



UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE COMUNICAÇÃO E EXPRESSÃO
DEPARTAMENTO DE LÍNGUA E LITERATURA ESTRANGEIRAS
CURSO DE LETRAS-INGLÊS

Bruna Letícia Clímaco

Teaching English as an Additional Language to learners with disabilities:
a systematic review of literature on challenges, strategies and methodological procedures
used when teaching students that have ASD and/or ADHD

Florianópolis
30 de Junho de 2024

Bruna Letícia Clímaco

Teaching English as an Additional Language to learners' with disabilities:
a systematic review of literature on challenges, strategies and methodological procedures
used when teaching students that have ASD and/or ADHD

Trabalho de Conclusão do Curso de Graduação
em Letras - Inglês do Centro de Comunicação
e Expressão da Universidade Federal de Santa
Catarina como requisito para a obtenção do
título de Bacharel em Letras - Inglês.

Orientadora: Profa. Dra. Priscila Fabiane
Farias

Florianópolis

2024

Ficha catalográfica gerada por meio de sistema automatizado gerenciado pela BU/UFSC.
Dados inseridos pelo próprio autor.

Climaco, Bruna Leticia

Teaching English as an Additional Language to learners with disabilities : a systematic review of literature on challenges, strategies and methodological procedures used when teaching students that have ASD and/or ADHD / Bruna Leticia Climaco ; orientadora, Priscila Fabiane Farias, 2024.

58 p.

Trabalho de Conclusão de Curso (graduação) - Universidade Federal de Santa Catarina, Centro de Comunicação e Expressão, Graduação em Letras - Língua Inglesa, Florianópolis, 2024.

Inclui referências.

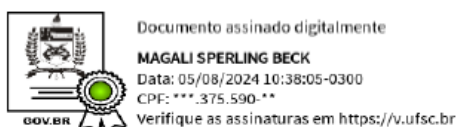
1. Letras - Língua Inglesa. 2. estratégias; desafios. 3. educação inclusiva de língua adicional. 4. TEA e/ou TDAH. 5. deficiências e ensino. I. Farias, Priscila Fabiane . II. Universidade Federal de Santa Catarina. Graduação em Letras - Língua Inglesa. III. Título.

Bruna Letícia Clímaco

Teaching English as an Additional Language to learners' with disabilities:
a systematic review of literature on challenges, strategies and methodological procedures
used when teaching students that have ASD and/or ADHD

Este Trabalho de Conclusão de Curso foi julgado adequado para obtenção do título de
Bacharel e aprovado em sua forma final pelo Curso Letras-Inglês.

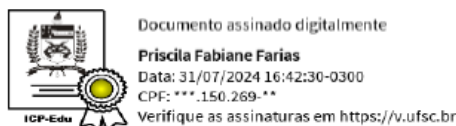
Local Florianópolis, 30 de Junho de 2024



Profa. Dra. Magali Sperling Beck

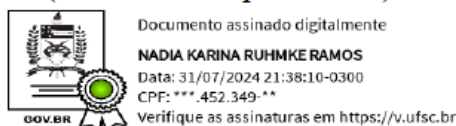
Coordenação de Curso

BANCA EXAMINADORA



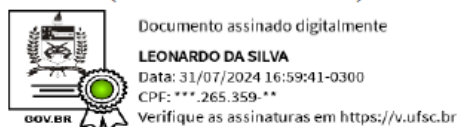
Profa. Dra. Priscila Fabiane Farias

(orientadora e presidente)



Profa. Dra. Nádía Karina Ruhnke Ramos

(membra da banca)



Prof. Dr. Leonardo da Silva

(membro da banca)

ACKNOWLEDGEMENTS

Pri, from all people, you are the one I want to thank the most, for all your patience, your comprehension, your kindness and support! This work only exists because of you since day one, when we were in our end-of-internship gathering and you agreed to be my mentor, I could not think nor ask for anyone better. I hope you realize how much it meant for me to have you by my side in every step, in each tear, every hug and positive words. Even during the hard times you were always smiling and telling me that "everything will be okay, we can figure it out", this meant the world to me! Thank you for listening and helping me to unravel every thought, every idea that I had and every sentence that I was trying to make sense and you could understand exactly what I was trying to say. I appreciate all your support, even when I went to your class telling you how I wanted to give up and you simply put faith in me. You allowed me to grow, to trust myself and I hope you know that this work is ours, both yours and mine, and I am so proud of us for getting this far. Thank you so much for accepting this journey and being as excited as me.

I want to thank my family, my mom Karina and my sisters Amanda and Laura for every single thing they did for me, for all the lunch prepared late at night, for all the talking, the hugs, the comprehension, the patience with my many humor changes; for all the support along this entire course and most of all for always believing in me! I would not be here without you and all the things you have done for me and I appreciate everything, from the very first start, everything we have been through until now, to the end of an era. I love you all from the bottom of my heart ♡ I could not ask for a family more amazing than you girls!

Bibs, you have been there for me since the day I had the most absurd idea of 'what if I try to write a TCC?' and you looked at me and said 'I think you should', and I remember following you around your home with a notebook with a list full of subjects I could do about, honestly we were crazy, but I thank you so much for planting this seed in me. Thank you for always believing that I knew what I was doing because I had something to say and it was something worthy to explore and tell the world. You have helped me through this college since the day I have met you and I want you to know how much I am grateful for having you with me, for supporting me in every crisis, and being my shoulder to cry on; for being my ears to complaining, my laughter in the middle of the night (when both of us had to get up early to work); for being my partner in dance and in crime, for accepting me as I am and finally for being the one I could scream for help whenever I was in need, thank you so much.

Lucas, you were the person that knew all of my to-do lists, and checked them all with me everyday. You were the one that did not accept that the pomodoro method was not something about tomatoes and got excited for every small progress I made. You listened to my very long audios talking about every step of this work and the readings that did not make any sense for you, but you continued to do so just for me to have someone to talk about my ideas and know how to explain them, and I am so thankful for your company, your small celebrations, your impetuous messages telling me to focus, your faith in me and our nonsense small talks to distract me, specially in my precious five minutes break.

As for those who followed me through this journey, I thank you for all your kindness and generosity. All the supportive messages, hugs, conversations and for the listening. I thank you for all the borrowed places, houses, rooms, keys, notebooks, computers, tablets and everything that made this work possible, you are amazing! I thank you for the gentle words, the hard ones and the shoulders for me to cry over. I thank you for every small and huge thing you have ever done for me and with me in order to help me out and get this work done, it means more than you can possibly imagine and I will be forever thankful for that ♡ I want you to know that I appreciated everything, every order to eat, to stay hydrated and get some rest; every laughter, distressing hangout and asking how it was going (even when I just looked at you with a desperate face or deadly eyes claiming it to be a forbidden question to be made, it meant a lot lol). Words are not enough to show how grateful I am for you to be part of such an important moment.

I also want to thank all my little students that, even without knowing, inspired me to be a better teacher. Your words and actions will forever echo in my educational path, and part of this is also for you. Finally, I want to thank my little me, for handling so much, for having so many reasons to give up and still get so far, I am proud of us. Thank you for not giving up and for having such great people around you that contribute for all of this to be possible. We have made it!

ABSTRACT

In order to comprehend the process of teaching and learning an additional language for people with disabilities, and furthermore identify strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD and/or ADHD as well as possible challenges these teachers may face, this work provides a systematic review of literature of ten studies, published between the years of 2015 and 2022. In the seven analyzed studies focused on ASD, 14 challenges and 17 strategies/methodological procedures were identified. Meanwhile, 5 challenges and 6 strategies/methodological procedures were identified in the 3 studies analyzed with a focus on ADHD students. Results indicate the relevance of teacher education as well as conditions for teacher planning. Moreover, findings highlight there is no recipe for teaching an additional language, besides the need for further research concerning teacher education in relation to teaching people with disabilities.

Key words: strategies; challenges; inclusive additional language education; ADHD and/or ASD

RESUMO

Com o objetivo de compreender o processo de ensino e aprendizagem de uma língua adicional para pessoas com deficiência, e ainda identificar estratégias e procedimentos metodológicos utilizados por professores de inglês como língua adicional no ensino de alunos com TEA e/ou TDAH, bem como possíveis desafios que estes professores podem enfrentar, este trabalho traz uma revisão sistemática de literatura de dez estudos, publicados entre os anos de 2015 e 2022. Nos sete estudos sobre TEA analisados foram identificados 14 desafios e 17 estratégias/procedimentos metodológicos. Enquanto isso, foram identificados 5 desafios e 6 estratégias/procedimentos metodológicos nos 3 estudos com foco em estudantes com TDAH. Os resultados indicam a relevância da formação de professores, bem como as condições para o planejamento docente. Além disso, os resultados destacam que não existe uma receita para o ensino de uma língua adicional, além da necessidade de mais pesquisas sobre a formação de professores em relação ao ensino de pessoas com deficiência.

