quality of teaching. This is because ASD has different types of learning, which leads the teacher to be in a constant adaptation of strategies, it is also noted that there is a need for an assistant in the classroom.

In addition, the study by Ferreira and Tonelli (2020) conducted a qualitative interpretative analysis, in which more practical work in early childhood education was evidenced, based on a didactic sequence applied in the classroom during the supervised internship. The student with ASD participated in a children's story activity, the name of the book was "the very hungry caterpillar" (p.565). The activities included painting the main character, and as the student was non-verbal, student pointed to the drawing and the teacher repeated the name of the character in English, and the student chose a favorite animal to create a new story. The student with autism actively participated with the help of his teacher and was able to create his own story. However, this was only possible because of the adapted material and the teacher as his facilitator or mediator.

The research reported on the neglect of not having English for children, criticizing the National Common Curricular Base (*BNCC*)¹⁸, as cited in Ferreira and Tonelli (2020) there is a need for specific guidelines in Brazil, which does not have laws that guarantee the teaching of English for early childhood education and the first cycle of elementary school in Brazil.

Furthermore, the text mentions some challenges such as the lack of funding for the purchase of teaching materials and the lack of preparation of professionals who could make a difference, but this only occurs due to gaps in the undergraduate course, which does not prepare professionals to work in a context of inclusion (Ferreira & Tonelli, 2020). Therefore, undergraduates or teachers who already work in the field, who do not have adequate training to deal with an inclusive environment, may end up reflecting exclusionary practices.

In addition, in Silva's work (2020) bibliographic research was conducted, in which the author highlights that teaching English in the school environment is fundamental during childhood, as the child absorbs the language in a natural and fluid way, as part of their cognitive development. The study by Silva (2020) highlighted the importance of language exposure and interaction for learning. In environment with other students, children learn better when their hear and use the language, such as English.

However, some students need more support than others, but it does not mean it is because of their disabilities, so the study itself highlights the need for curricular adaptations, which will require teachers to evaluate effective methodologies to implement in the classroom. One example of this is classes through playfulness "playfulness is, therefore, the bridge that connects the desire to the pleasure of carrying out activities" (Silva, 2020, p.4). ¹⁹ The children do not even realize that they are learning, as activities like these, make learn more fun, this generates interest.

Furthermore, the school must be prepared to receive this student "in the educational process, the school must direct and prepare all the professionals who are part of it" (Silva, 2020, p.8),²⁰ that is, adequate training is essential to ensure a

¹⁹ Translation from the original: "O lúdico é, dessa forma, a ponte que une a vontade ao prazer por realizar atividades" Silva (2020, p.4).

¹⁸ Translation from the original: Base Nacional Comum Curricular (BNCC).

²⁰ Translation from the original: "No processo educacional a escola deve direcionar e preparar todos os profissionais que dela fazem parte" (Silva, 2020, p.8).

welcoming for students with or without disabilities. The teachers' role is essential to know the time to use certain approaches, since not all students with autism spectrum disorder ASD will be able to participate in some activities. But everything will depend on the uniqueness of the student. If the teacher uses excessive playful activities, students may end up losing interest, unless the teacher varies the activity and according to Silva (2020) the result of the article showed that English language teaching contributed to the student's social and cognitive development.

7. Final Considerations

The articles analyzed reveal a field of research in constant evolution, this study aimed to review the theme of teaching English to students with autism spectrum disorder (ASD) and the challenges faced by teachers, based on the analysis by studies presented in this research. The studies were marked by persistent challenges and opportunities for pedagogical innovation, developed both in the Brazilian and international contexts, present significant findings and conceptions. Teaching English to students with ASD presents several challenges for teachers, requiring pedagogical adaptations, differentiated strategies and adequate institutional support. Many undergraduate courses do not address inclusive education, and when they do, they treat as superficially.

Furthermore, continuing training is essential for teachers to develop specific skills to work with students with ASD. According to National Institute for Educational Studies and Research Anisio Teixeira (2022) reveals that only 40.9% of teachers in Brazil have continuing training, highlighting a significant gap in the preparation of educators to deal with challenges in the classroom, especially in the context of inclusive education. To corroborate with this, Brahim (2022) argues that although curricular adaptation can be important, the biggest problem is the lack of institutional support to ensure the effective implementation of these strategies.