Palavras chave: estratégias; desafios; educação inclusiva de língua adicional; TEA e/ou TDAH

LIST OF TABLES

Table 1 - a summary of the studies analyzed.....	25
Table 2 - a summary of general strategies found in the studies analyzed that focused on students with ASD.....	29
Table 3 - a summary of the challenges found in the studies analyzed that focused on students with ASD, during implementation of strategies/research.....	35
Table 4 - a summary of the strategies found in the studies analyzed that focused on students with ADHD.....	41
Table 5 - a summary of the challenges found in the studies analyzed that focused on students with ADHD.....	41

TABLE OF CONTENTS

1.INTRODUCTION.....	11
2. THEORETICAL BACKGROUND.....	14
2.1. ASPECTS RELATED TO DISABILITIES AND DISORDERS.....	14
2.1.1 Autism Spectrum Disorder.....	15
2.1.2 Attention Hyperactivity Disorder.....	17
2.2 EDUCATION FOR PEOPLE WITH DISABILITIES IN BRAZIL.....	20
3. METHOD.....	23
3.1 PROCEDURES.....	24
4. RESULTS AND DISCUSSION.....	25
4.1. CHALLENGES AND STRATEGIES FOR TEACHING ENGLISH FOR STUDENTS WITH ASD.....	26
4.2.CHALLENGES AND STRATEGIES FOR TEACHING ENGLISH FOR STUDENTS WITH ADHD.....	40
5. CONCLUSION.....	46
6. REFERENCES.....	49
7. APPENDIX A.....	52

1. INTRODUCTION

As an English teacher in the beginning of my career, I see the educational system in Brazil from a very specific perspective: the one of an educator starting her professional path. Departing from this perspective, at the same time I feel I have a lot to learn, I also try to observe my classroom with "fresh eyes", which guide me to attempt finding alternatives to gaps I see, being one of them, learning about strategies and methodologies for teaching English for students with disabilities. As a student, especially being hard of hearing since I was a child, I have another perspective, since I understand, from experience, the relevance of inclusive and situated teaching. It is my belief, however, that both previously mentioned perspectives are connected when it comes to impacting my teaching endeavors. I also believe that the combination of both perspectives has been an important aspect in my academic journey, for it reflects a characteristic of mine that defines the way I study but that also influences the way I relate to the classroom, both in terms of accessibility and in the student-teacher relationship.

Since I began my studies, I have had educational experiences that were not adapted to my needs regarding accessibility. Being hard of hearing, more specifically with severe hearing loss on the left ear and moderate hearing loss on the right one, because of this lack of accessibility, I lost a lot of the will to study and learn throughout my academic life, something that was not taken into consideration by my teachers throughout my elementary and high school years, and I dare to say even in higher education.

That is why I know from experience that, when talking about a disability, several issues regarding the students' needs must be taken into consideration, in a way that makes teaching-learning possible for everyone, and such methodological approaches should include those who have different needs from the rest of the class. The teacher's role in this environment, as stated by Lobo and Lima (2019, p. 114, my translation), "is to identify their student's difficulty and devise strategies to overcome those difficulties". The authors suggest that "a simple visit to regular schools is enough to realize the difficulty on the part of students with some disability or special needs, for not being able to adapt to an environment that is not prepared to receive them" (LOBO; LIMA, 2019, p. 114, my translation). As mentioned above, being a student, I believe I had no contact with such strategies, and if there were any I was not aware of their impact in my life and that is one of the reasons for me to be interested in searching about possibilities to do it differently, especially when I am in the process of becoming a teacher myself.

Education plays an important role in human's development as well as in shaping society. While thinking about equity, everyone should have access to a kind of education that prioritizes the student and their needs, so that anyone has the opportunity to learn. With that in mind, studies that focus on the impact of individual differences on learner's development explain that there are several aspects that can influence the way people learn and that should be accounted for in a classroom (DORNEY; SKEHAN, 2003). However, even though all students deserve attention to their learning specificities, differences and characteristics, special needs students also require adaptations that derive from their disability which must be considered in their educational process.

In Brazil, there are several government documents that guide education and reinforce the importance of an inclusive learning process (e.g. Law n^o. 13.146/2015 or even the Brazilian National Common Core Curriculum - BNCC). Still, one could say this topic continues to be a struggle when it comes to putting these ideas into practice in the daily classroom (VITALIANO, 2013, apud FERREIRA; TONELLI, 2020), once BNCC, for example, does not provide clear guidelines for dealing with inclusion. That signals the urgent need to educational practices that allow the student with disabilities to learn along with others, having their needs attended, once "equality and equity in education needs should be strengthened and supported to satisfy the need of giving attention and care to students with special needs" (BRAHIM, 2022, p. 204).

Although all disabilities are important and deserve attention, this study will focus on two groups of disabilities: Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD). The reasons for this choice are twofold: 1) the identification of both ASD and ADHD have become more and more common in schools (FERREIRA; TONELLI, 2020; VILLALOBOS, 2011), which reinforces the relevance of studies that investigate educational practices that consider them, and 2) studies that attempt to understand practical possibilities for teaching English for people with disabilities are still scarce. It is relevant to mention that, at first, we had the intention of also researching studies that dealt with CAPD (central auditory processing disorder). However, no studies were found that could fit our criteria, which signals to the importance of research in the area.

Considering the main concepts that guide this study, Autism Spectrum Disorder (ASD) may entail learning difficulties, affecting individuals in their abilities of social cognition and interaction, among others. Attention Deficit Hyperactivity Disorder (ADHD), on the other hand, may affect individuals in having impulsive behavior, lack of attention or hyperactivity.

Drawing on Vitaliano (2013), Ferreira and Tonelli (2020, p. 560, my translation) highlight that teachers and school administrators, through actions that enable and promote

learning, can be the main agents responsible “for the creation of changes that transform the school environment into a welcoming and inclusive one”. According to Vitaliano (2013), however, within the process of teachers' education, teachers usually do not receive enough information on how to be prepared to deal with specific scenarios of disabilities and Special Needs Education. This lack of preparation affects not only the teachers or the students themselves, but the entire environment, since it is important to give opportunity to everyone equally.

Rodrigues (2008 apud Vitaliano 2013) affirms that when considering the school environment, it is important to perceive the difficulties faced by learners from an educational point of view instead of from a clinical/medical perspective. That entails planning, evaluating and developing/adapting materials that are inclusive of students with disabilities. This is why this research focuses on studies that approach the educational aspect of disabilities, discarding papers that focused on a more clinical look. The objective here, therefore, is not to present "symptoms", but to discuss teaching possibilities that may contribute to inclusive English classes.

Considering the aforementioned, the present study intends to critically report a systematic research of empirical studies in the area of additional language education, focusing on English as the additional language. The aims of the present study are to (1) identify strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD and/or ADHD and (2) identify possible challenges that teachers of English as an additional language have had when developing/implementing their materials, strategies and/or methodological procedures for teaching students that have ASD and/or ADHD. In order to achieve the objectives of the study, articles published from 2015 to 2022 were selected to be included in the systematic review. The 2015 date was chosen because of Law 13.146 that instituted the Brazilian Law for Inclusion of People with Disabilities. The date 2022 was chosen since this study started in the middle of 2023. The research questions that will guide this study are: 1- do teachers of English as an additional language face challenges, considering preparation, planning and/or assessment, when teaching English as an additional language for students that have ASD and/or ADHD? If so, which are they? and 2- what are some strategies and methodological procedures used by teachers of English as an additional language when dealing with these challenges and/or when teaching students that have ASD and/or ADHD?

In order to achieve the aforementioned purposes, the present text is organized as follows. After this introduction, Section 2 presents the theoretical background regarding the main

concepts that guide this study. The method employed is presented in Section 3, as well as the procedures for data collection and analysis. Section 4 shows the results altogether with the discussion about the findings. Finally, Section 5 presents the conclusions of this study finishing with the bibliography in Section 6.

2. THEORETICAL BACKGROUND

Considering that the aims of the present study are to (1) identify strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD and/or ADHD and (2) identify possible challenges that teachers of English as an additional language have had when developing/implementing their materials, strategies and/or methodological procedures for teaching students that have ASD and/or ADHD, it is relevant to understand some key concepts that guide this project. In this sense, section 2.1. will deal with aspects related to disabilities and relevant constructs that inform this study, while section 2.2. will discuss aspects that involve teaching an additional language for people with disabilities.

2.1. ASPECTS RELATED TO DISABILITIES AND DISORDERS

According to the Oxford dictionary, disorder can be characterized as “a condition that causes problems with the way part of the body or brain works” (DISORDER, 2023). In this sense, a disorder may or may not give rise to a learning disability depending on its severity. Considering the vast possibilities of disabilities and disorders, the following sections will focus on discussing the ones under the scope of investigation for this study.

When thinking about the way people act and react to disabilities in their daily lives and how this has a great impact on the lives of people with disabilities and the environment around them – with their peculiarities and difficulties being constantly neglected due to the lack of inclusion and adaptations – one may realize that the environment can be more limiting than the disability itself. Regarding this statement, it seems important to emphasize that there are particularities about each one of the disabilities and the more information we have, the more knowledge we will gain, making the pedagogical practices in the classroom more accessible.

In this sense, a brief discussion on each of the disabilities under scrutiny in this study is presented as follows¹.

2.1.1. Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) can be perceived as “a group of dysfunctions in cognitive and social development, which manifests itself to varying degrees” (LEITÃO, 2018, p. 33, my translation). According to Leitão (2018, p. 34, my translation), people with ASD “often have marked impairment in their development related to social interaction and communication” and the manifestations of this disorder may vary according to the development and age of the person, with the possibility of nonverbal consequences in their social interaction, such as body gestures and eye contact for example, including “a markedly restricted repertoire of activities and interests” (BELISÁRIO FILHO; CUNHA, 2010, p. 15 my translation). Belisário and Cunha (2010) describe some characteristics that people with ASD often present, such as high interest in non-functional routines and rituals (e.g. opening and closing the lunchbox a specific number of times before eating) and difficulties regarding understanding non-literal aspects of questions, directions and jokes. In addition to these characteristics, there are a few behavioral traits that can appear such as great concern and fascination with objects and their movements, and body movement (such as clapping hands/snapping fingers, body shaking, walking on tiptoe, among others). People with autism may also present the need to have some alone and quiet moments with no interaction whatsoever with others, no interest in proposed activities, and in some cases, behaviors that may put them at risk.

It is important to highlight, however, that although some authors present stereotypical characteristics regarding the behavior of people with autism, as Belisário Filho and Cunha (2010, p.17, my translation) explain, the Autism Spectrum Disorder is to be seen as a subjective category that is not unique, so no person with autism is the same or has all the same characteristics. Moreover, Orrú (2024) points out the relevance of considering other intersectional aspects of a person with disabilities such as gender and race, since other aspects influence a person’s identity and since a disabled person is not defined by the disability.

When it comes to teaching students with autism, drawing on Santos (2013), Ferreira and Tonelli (2020) make reference to the importance of the teacher-student interaction, as children

¹ More recent perspectives on disability studies have proposed an understanding of disabilities such as autism and ADHD from a neurodiversity perspective (ABREU, 2021), which may avoid stigmatizing the disorder focusing on symptoms and behaviors that might manifest in the students, instead, approaching the disabilities in a more inclusive and less judgemental way. However, due to time constraints, it is not going to be possible to use this perspective in this work, at this time.

with ASD seem to seek a pattern recognition in class that provides safety in the environment they attend to, looking at the teacher as a reference and a model to help to identify a routine, organization and even behavior in class. The authors explain that

the challenges surrounding inclusion of children with ASD in the classroom are related to building social relationships and contexts that favor the establishment of friendship cycles and affection with these students, as it is important that they visualize the school as a welcoming environment, in order to learn in a meaningful way (FERREIRA AND TONELLI, 2020, p. 559, my translation).

Being aware of the students' possible specific traits and needs, the importance of an inclusive environment and their relationship with the teacher, it is crucial to understand the impact of daily routines. A school is often characterized as an institution that has daily rituals which may influence the life of the ASD student and, hence, these play an active role in their progress in the school environment. On the other hand, the absence of such routines, such as a change of teacher or, in some places, not having a second teacher/assistant, a different class, an extra event that does not follow the pattern they are used to or other possible events different from the daily routine can influence the way the student feels in class and, consecutively, their learning (BELISÁRIO FILHO; CUNHA, 2010). According to Belisário Filho and Cunha (2010, apud Leitão, 2017, p. 41), it is essential that schools provide an environment prepared to receive the students with ASD, pointing out that this coexistence in the school environment can be facilitated by the participation of classmates, who usually intervene spontaneously in the learning of rituals by the student with ASD, together with the collaboration of the teacher and the students' family. The communication between classmates, the teachers and family are vital for the ASD student, and being aware of the possible changes that may happen in the school routine - or even at home - allows the others to anticipate movements for an intervention in order to minimize possible reactions that can influence behavior in the classroom, such as warnings from the teacher about changings in the school's calendar, an extra event or something concerning any changes in the school or in their home, considering that different experiences at home can also influence their behavior in school, compromising their learning and development (Leitão, 2017).

Additionally, Ferreira and Tonelli (2020) discuss the relevance of stimulating students with ASD to their full learning potential, considering that, due to the brain's plasticity, it may allow for cognitive development if rightly stimulated. In this sense, the authors defend the

implementation of activities that encourage the student with ASD to learn social interaction as well as activities that challenge them. Moreover, they talk about applying activities that are focused on maximizing students with autism' strengths, allowing them to exercise the abilities they already have. The authors also discuss the benefits of activities with visual organization and concrete stimulus, as well as playful activities that can increase motivation.

Similarly, Wielewicz and Behnck (2023, p. 188, my translation) draw attention to the importance of "exploring the potential of each person, as a means of valuing their contributions and their unique existence in the classroom context". With that in mind, the authors explain that the use of "inclusive pedagogical strategies that take into consideration the potential of neuroatypical students, in addition to their limitations and difficulties, enables a classroom where all individuals, each with their own specificities, have space to participate and express themselves" (WIELEWICKI; BEHNCK, 2023, p. 187, my translation). Moreover, Bock, Gesser and Nuernberg (2021) discuss the possible contributions of Universal Design as an inclusive learning framework that may aid in removing barriers and cover specific needs. The authors explain that Universal Design involves the use of products, spaces, means of communication, technologies and services that are designed to ensure their use by as many people as possible, regardless of their characteristics.

Considering the aforementioned, it is clear that teaching an additional language to students with autism requires more than simply having students in the classroom or adapting one or two activities along the way. Wielewicz and Behnck (2023, p. 181-182, my translation) emphasize that, "considering that students with ASD are included in the regular education system, it is important to identify what types of inclusion actions need to be carried out to guarantee access to education for neurodivergent students". Hence, investigating possible challenges, strategies and methodologies that can contribute to this purpose seems relevant. Having in mind that the same perspective applies to other disabilities and keeping in mind the main goals of this study, the following section will discuss specificities of students with Attention Deficit Hyperactivity Disorder.

2.1.2. Attention Deficit Hyperactivity Disorder

People with Attention Deficit Hyperactivity Disorder (ADHD) can be perceived as "being excessively distracted, and this is usually accompanied by impulsivity and hyperactivity" (VILLALOBOS, 2011, p. 24). As explained by Douglas (2005, apud VILLALOBOS, 2011), ADHD children have a tendency to be distracted, which may impact their short-term memory, they may also act without thinking and have trouble focusing. In this

sense, “they may understand what is expected from them but have trouble following through” (VILLALOBOS, 2011, p. 24) and those may be due to the fact they may have difficulties sitting still, paying attention, or attending to details.

As stated by Villalobos (2011, p. 24), people with ADHD "can be distracted from an idea, an emotion, an action, or a relationship. The distraction may come from outside or be within the person’s mind”. Considering that the distraction of the person with ADHD can be perceived as a subjective characteristic that demands a careful recognition, it is important for the teacher “to be sensitive in the classroom to notice this peculiarity and use methods and strategies for enhancing learning when it comes to students with this disorder" (RELVAS, 2015 apud FREITAS, 2017, p. 28, my translation). Moreover, it is relevant to keep in mind that “some studies suggest that the disorder results from an imbalance in certain neurotransmitters (most likely dopamine and serotonin) that help the brain regulate focus and behavior” (SOUZA, 2001 apud VILLALOBOS 2011, p. 24).

Freitas (2017) explains that “the brain of a person with ADHD has some areas more developed than others” (FREITAS, 2017, p. 12, my translation) which means that people with ADHD often have difficulties following rules, meeting goals and carrying out tasks with a specific deadline. Drawing on Doidge (2016), Freitas (2017) explains which areas from the brain can be affected, such as the outlier, related to attention span; the frontal lobes, where goal setting and the development of abstract thought reside; the basal ganglia, responsible for maintaining focus, that are generally smaller in people with ADHD; vagus nerve/vagal nerve, part of the parasympathetic nervous system that calms the body after some stressful situation; and the cerebellum, that controls the timing of thought and movement. It is important to highlight that even though the knowledge about the function of the brain in students with ADHD is not the main object of this study, it plays a vital role in understanding how the disorder affects important areas of the brain, impacting their behavior directly, which may influence the way the teachers prepare their classes and the comprehension of their challenges faced while dealing with the students with low interest and attention span during their classes.

In relation to the classroom, according to Villalobos (2011), the student with ADHD often seems to demonstrate lack of interest while learning in school, which may require a big effort from the teachers to have the students' attention or when dealing with forgetting to hand in assignments and the need for more time to complete tasks, as well as repetitions regarding the explanation of classroom activities. Some of these characteristics are also mentioned by Freitas (2017), when the author talks about, along with disorganization of school material and written activities, the way in which students with ADHD can hinder the activity and learning

of their colleagues by being impulsive and speaking when they should not, or by not following orders and commands. Drawing on Costa (2016), Freitas affirms that ADHD may come accompanied by a variety of comorbidities² like Oppositional Defiant Disorder (ODD), that leads the student to confront the person in higher position than theirs; and Conduct Disorder (CD) in which they can persistently display severe antisocial and aggressive behaviors. In addition, the students may exhibit more individual behaviors such as fidgeting in the chair, shaking their legs, playing with pens and other personal materials or simply focusing on something unrelated to the content being taught.

Even though the above mentioned characteristics may be found in the behavior of students with ADHD, it is important to understand that just like students with ASD, students with ADHD can manifest countless different types of behavior, connected or not to some comorbidities, making these just a few examples that vary greatly from person to person. Bearing in mind that ADHD is a disorder with a vast collection of symptoms and behavioral attitudes that manifest themselves in very distinct ways in each person, it is crucial to emphasize that other factors must also be taken into account, such as their relationship with the family, the environment, the teacher and the other colleagues.

Moreover, it is important to keep in mind that the role of the school and the teacher in the student's life is paramount in the sense of promoting an inclusive education that attempts to remove barriers. After all, as posed by Freitas (2017, p. 13), “limited people do not exist, because the more we know the brain, the better we can deal with it, for example, promoting pedagogical accessibility to facilitate learning for students with some ‘limitation’”. Similarly, Relvas (2015, apud FREITAS, 2017) highlights that it is through knowledge about the functioning of the brain of people with ADHD that it becomes possible for teachers to use teaching strategies aimed at these people, with the goal of transforming the teaching and learning process of the English language and making it more efficient for both the teacher and the student.