According to Araújo and Larre (2022) there is a shortage of research and materials aimed at training English teachers in the context of inclusive education, which makes many teachers feel insecure when working with autistic students. Brahim (2022), Ferreira, Tonelli (2020), also reinforces this difficulty, highlighting that the lack of preparation of teachers directly compromises the quality of teaching, although, even without specific training, teachers can develop effective strategies, through the exchange of experiences and experimentation with alternative pedagogical approaches.

Moreover, teacher training needs to be effective. The teacher has a role in determining the student's future, helping in social transformation, who for a long time were excluded from society. Brahim (2022) argues that the need for multidisciplinary support in the education of autistic students, involving not only teachers, but also occupational therapists, psychologists and speech therapists. The presence of multidisciplinary professional's support, and help teacher to choose the effective methodology, that considers specificities of each student and provides teaching adapted to their individual needs.

Another major challenge faced by teachers is adapting teaching materials and curriculum to meet students' needs. Ferreira, Tonelli (2020), Silva (2020) and Nobrega (2023) agree that the use of visual resources, sensory materials, games and playful strategies can facilitate learning. In classroom, students have different rhythms, then transforming teaching practice is a fundamental step towards building equitable.

According to Ferreira, Tonelli (2020) the BNCC does not include teaching English in early childhood education, which is a limitation, as students could benefit from this development period to learn the language. The importance of the environment and social interactions in cognitive development emphasizes that each student has their own unique learning styles.

One of the challenges for teachers was the issue of interactions, for the development of activities. According to Hashim, Yunus and Norman (2021), many students with ASD have difficulty understanding social norms, expressing their needs and interpreting verbal and nonverbal communication. To corroborate this statement, Bidari, Yanti (2021) suggest that

the use of visual resources and structured methods can facilitate this interaction, helping students to better understand the content.

Thus, according to Araújo, Larre (2022) and Frasson, Bortolluzi, Ghisleni (2022), among the highlighted approaches, the adoption of assistive technologies, and the use of visual materials, proved to be essential in favoring the learning of English by students with autism spectrum disorder ASD.

Furthermore, the study by Bodnar, Cordeiro, Pesce (2024) makes a fundamental contribution to this research by highlighting, from perspective of students with ASD and their families and they argue that standardized fail to meet the needs of these students, reinforcing the need for personalized methodologies that consider their individual interests, such as movies, music and games, but the excessive use emphasis on personalized methodologies masks the absence of effective public policies.

Thus, the results indicated that, although the context is completely different, the challenges are similar, the convergence of these studies is mainly due to the need for teacher training, curricular adaptation, methodology and technological resources as tools to facilitate learning.

However, this study has its limitations, which should be acknowledged. Firstly, as a bibliographic review, it relies on existing research, which means that the findings are dependent on the availability and scope of prior studies. While the selection of articles followed a clear criterion, focusing on recent and relevant research, the limited number of empirical studies on English language teaching for students with ASD restricted a more comprehensive discussion on practical classroom intervention.

Additionally, most of the analyzed studies focus on general aspects of inclusion, with few offerings in depth analyses of specific pedagogical strategies for foreign language acquisition among students with ASD. This highlights the need for further empirical investigations, particularly longitudinal studies that track the progress of students over time to assess the effectiveness of different teaching methods, for example, there is a need for research that focuses on the student's perspective (Bodnar, Cordeiro, & Pesce, 2024).

Another point concerns, as the literature analyzed, it became clear that the main challenges lie not in methodologies but also in structural and institutional gaps, particularly the lack of teacher training and the scarcity of assistive technology resources designed especially for foreign language learning. Thus, in future research should focus on training English teachers for inclusion, identifying gaps in undergraduate courses and proposing effective training models.

Therefore, this research aims to contribute to the academic field by highlighting the importance of inclusive education, reducing the prejudice which is present in our society. Additionally, the inclusion of autistic students in English teaching should not been as an isolated challenge for the teacher, but as a collective commitment of the school and society. Respecting students' uniqueness not only enhances the teaching process but also expands perspectives on learning. True inclusion goes beyond mere presence in the classroom; it requires active engagement in the educational process. Only through a critical and transformative approach can truly an accessible and equitable education be achieved.

References

American Psychiatric Association (2013). Diagnostic and statistical manual of mental disorders (5th ed.).

Allen, M. (Ed.). (2017). The SAGE encyclopedia of communication research methods. SAGE publications.