For that to be possible, it is crucial to understand the role of education for students with disabilities. With that in mind, the next section will talk about Brazilian education for people with disabilities and the impact of impairment in their learning process.

² It is important to mention that both ADHD and ASD disorders may be accompanied by depression, anxiety, among others comorbidities, since they can present similar aspects, which reinforce the possibility of including both disorders under the perspective of neurodivergent term for further studies.

2.2. EDUCATION FOR PEOPLE WITH DISABILITIES IN BRAZIL

Feeling incapable of doing an activity can be considered one of the worst feelings there is, because it creates a barrier, a feeling of defeat and inferiority, destroying your self-esteem and determination to face challenges, from the smallest to the most complex. In early childhood, we find our first challenges: to walk, to discover new things, to speak our first words, to practice writing, and to deepen our knowledge of what the world has to offer. If people are not encouraged to see difficulties as challenges that need to be learned and overcome, they will feel stagnant, afraid to try. If people are taught that they won't succeed, that they are incapable, that there is something wrong with them, or that they require too much to learn, and there is a focus on the person's difficulty instead of a solution or a way to generate an opportunity for them to get there too, they may give up halfway.

Teachers can aid in providing that opportunity, to guide students to a path where it is possible to learn, where the person feels comfortable enough to try and make mistakes until they succeed. As Tardif and Lessard (2005, p. 35, my translation) explain, "teaching is a job whose object is not made up of inert matter or symbols, but of human relationships with people capable of initiative and endowed with a certain capacity to resist or to participate in the action of teachers". To think of ways for students to achieve the autonomy needed in class for them to be able to perform the activities with no regression in their learning and/or exclusion in their education seems to be a relevant aim of any teacher; for this to be accomplished, it is essential that schools provide a welcoming environment, with materials that allow students to learn, to understand what has been asked and to be ready to apply that knowledge in the world outside the school walls. Being a teacher also seems to mean carrying the responsibility of offering a room for the students with disabilities to have the same chances as any other student.

In Brazil, there are official documents regulating inclusive education that guarantees all students equal rights to receive education and information. According to the Law n°. 13.146, of July 6, 2015. Art. 2, a person with a disability is someone who has a long-term physical, mental, intellectual or sensory impairment which, in interaction with one or more barriers, may obstruct his or her full and effective participation in society on an equal basis with others. This is not the first official document that discusses disabilities in Brazil. The 5.296 decret, for instance, published on December, 2nd, 2004, attempted at guaranteeing the right of accessibility. However, an important contribution of the Law n°. 13.146 is that, different from previous documents, it presents a functional/social perspective of the person with disabilities. In this sense, it understands that the barriers imposed on people with disabilities are not necessarily caused by the disability itself, but by external structures that do not consider differences, that

is, the environment is limiting and not the disability itself. As stated by one participant in Bock, Gesser and Nuernberg study (2021, p. 17, my translation),

We are social beings, we are finite and limited beings, none of us can meet all our needs alone [...] when we work together towards something, we have greater possibilities of achieving success, this applies to all areas of human life.

With that in mind, it is of great importance to understand that among different students with unique minds, teachers must take into account the different ways of learning when developing materials and implementing classes. Universal Design, mentioned by Bock, Gesser and Nuernberg (2021), seems to be one way of doing that, as it provides ways to manage diverse approaches towards students' needs, offering different possibilities to present the same content so that students become familiar with the lesson topic without being tied to a single way of studying it (BOCK; GESSER; NUERNBERG, 2021). As the authors explain, "it is necessary to consider that people participate in different ways in social spaces, according to their ways of being in the world and, therefore, a single format for making knowledge available is not possible" (BOCK; GESSER; NUERNBERG, 2021, p. 8, my translation).

Diving on the importance of providing access to different learning resources, and in order to reduce barriers, from the Universal Design perspective, "resources, strategies, methodologies and assessments are developed with a view to expanding access for all" (BOCK; GESSER; NUERNBERG, 2021 p. 2, my translation). A few examples of strategies that are part of the logic behind the Universal design would be, for example, progressively sequencing activities according to their difficulty and in several steps, disposing the text for the students to read more than one time or manipulating the materials offered by changing the size, format, among others. This way, "based on networks and principles, curricula, activities and methodologies are designed taking into account students' individual differences in the process of relating to knowledge, beyond diagnosis" (BOCK; GESSER; NUERNBERG, 2021, p. 3, my translation).

This perspective matches with the paramount need of inclusion of students while taking into account their peculiarities in class, not simply their clinical symptoms. In Bock, Gesser and Nuernberg's (2021) study, for instance, which focused on designing and implementing an online course on disability studies for future teachers as well as teachers who have already graduated in the area, the use of Universal Design throughout the course seemed to have positive implications on participants' autonomy development, as well as increase of interest for

the course. In their study, they provided support for each students' needs through "the anticipation of possible disadvantageous situations, removal of barriers and implementation of facilitators" (BOCK; GESSER; NUERNBERG, 2021, p. 7, my translation). These strategies, which derive from the universal design, seemed to increase the students' interest on the discussed topic in class and on other areas, as well as elicit positive feelings towards the course, through expressions that appeared in their diaries such as "respect, privilege, freedom, tranquillity, ease, welcoming environment, fulfillment and feeling comfortable" (BOCK; GESSER; NUERNBERG, 2021, p. 7, my translation). Still, although, as mentioned, inclusive activities are vital for the students, according to Bock, Gesser and Nuernberg (2021), the use of accessible resources can be insufficient if the individual's choice consistent with the person's abilities is not considerate nor allowed.

Bearing in mind the Brazilian Law nº 13.146, people with disabilities should be granted conditions for access to the school community. Furthermore, the law foresees an inclusive educational system at all levels and modalities, which means that schools should offer services and accessibility resources that eliminate barriers and promote full inclusion in the school environment, according to students' physical, sensorial, intellectual, and social abilities, according to their characteristics, interests, and learning needs. Beyond laws, it is necessary that places and society are able to receive and interact with people with disabilities especially inside classrooms.

When it comes to teaching an additional language to people with disabilities, as Rocha and Tonelli (2017) point out, many teachers have not been prepared to teach students with disabilities. Even though the teachers attempt to "teach everyone, helping and mediating this process, allowing students to recognize themselves in the school environment so that they can identify themselves as active participants in society and build their stories as critical and linguistically developed human beings" (FERREIRA; TONELLI, 2017, p. 562, my translation) this is not a path easily traced, specially due the fact that many professionals are not prepared to deal with it, once it is not something specified neither explicitly shown during their development in this profession, because there are no special notes, rules, list or single way to do it. Humans are the most complex form of life that exists and each one behaves and understands the world in their own way. This leads to a perspective that in relation to studies, could not be any different, specially by taking into account students with disabilities and specific needs, as well as the process of applying the content in class.

Although a specific subject (or an inclusive perspective, for that matter) towards inclusive teaching may not be included in college curriculum/contents, leading to "gaps in the

education offered in undergraduate courses, which do not sufficiently prepare students to work in an inclusive context" (FERREIRA; TONELLI, 2017, p. 561, my translation), the teachers are still aware that "all students must have equal rights, which makes it part of the role of teachers and school managers to create an environment that provides development conditions for their students, regardless of limitations imposed by their disabilities" (FERREIRA; TONELLI, 2017, p. 562, my translation).

Bearing in mind the relevance of guaranteeing an inclusive environment in language classes, this study attempts to contribute to this field, by reviewing other studies that dealt with strategies and methodological procedures for teaching students with disabilities.

3. METHOD

The present study consists of a systematic review of literature, which is "a research modality that follows specific protocols in search of giving some logicity to a large documentary corpus" (GALVÃO; RICARTE, 2019 p. 58, my translation). In this type of research, the focus relies on finding articles that provide information about one or more specific questions or objectives that the author is investigating. Based on criteria to know which article correlates with their research proposal, the author selects the ones relevant for their research and discards the others that, for some reason, did not fit in their academic needs. In other words, according to Galvão and Ricarte (2019), a systematic review is a literature review that covers specific subjects that are connected with the reading objectives from questions previously defined by the researcher.

This study aims to answer the following research questions: 1- do teachers of English as an additional language face challenges, considering preparation, planning and/or assessment, when teaching English as an additional language for students that have ASD and/or ADHD? If so, which are they? and 2- what are some strategies and methodological procedures used by teachers of English as an additional language when dealing with these challenges and/or when teaching students that have ASD and/or ADHD? It is also important to clarify that when we use the expression "strategy", we mean either teaching strategies identified and/or other methodological procedures employed by the teacher to facilitate learning.

In this sense, the main goals of this study are to: (1) identify strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD and/or ADHD and (2) identify possible challenges that teachers of English as an additional language have had when developing/implementing their

materials, strategies and/or methodological procedures for teaching students that have ASD and/or ADHD. In order to achieve these goals, the following procedures were conducted.

3.1. PROCEDURES

This study consists of a systematic review of research articles that address strategies and/or methodological procedures used when teaching students that have ASD and/or ADHD and that have been published between the years 2015 and 2022, written either in English or in Portuguese.

The keywords (both in English and their translation in Portuguese) ‘inclusive education’/‘educação inclusiva’, ‘ADHD’ and/or ‘ASD’/ ‘TDAH e/ou’ ‘TEA’, ‘Attention Deficit Hyperactivity Disorder’/ ‘Transtorno de Déficit de Atenção e Hiperatividade’, ‘Autism Spectrum Disorder’/ ‘Transtorno do Espectro Autista’, ‘additional language teaching and/or learning’/ ‘ensino de língua adicional e/ou aprendizagem’, ‘teaching strategies/methodologies’/ ‘estratégias/metodologias de ensino’ were used to find the material in the following databases ‘Web of sciences’, ‘ERIC’ and ‘PORTAL CAPES’. The databases were chosen considering the amount of articles initially found, 37, being considered only articles with open access.

The criteria for inclusion/exclusion of articles were the following: (1) To have information about strategies, procedures and/or challenges when teaching an additional language to people with some of the aforementioned condition and (2) The articles including other disabilities and disorders such as deafness/hearing impairment, blindness/vision impairment and physical disabilities were discarded. Then, in order to access the 37 articles found using these criteria, we read the abstract and/or the introductory paragraphs of each article.

We then selected 10 articles that remained following the established criteria. These articles were submitted to a more analytical reading, which means we read the complete texts in order to organize the information systematically considering, besides methodological information about each article, the strategies, challenges and other relevant findings. We then engaged in an interpretative reading process, focusing on answering the two research questions that guided this study. The findings were discussed under the literature that informs this research.

4. RESULTS AND DISCUSSION

As previously mentioned, two research questions guided this study: 1- do teachers of English as an additional language face challenges, considering preparation, planning and/or assessment, when teaching English as an additional language for students that have ASD and/or ADHD? If so, which are they? and 2- what are some strategies and methodological procedures used by teachers of English as an additional language when dealing with these challenges and/or when teaching students that have ASD and/or ADHD?

In order to answer these questions, ten studies, from 2015-2022, were analyzed, being six of them foreign studies and four Brazilian studies. From these ten studies, seven of them focused on teaching English to people with ASD and the other three focused on teaching English to people with ADHD, as it is shown in the following table:

Table 1 - a summary of the studies analyzed.

Text	Disability	Year	Title	Author(s)
A	ADHD	2020	Integrating Drawing in Teaching English Language at Yumba Special School for Children with intellectual Disabilities	ALHASSAN, B. & OSEI, M.
B	ASD	2019	Case Study: Second Language Acquisition with Asperger Syndrome in a University Setting	BRADLEY, M.
C	ASD	2021	English As Secondary Language Learning and Autism Spectrum Disorder: The Obstacles in Teaching and Learning the Language	HASHIM H. U., YUNUS M.M. & NORMAN, H.
D	ASD	2017	Teaching English to a Student with Autism Spectrum Disorder in Regular Classroom in Indonesia	PADMADEWI & ARTINI
E	ASD	2021	Effectiveness of the Picture Exchange Communication System in Teaching English Vocabulary in Children with Autism Spectrum Disorders: A single-subject study	ZOHOORIAN Z., ZERAATPISHE M., & MATIN SADR N.
F	ASD	2022	Autism Children and English Vocabulary Learning: A Qualitative Inquiry of the Challenges They Face in their English Vocabulary Learning Journey	HASHIM, H.U., YUNUS, M.M. & NORMAN, H.
G	ADHD	2021	Ensino de Inglês para Alunos com Transtorno de Déficit de Atenção e Hiperatividade	SANTOS, A.C. & SENEFONTE, F.H.R.

H	ASD	2020	Ampliando horizontes: ensino de inglês para crianças com transtorno espectro autista	FERREIRA, O.H.S & TONELLI, J.R.A
I	ADHD	2019	O ensino de LI para alunos com NEE: experiências e reflexões no âmbito do pibid	LISBOA, J.V.R.
J	ASD	2018	O Processo de Ensino-Aprendizagem em Língua Inglesa de um aluno com Autismo: um estudo de caso em uma escola inclusiva	SILVA, C.L., FACIOLA, R.A. & PEREIRA, R.R.

In relation to the research methodologies used in the ten analyzed studies, they varied from observation of classes followed by diary/field notes, surveys and/or interviews with students and/or teachers, application of proficiency exams, application of developed inclusive/adapted activities. It is relevant to observe that these ten studies seem to have different language conceptions, since the foreign studies mostly focus on vocabulary development or specific abilities such as academic English. On the other hand, the Brazilian studies seem to have a more communicative perspective on language teaching (e.g. in one, teaching is guided by literature and in another there is a focus on the development of the four abilities). More information about the studies analyzed can be seen in appendix A. Moreover, it is relevant to emphasize that the studies were conducted in different contexts that seem to understand and approach disability from different perspectives.

The selected texts were divided into two categories regarding each disability (4.1) Challenges and strategies for teaching English for students with ASD and (4.2) Challenges and strategies for teaching English for students with ADHD. In order to facilitate discussion, letters from A to J were used to refer to each study, considering the table aforementioned. For the identification of strategies and challenges in the analysis, both are highlighted in bold along the following text.

4.1. CHALLENGES AND STRATEGIES FOR TEACHING ENGLISH FOR STUDENTS WITH ASD

In relation to challenges and strategies for teaching English for students with ASD, two Brazilian studies and five foreign studies were analyzed. They are texts B, C, D, E, F, H and J. Seventeen different teaching strategies/methodological procedures were identified as they were used in these studies. From these seventeen, five of them refer to strategies/procedures that

seemed to be specific to the study's methodology and/or the context, that is, the strategy/procedure used seems to derive from specificities of the research method employed or the context in which the study was carried out. They are: specific techniques for developing academic English, used in text B; social stories as a teaching method, used in text C; specific techniques based on behavioral perspective for encouraging interaction, used in text D; Picture Exchange Communication System, used in text E; and teaching unit based on children's literature, used in text H. Considering the specificities of these strategies/procedures, they are briefly described in the paragraphs below.

Text B, *Case Study: Second Language Acquisition with Asperger Syndrome in a University Setting (2019)*, focused on examining one student's progress in the University of Costa Rica, in order to compile some general characteristics and recommendations for educators teaching students with ASD. The student was observed for two years while enrolled in 3 English courses: Intermediate 1, Academic writing and Upper-Intermediate 2. For that study, besides other teaching strategies implemented, the teacher reported implementing teaching strategies that were specifically related to **teaching academic English**. They were: i. to develop intonation: the teacher carried out private sessions with the student, presented activities to learn rhythm and tone; ii. to develop concision: the teacher presented activities to aid the student into being more succinct, focusing on which details to include when speaking and which to omit, specially considering cultural expectations; and iii. to develop the ability to make inferences: the teacher suggested the learner to switch the focus from what he does not understand to what he does understand. As previously mentioned, these were strategies implemented that were very specific to the context and methodology of the study, however, other strategies were used by the teacher in this study which seem to be more general when we consider learners' development independently of the course. These will be mentioned later in this discussion.

Text C, *English As Secondary Language Learning and Autism Spectrum Disorder: The Obstacles in Teaching and Learning the Language (2021)*, aimed at investigating the obstacles that learners with autism may face in English as secondary language learning, as well as investigating challenges faced by the teachers who are in charge of teaching learners with autism. The data collection happened in two Autism centers in Selangor, Malaysia, and participants were 45 preschool learners with autism and 14 teachers. The study did not mention any specific strategy used for teaching other than the importance of visual material. However, the study discussed the relevance of using '**social stories**' to enhance learning - a method of teaching to facilitate the understanding of social context that the child might find difficult to

interpret. Unfortunately, the study did not clarify how the use of social stories took place inside the classroom.

Another example of a study that made use of a specific strategy in its methodology was text D, *Teaching English to a Student with Autism Spectrum Disorder in Regular Classroom in Indonesia* (2017), a mixed-method case study that took place in a bilingual school in Indonesia. This study aimed to investigate appropriate strategies of teaching English to an ASD student in a regular school. Besides other strategies mentioned, which will be referred to later in this discussion, the study mentions **behavioral based** (stimulus, reinforcement and repetition) teaching techniques to encourage interaction and following commands such as "media for shaping". As explained by the authors,

the types of media used depended on the topics and the material being taught. The media for shaping for example can be in the forms of pictures or even the real objects to tell about kinds of nouns in English. By showing the media and saying it out loud, the shadow teacher was transferring the information which was understood through the visual image formed in the brain of the student (PADMADEWI; ARTINI, 2017, p. 165).

In study E, *Effectiveness of the Picture Exchange Communication System in Teaching English Vocabulary in Children with Autism Spectrum Disorders: A single-subject study* (2021), two students with ASD (9 and 12 years old), from a school for students with special needs in Iran, participated in the research. The study aimed at employing **PECS** (Picture Exchange Communication System) to ESL (English as a Second Language) vocabulary development and, for that purpose, a sequence of activities were performed in which the student would gradually recognize the words with the objects themselves. PECS refers to an approach based on behavioral analysis, meaning that the student's learning is related to a rewarding system that would reinforce the children's behavior and progressively encourage the student's language skills through the phases.

Text H, *Ampliando horizontes: ensino de inglês para crianças com transtorno espectro autista* (2017), takes place in a classroom of early years in Parana, Brazil. It makes use of children's literature to guide language learning. In this study, the authors Ferreira and Tonelli present a book called *'The very hungry caterpillar'* (1969) and through a series of activities involving painting the right animal, choosing which animal to work with and the food it would ingest, the children could be able to produce their own version of the story, with the animal of their choice, all of that while included in class, once all the other students in class made the

very same activities, except that, instead of telling the ASD student to simply choose an animal, for example, as done by the other children in class, it was **supplied images for the ASD student to choose**; this way the student continued to be part of the class, having the chance to feel included, while also having the support they needed to accomplish the tasks.