Alkinj, I., Pereira, A., & Santos, P. (2022). Educators' attitudes towards the inclusion of students with autism spectrum disorder (ASD) in Jordanian public schools. *Revista Brasileira de Educação Especial*, 28, e0157. https://doi.org/10.1590/1980-54702022v28e0157

Araújo, L., & Larre, J. (2022). Por uma linguística aplicada mais inclusiva: pesquisas sobre o professor de inglês, autismo e Tecnologia Assistiva. *The ESPecialist*, 43(2), 158-173. doi:10.23925/2318-7115.2022v43i2a10.

Bidari, N. P. I., & Yanti, M. V. (2021). Visual aids for teaching English to students with autism spectrum disorder. *Journal of English Teaching and Applied Linguistic*, 2(1), 24-37.

Boccato, V. R. C. (2006). Metodologia da pesquisa bibliográfica na área odontológica e o artigo científico como forma de comunicação. *Rev. Odontol. Univ. Cidade São Paulo, São Paulo, 18*(3), 265-274.

Bodnar, A. S.; Cordeiro, A. F. M.; & Pesce, M. K. de. (2024). O ensino de língua inglesa como língua estrangeira para estudantes com Transtorno do Espectro Autista. *Revista Eletrônica De Educação*, *18*(1), e5968120. https://doi.org/10.14244/reveduc.v18i1.5968.

Brahim, M. G. (2022). Teaching English to Students with Autism Spectrum Disorders: Challenges and Teaching Strategies. *English Studies at NBU*, 8(2), 203-214

Brasil. (2015). Lei nº 13.146, de 6 de julho de 2015: Institui a Lei Brasileira de Inclusão da Pessoa com Deficiência (Estatuto da Pessoa com Deficiência). Diário Oficial da União. https://www.planalto.gov.br/ccivil03/ato2015-2018/2015/lei/13146.htm.

Brasil, Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (Inep). (2023). Censo Escolar da Educação Básica 2022: Resumo técnico. Brasília, DF, Brasil.

Casarin, S. T. et al. (2020). Tipos de revisão de literatura: considerações das editoras do Journal of Nursing and Health. *Journal of Nursing and Health. 10* (5). https://periodicos.ufpel.edu.br/index.php/enfermagem/article/view/19924.

Côrtes, M. S. M., & De Albuquerque, A. R. (2020). Contribuições para o diagnóstico do Transtorno do Espectro Autista: de Kanner ao DSM-V. Revista JRG de Estudos Acadêmicos, 3(7), 864-880.

Ferreira, O. H. S., & Tonelli, J. R. A. (2020). Ampliando horizontes: ensino de inglês para crianças com transtorno do espectro autista. Revista Desenredo, 16(3).

Frasson, S. C., Bortoluzzi, V. I., & Ghisleni, T. S. (2022). A importância das tecnologias digitais assistivas aliadas do trabalho do professor de língua inglesa com alunos públicos-alvo da educação especial. *Research, Society and Development, 11*(1), e59711125469-e59711125469.

Hashim, H. U., Yunus, M. M., & Norman, H. (2021). English as Secondary Language Learning and Autism Spectrum Disorder: The Obstacles in Teaching and Learning the Language. *Arab World English Journal*, 12(2), 22-30.

Kanner, L. (1943). Autistic disturbances of affective contact. Nervous child, 2(3), 217-250.

Neves, M. M., & Barroso, M. R. C. (2024). Construção de jogos digitais em inglês para alunos do espectro autista. *Revista Eletrônica do Instituto de Humanidades*, 32(58), 70–90.

Nóbrega, V. L. M. da. (2023). Estratégias para o ensino da língua inglesa com alunos do transtorno do espectro autista (TEA) no ensino fundamental II: A transdisciplinaridade como metodologia de ensino. REDES – Revista Educacional da Sucesso, 3(1), 8–16.

Pereira A. S. et al. (2018). Metodologia da pesquisa científica. [free e-book]. Ed.UAB/NTE/UFSM.

World Health Organization. (2023). Autism spectrum disorders. https://www.who.int/news-room/fact-sheets/detail/autismo-spectrum-disorders.

Soares, D. P. (2019). A criança com autismo na escola: possíveis caminhos para a inclusão.

Silva, A. L. B., & Menezes, A. M. C. (2022). O Papel da Família do Aluno Autista no Processo de Inclusão Escolar. *ID on line. Revista de psicologia*, 16(64), 227-240.

Silva, E. M. M. da. (2020). Ensino de língua inglesa e o autismo: Desafios e possibilidades. In I. V. de Sousa (Org.), *Linguística, letras e artes: Cânones, ideias e lugares* (pp. 1–11). Atena Editora. https://doi.org/10.22533/at.ed.1692019061.