Besides the five strategies listed above, which were related to specificities of the research methodologies and/or contexts implemented, other twelve teaching strategies were identified in the seven studies that focused on students with ASD that were analyzed. They are presented in the table below which mentions the strategy used, the number of studies that made use of that strategy and the text in which the strategy can be found:

Table 2 - a summary of general strategies found in the studies analyzed that focused on students with ASD.

Strategy	N° of studies	Text
Dialogue + individual meetings with student	1	B
Reduce noise	1	B
Gestures for facilitating comprehension	3	D-H-J
Teacher previous and explicit preparation	1	B
Concise and direct/objective language	3	B-H-J
Offering options for facilitating making choices	1	H
Routines and repetitions	3	B-E-F
Teacher mediation during oral activities	5	B-C-D-E-F
Role play for improving oral skills and socialization	2	B-J
Shadow teacher	1	D
Visual, concrete and modeling resources	5	B-C-D-E-F
Customized materials and classes according to learner	5	B-C-D-E-F

As it can be perceived in table 2, some of the strategies that appeared in the analyzed ASD studies were mentioned in more than one study, while others appeared in only one study. There were three strategies that were mentioned in five of the seven analyzed studies that

focused on ASD (B, C, D, E and F), which are: i. teacher mediation during oral activities; ii. customized materials and classes according to the learner; and iii. visual, concrete and modeling resources. Those can be seen as very substantial strategies to consider as they seem to take into account one of the most striking aspects regarding students with ASD: the specific needs of each student and how this interferes with their learning.

The first strategy, **teacher mediation during oral activities**, highlights the relevance of the figure of the teacher, reinforcing how it is important for the student to have guidance inside the class. As previously mentioned in the review of literature, Ferreira and Tonelli (2020) call attention to the importance of the teacher-student interaction, as children with ASD seem to seek a pattern recognition in class that provides safety in the environment they attend to, looking at the teacher as a reference and a model to help to identify a routine, organization and even behavior in class. Moreover, this methodological procedure, teacher mediation during oral activities, seems to be in line with the reality of the autistic person, because depending on the degree of autism and on the specificities of that person's autism, oral skills may be a challenge, once "we can find children with neither verbal communication nor non-verbal communication, with verbalization of isolated words, with stereotyped language, using repetition of phrases" (BELISÁRIO FILHO; CUNHA, 2010, p. 32, my translation). For this reason, having activities that prioritize the use of other ways of communication such as drawings, objects and images, or using their hand to choose something other than asking the students to speak, or even verbally explaining the subject can be considered relevant strategies to aid in promoting the elimination of barriers.

In relation to the strategy **customized materials and classes according to the learner**, it seems to highlight the relevance of adapted material which may allow the student to achieve further abilities, that allows them to own the content in a way they can have a better comprehension on the subject, as they each have their singular form to study and not always the method used in class is inclusive for them. That was the case of the study F, by Hashim; Yunus and Norman (2022) for example, in which the teachers had to develop a customized learning material to accommodate the variances in traits and preferences among 45 children with ASD who studied in a school in Malaysia, having to deal with specificities like some being sensitive to sounds, lights and touch while others were attracted to bright and vibrant colors. This way, having specific material adapted for each student may be necessary, although may not be a practical strategy to be applied daily, for it demands a lot of time and effort by the teacher, which reinforces the relevance of planning time in teaching.

Finally, the other strategy that was used in the 5 studies mentioned (B, C, D, E and F) was the implementation of **visual, concrete and modeling resources**, which refer to activities with visual organization and concrete stimulus. Ferreira and Tonelli (2020) highlight the benefits of activities with visual organization and concrete stimulus, as well as playful activities that can increase motivation. These seem to be very important for the student with ASD, since considering their brain functionality, it is important for them to have visual support, for a better association of speech with writing through images. This strategy also makes sense as it consolidates learning in a more concrete way so it is helpful for learners to have access to information in a more accessible way. It should be highlighted, however, that this strategy could benefit all students in the classroom, since it may be very helpful for language development to make use of visual and concrete stimulus to achieve comprehension and for vocabulary development. One example of the use of this strategy was in study J, by Silva, Faciola and Pereira (2018), *O processo de ensino-aprendizagem em Língua Inglesa de um aluno com autismo: um estudo de caso em uma escola inclusiva*, that attempted to investigate the reality and possibilities regarding English teaching to students with ASD, in a local private school. One diagnosed student with autism and one English teacher graduated in *Letras-português/inglês* participated in the study. The study used flashcards, painting activities, music and videos to help learners to practice oral skills besides writing and vocabulary through drawings.

Going back to the list of identified strategies for teaching students with ASD, there were three strategies that were mentioned in three studies: i. Gestures for facilitating comprehension; ii. Concise and direct/objective language; and iii. Routines and repetitions. In Silva, Faciola and Pereira (2018), text J, for example, it is also possible to see the use of music and videos to associate gestures to words for a better comprehension of its meaning, while in Ferreira and Tonelli's work (2020), text H, as the student did not have their oral skill well developed, so the student used **gestures for facilitating comprehension** to refer to the figure of the character from the book when the teacher repeated the word 'caterpillar', this way the student could demonstrate that they were understanding and learning how to match the oral word to its meaning.

The strategy of using **concise and direct/objective language** is related to attempting to make oneself clear by going straight to the point. Its relevance may be that if the student has too much information, they cannot focus on what matters the most in the moment. That was the case of text B, by Bradley (2019), when the student with ASD could not understand the content due to the fact the teacher was over-explaining it, using too much information and too

many words, leading to confusion and struggle; and when she lowered her voice and explained again using less and concise words, he was able to comprehend the content. Similar results appeared in teaching younger students such as in elementary school (Silva; Faciola; Pereira, 2018) and pre-school (Ferreira; Tonelli, 2020).

Finally, in relation to the strategy of promoting **routines and repetitions**, as mentioned in the review of literature, some ASD students rely in routine to have security when dealing with the inconsistency of people around them, so knowing what is coming next helps them to be prepared, that way, “children with autism, unlike ordinarily developing children, tend to repeat actions and learn through patterns” (HASHIM; YUNUS; NORMAN 2022, p. 9). The absence of such routines, such as a change of teacher or not having a second teacher, a different class, an extra event that does not follow the pattern they are used to or other possible events different from the daily routine can influence the way the student feels in class and, consecutively, their learning (BELISÁRIO FILHO; CUNHA, 2010).

From the seventeen strategies identified in the seven studies analyzed that focused on ASD students, there was one strategy that appeared in only two studies: **The use of role play for improving oral skills and socialization**. This strategy refers to making use of role play activities in which the student pretends to be in a certain specific scenario while performing a character (role) and then interacts with their classmates/teacher using the language to communicate with the others within that scenario. The use of role play for improving oral skills and socialization appeared in studies B and J, where in B, it seemed to help the student to feel more comfortable in practicing their oral skill with the class, while in text J, the strategy appeared otherwise, being used as an instrument to develop the student's social skills.

The other five strategies identified appeared in only one of the texts analyzed: i. dialogue and individual meetings with students, ii. teacher previous and explicit preparation, iii. reduce noise, iv. the presence of a shadow teacher and v. offering options for facilitating making choices. The first three were only mentioned in text B. In this text, besides the specific strategies implemented for academic English development, already mentioned in this discussion, the teacher reported having used other three types of teaching strategies during teaching: strategies before class (involving teacher preparations and learning more about the student with ASD for example); strategies during classes (including reducing the noise and distractions; being more concise and direct; slowing down oral speech; using authentic materials and demonstrating how language is actually used in them); strategies used after classes (the teacher had the student working with a group while also having **individual meetings** to check in and work on trouble areas as well).

The strategy of **offering options for facilitating making choices** refers to granting a certain autonomy to the student, so that they feel included in the activity in the same way as their colleagues, however, in a way that they can communicate their decisions in a better way. For example, the question: “what is your favorite animal?” or “which one of these is your favorite animal” followed by the disposal of several pictures with different animals. When asking this question, the student who does not verbalize chooses the one they like the most by pointing. It was mentioned in study H, in which, as previously mentioned, the students were supposed to produce their own version of the book: *‘The very hungry Caterpillar’* (1969), it was asked for them to choose their favorite animal and, for this, the student was offered several images of different animals in which he pointed the dog and later drew it; the same strategy was used again in a similar activity, when they had to choose what types of food their animal would eat in the story, and for that, they gave a paper with the caterpillar and all the things it eats and the student only drew the ones he wanted his animal to eat in his version.

Finally, the strategy of the **shadow teacher** was mentioned in study D and it refers to having a second teacher who offered additional explanation, provided visual media, and provided support when the student seemed tired (pull-out system). It is necessary to highlight that not every person with ASD will need a second teacher to understand the content or to be offering extra material upon the subject in the classroom, but it may still be a good strategy to offer some support for some students. It is also important to understand that even though it seemed to be of great support for the student in study D, "shadow teacher" looks like an odd term to refer to a second teacher, once it is not clarified in the study if it would only help the ASD student or co-teach the class, and even though it may help the student with the extra material to focus on the subject, it may also create a barrier for the student to not interact with their classmates, as mentioned in the literature review, it is an important interaction for them.

Considering the analyzed strategies, it is possible to see that, in general, the identified strategies seem to reflect the impact of the specificities of the context in teaching. It was possible to notice that, as each person has their own specificities, each teacher and/or researcher in different studies and situations seemed to feel the need to create strategies regarding their students' needs. Some strategies were more specific than others, according to their context and needs, just as some other strategies were used more than once in different circumstances. In this way, the list of identified strategies seem to signal the importance of understanding that there is no ready-made recipe, neither a step-by-step list to be followed, nor a special formula that can be applied and ensure that ASD students are going to learn (or any student for that matter), but rather that an in-depth understanding of the context is necessary taking the

disabilities into account as well as other aspects of the teaching/learning context, so that teachers can then make appropriate and informed decisions. For this comprehension to be achieved, procedures such as critical needs analysis (BENESCH, 1996) can be seen as an alternative, as well as the importance of teacher education is highlighted, both when it comes to pre-service teacher development, focusing on planning and learning about the disabilities, as well as in-service teacher education.

As previously mentioned, there were two main goals guiding this study: (1) identify strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD and/or ADHD and (2) identify possible challenges that teachers of English as an additional language have had when developing/implementing their materials, strategies and/or methodological procedures for teaching students that have ASD and/or ADHD. The first part of the discussion carried out in this section focused on strategies and methodological procedures used by teachers of English as an additional language when teaching students that have ASD. We shall now move on to discussing possible challenges that teachers of English as an additional language have had when developing/implementing their materials, strategies and/or methodological procedures for teaching students that have ASD. For that, the same seven out of the ten reviewed studies were considered, as they focused on students with ASD.

In relation to challenges faced by teachers in these seven reviewed studies, most of them appeared during the implementation of the classes/research. Only in study B, it was mentioned a challenge that appeared before classes started, which in fact motivated the design of the study. In the case of this research, specifically, the **teacher did not know how to deal/what to do** in order to teach a student with ASD. The author describes she "was a new professor and did not recognize the signs or have any training" (BRADLEY, 2019, p. 169), so at first she felt lost on how to aid the student in her class.

Besides this challenge that appeared before class/research implementation, other fourteen challenges were identified, in the seven analyzed studies, as difficulties observed during the implementation of strategies/research. Table 3, as follows, presents the identified challenges as well as the number of times they appeared in different studies and the text in which they were mentioned.

Table 3 - a summary of the challenges found in the studies analyzed, that focused on students with ASD, during implementation of strategies/research.

Challenge	N° of studies	Text
Lack of engagement in class	3	B-E-H
Difficulties to personalize material according to the students' preferences	4	B-C-F-H
Lack or difficulties of interaction/socializing with other students	5	B-C-D-F-H
Difficulties to acquire new vocabulary	4	C-D-E-F
Difficulties to personalize material to get students' attention	2	C-H
Short time to adapt	2	C-J
Repetition of content	3	C-E-F
Lack of interest and attention	1	E
Lack of cooperation	1	E
Not able to grasp more than 3 syllables	1	F
Student isolated in and outside of the class	1	B
Specific behavior aspects	1	E
Not understanding without visual support	1	E
Parents asking for more Portuguese (L1) in class	1	J

As it can be perceived in table 3, some of the challenges that appeared in the analyzed ASD studies were mentioned in more than one study, while others appeared in only one study. There was a challenge that appeared in five different studies (B, C, D, F, and H) that was: **lack or difficulties of interaction/socializing with other students**. It refers to difficulties students seemed to have in interacting and or socializing in class, which makes sense, considering that this can be a difficulty for students with ASD, once, as stated in study F, very often “learners with Autism commonly demonstrate difficulties in responding and initiating social interactions” (HASHIM; YUNUS; NORMAN, 2021, p. 26). In text F, we also have another example of this challenge and how the difficulties in interaction and socialization impacts the vocabulary development, once "a limited vocabulary results from a lack of communicating and starting discussions" (HASHIM; YUNUS; NORMAN, 2021, p. 8), therefore, there should be

another form of working with the vocabulary, or a different method to encourage the ASD student to be included and participate in the activity, to increase their vocabulary among the other students.

Another challenge that is related to socialization appeared in text B: Students isolated in and outside the class. Although it is similar to the challenge previously mentioned, it refers to a different situation since, in this case, it was also related to the fact that, many times, the student did not want, was able to or needed to communicate to others, preferring to be by themselves, or when the teacher did not recognize the signs or had any training to help the student. As the teacher said, at first, “I just let the student isolate himself to not make the others feel uncomfortable” (BRADLEY, 2019, p. 168). In this study, the student had a struggle to provide responses and to interact with other students, which is also related to a possible ASD trait of not understanding the language figure used by the others around them.

Besides these two challenges mentioned related to socialization, other challenges that were mentioned were related to language, such as difficulties to acquire new vocabulary, which appeared in 4 studies (texts: C, D, E and F). This challenge has to do with the struggle to use the words in English in conversations or, for example, in study D, when the teacher showed a card, mentioned the color and asked the student to repeat, but when it was asked again the color said, the student changed, so “on vocabulary level, the ASD student can say all the colours in English but he did not have any understanding how it is used for communications” (PADMADEWI & ARTINI, 2017, p. 164). This shows that, even though the student could reproduce the word right away, they could not associate the word (e.g. red) to its meaning, the color, and therefore, did not acquire the word to his vocabulary once they could not use it in a natural way, as for example explain that their water bottle was red.

The other two challenges related to language that appeared in some studies were: not being able to grasp more than 3 syllables (1 study - text: F) and not understanding without visual support (1 study - text: F). In this particular study, the researcher was interested in identifying challenges of teaching English to autistic children and, by collecting data in focus groups, one challenge that emerged was that autistic children may have difficulties in grasping longer words. In this case, it may influence vocabulary development. Moreover, some autistic children may have difficulties in understanding what is being said since “because they do not have images (...) in their heads, it is difficult for them to understand what they are learning” (HASHIM; YUNUS; NORMAN, 2022, p. 6). For this reason, it is important to have visual material while teaching the class, not only for ASD students, but for everyone to have something to rely on when associating the word with its meaning. This challenge makes

connection to the previous one, as it involves the use of images to recognize the words and by helping to internalize its meaning it is also increasing their vocabulary, which can improve their conversation skills and enrich their social abilities.

Finally, the last challenge that was related to language appeared in text J in which the teacher had **Parents asking for more Portuguese (L1) in class**, the reason for this to happen was because the children could not comprehend the content, once it was their first time learning the language and complained about the subject to their parents. In this case, although it was a challenge identified, it seems not to be related to autism, once “it is believed that little exposure to the target language makes learning difficult, not only for students with autism, but also for others” (SILVA; FACIOLA; PEREIRA, 2018, p. 50, my translation).

There were also challenges related to behavior in class, such as the **Lack of engagement in class (3 studies - texts: B, E and H)**. This challenge revolves in the low interest, participation and/or involvement with the environment and the activities in class by the student, this is related to what was said in the literature review about how autistic people may have no interest in proposed activities and so, they often do not participate actively in some activities. In the particular case of text H, for example, which involved little kids in pre-school, the student whom the case-study was directed to, was diagnosed with severe autism (or Level 3 of support) and, as mentioned by the authors, that “implied difficulties in communicating and relating to other children in the class, also affecting speaking skills and the possibility of participating in activities with reduced autonomy and mediation” (FERREIRA; TONELLI, 2020, p. 564, my translation).

The following three challenges, also behavior related, were presented only in one study, text E: Lack of interest and attention; Lack of cooperation; and finally, the Specific behavior aspects. As they are very similar challenges, they seemed to be connected to one another in this study, after all, if the content/explanation did not catch the student’s attention, they will have a low interest in class and, furthermore, they will not want to cooperate. In study E, during phase 2 of the study, two students are taught to “walk to the communication book, remove a single card from the communication book cover, and then approach the communication partner. These skills are trained progressively by increasing the distance between the child, the partner, and the communication book slowly” (ZOHOORIAN; ZERAATPISHE; MATIN SADR, 2021, p. 3). Even though the participants seemed interested in the beginning of the activity for changing places and moving around the class, they both gradually showed no interest after a while, as they got “distracted by the environment and lost attention” (ZOHOORIAN; ZERAATPISHE; MATIN SADR, 2021 p. 10), this show us that even if the student participated actively in the

beginning of the activity, they can lose interest in the middle. Moreover, regarding this challenge, it should be taken into consideration the number of sections that students should perform the same activity in this study, that even though followed a pattern with slight differences, as it was the purpose of the activity, the repetition might be tiring for the student. This tiredness is going to be explained furthermore in another challenge.

Another challenge noticed in this study, in the same phase of the challenge mentioned above was the **Lack of cooperation**, in which, in phase 2 of PECS, where the student was supposed to walk to the box with the photograph of the previous chosen item (chosen in phase 1) attached to and then pick it up, one of the two students while not paying attention to the activity, as reported by the authors, “even if he stood up to do the phase he would push himself against the surroundings” this is related to behavior attitudes, therefore to the third challenge **Specific behavior**, and so to possible specific traits of people with ASD previously mentioned in the review of literature that involves body movement, no interest in proposed activities, and in some cases, behaviors that may put them at risk.

Finally, there were challenges that specifically teachers faced due to their preparation to deal with the needs of their students, such as **Difficulties in personalizing material according to students preferences (1 study - text C)**. This challenge highlights the special attention and extra time that the teacher must give in order to provide several different materials for their class, so each student could receive the content in a way that their particular minds can comprehend the subject and each activity can fulfill their particular needs; although it is important for the students to have an adapted material, in study F, it was possible to see that, due to the high number of ASD students in class (45 children with autism), the “teachers find it difficult to consider designing distinct resources for each of the children in the classroom throughout the teaching and learning session because they all have different traits and preferences” (HASHIM; YUNUS; NORMAN, 2022, p. 10). That challenge can make the work tiring and exhausting for the teachers when considering the extra effort and work needed when preparing classes.

Another challenge that involves tiring activities is the need of the **Repetition of content (3 studies - text C, E and F)**, this challenge was perceived in study F, in which, in order to deal with the students’ short retention power, the same tasks were applied several times, which, as claimed in the study, the teachers “find it tiring to keep on repeating the teaching and learning process every day” (HASHIM; YUNUS; NORMAN, 2021, p. 26) this method also can lead to exhaustion, and teachers’ lack of motivation. The challenge previously mentioned is also attached to the next one: **Difficulties in personalizing material to get student attention (2**

studies - text C and H) in which the teacher must find different ways to maintain the attention of the students through different types of activities. Although this is also a strategy that addresses the specific needs of each student and allows them to be attracted and to absorb the content, it can also become a difficult work to maintain as it demands extra effort from the teacher as they would need to prepare more versions from the same activity to consider every student specificity. Finally, another challenge that seems to be related is the **Short time to adapt (2 studies - text C and J)**, which is related to the difficulties of teacher to produce materials depending on learners preferences due to time constraints, once, as mentioned before, adapted materials regarding people specific needs demands an extra effort that is often not available for the teachers, besides the short time in class for the implementation of the adapted materials (usually 45 minutes). As explained in study C,

sometimes, due to time constraints and teachers shortage, teachers in charge need to be able to try to adapt and adopt the materials depending on the learners' preferences. Teachers also sometimes need to customize their own materials in order to get the learners' motivation and attention to learn. (HASHIM; YUNUS. NORMA, 2022, p. 27)

These challenges highlight the relevance of teacher education that deals with planning and strategies both during academic training and throughout daily work.

Considering the challenges identified, it seems to be in line with what the literature says in relation to possible specificities of autistic people and how their needs may influence the methodology and preparation of classes. Through the challenges, it is possible to see that the teaching profession still contains gaps in the practice of inclusion inside and outside the classroom with the preparation of activities that engage the student and, at the same time, adapt to their needs in a way that they can carry them out autonomously. This shows us how teachers also need pedagogical support both in their pre-service education and throughout their in-service experience in schools, whether inclusive, specific or regular education. Moreover, many of the challenges encountered appear to be related to the strategies also highlighted, as the strategies used appear to be alternatives to deal with such challenges reported and identified in the studies. Finally, it is vital to keep in mind the importance of teachers always being aware of the students' individual needs so that barriers are not imposed/reinforced by the school environment, as the school should be a welcoming place that aims to provide teaching/learning opportunities for everyone.

4.2. CHALLENGES AND STRATEGIES FOR TEACHING ENGLISH FOR STUDENTS WITH ADHD

This study attempts to identify challenges that teachers may face and strategies they may use, when teaching students with one of two disabilities: Autism (ASD) and Attention Deficit Hyperactivity Disorder (ADHD). The previous section discussed studies that focused on ASD students. In relation to challenges and strategies for teaching English as an additional language for students with ADHD, one foreign study and two Brazilian studies were analyzed. The texts, previously mentioned in Table 1, are A, G and I. As it is possible to see in the following Table 4, six different teaching strategies/methodological procedures were identified, whereas five of them were presented in study I, only two were shown in study A and no strategies were mentioned in study G. Furthermore, five challenges were found in the three studies, whereas four were presented in text A, two were shown in text G and only one appeared in the three texts. The following tables show all the six strategies and five challenges found in the three mentioned studies. As only three texts were analyzed, in this section, both strategies and challenges will be discussed together and each text will be described and analyzed separately.

Table 4 - a summary of the strategies found in the studies analyzed that focused on students with ADHD

Strategy	N° of studies	Text
Teacher previous and explicit preparation	1	I
Visual, concrete and modeling resources	2	A-I
Multisensorial activities	1	I
Routines and repetitions	1	I
Concise and direct/objective language	1	I
Drawing methodology	1	A

Table 5 - a summary of the challenges found in the studies analyzed that focused on students with ADHD

Challenge	N° of studies	Text
Teacher centered classes	1	A
Lack of/short span in terms of attention	3	A,G, I
Lack of participation	1	A
Students moving from their seats	1	A
Teacher with difficulties with the language	1	G

Text A, *Integrating Drawing in Teaching English Language at Yumba Special School for Children with Intellectual Disabilities (2020)* was an action-research that integrates drawing in teaching and learning of English for children with intellectual disabilities to facilitate language learning. The study took place at Yumba Special School, in Ghana, and the 21 participants were students ranging from 11 to 20 years old due to the occasion that intellectual disability schools do not go beyond high school in that context, this way they all learn the same content together regardless of their levels and/or ages. In this study, two strategies were identified: **Visual, concrete and modeling resources**, that refers to activities with visual organization and concrete stimulus, and that in this case in particular, it is connected with the objective of the study that was to integrate drawing in teaching and learning of English language for children with intellectual disabilities and to do so, several different art tools and materials such as “2B pencils, colored pencils, erasers, cutting knives, masking tape and A4 sheets” (ALHASSAN; OSEI, 2020, p. 8) were used; and **Drawing methodology** that involved the six following steps: first the language skill to be taught was introduced to the students; than the researchers presented the scenario to initiate the drawings activities; next, the students, called as pupils in the study, started to explore and manipulate the materials to further draw and color; in step five, through drawing and presentation to the class, the pupils should demonstrate an understanding of language skills, if not, they would go back to the beginning and redo the cycle again; at last for the sixth and final step, the pupils who demonstrate that their understanding of language skills had improved were assessed. This strategy was used because, according to the researchers, “allowing the pupils to draw was going to help them grasp the lesson, and talking about their drawings in English would help them gradually improve their English language speaking skills.” (ALHASSAN; OSEI, 2020, p. 9). This study also showed some positive feedback for oral skills as “they were actively participating in class,

including answering oral questions during presentation stages of their drawing integration lessons” (ALHASSAN; OSEI, 2020, p. 13). Besides keeping the students engaged and participative in class, the method also encouraged them to engage with the subject taught, for example a student, who by herself, “brought long and short sticks into the classroom to show pupils adjectives of various sizes and lengths” (ALHASSAN; OSEI, 2020, p. 9). This shows us that, from the moment she internalized knowledge about adjectives, she wanted to share it with the class, in a dynamic way using something concrete, this also shows us the importance of using other materials in the classroom, encouraging students to learn the content of different ways with concrete materials that makes it easier for them to learn. These strategies seem to make sense when we consider ADHD people, since it involves dynamic strategies and activities that allow the student to move around and to feel comfortable to speak and to create.

In relation to the challenges that were mentioned in text A, they were **Teacher centered classes, Lack of/short span in terms of attention, Lack of participation and Students moving from their seats**. Even though they are different challenges, it is important to highlight what the researchers noticed while observing the classes before their intervention, about how the way the teachers acted in class contributed to the children behavior and, therefore to the challenges themselves, as the

teachers sometimes forgot they were teaching pupils with intellectual disabilities needing different teaching instructions. They delivered lessons at a faster rate instead of taking their time to accommodate for the disabilities. As a result, the pupils were not paying attention nor were they actively participating during lessons. (ALHASSAN; OSEI, 2020, p. 13)

In accordance with what was mentioned, the first challenge of the study, regarding **teacher centered classes**, is related to the management of the class and the way the teacher carried out the activities. Having in mind that the students with ADHD may present a certain difficulty to follow rules, to stay still and tend to lose focus, therefore, a class that is taught by “teachers do[ing] most of the talking in classroom... stop[ping] only at intervals to ask pupils to repeat after them and ask pupils what they understand” (ALHASSAN; OSEI, 2020, p. 13), may seem to contribute to the students lack of focus and cooperation, as it gives no room for the student to get involved in the class nor with the content as they need more stimulation than that to do so. This way the student will also feel the need to move from their seats and walk around the room, as they may be hyperactive and staying sitting for an entire class looking at the teacher would not draw their attention, leading to a restless state, less participation and less attention span.

In text G, *Ensino de Inglês para Alunos com Transtorno de Déficit de Atenção e Hiperatividade (2021)*, two different schools in the same town, Andirá in the state of Paraná, were analyzed: in the first school, identified as School A, the participants were part of a seventh grade class of twelve students, observed three times in August of 2018, whose teacher, that was graduated in *Letras-inglês* and Pedagogy, had seven years of teaching experience and gave classes to three students with ADHD. The second school, identified as School B, had for its participants an eighth-grade group with ten students and a teacher graduated in Biological Sciences that had a specialization in School Management, she also had 24 years of teaching experience with 6 of 10 students having some kind of disorder, although it did not specified what type. Something that calls attention in this study is that, in none of the schools, teachers reported making no use of any strategies to teach the students, and once the main goal of this study was to “describe and explain strategies/ methods for English teaching to students with ADHD in Andirá-PR” (SANTOS; SENEFONTE, 2021, p. 170), it is important to highlight that none were reported, therefore, the study itself only identified challenges and brought strategies mentioned in other studies. Moreover, the teachers in the study drew attention to the gaps in the education of teachers in the area, as they both did not know how to help their students. Furthermore, they also highlighted the lack of material and strategies for an inclusive class, saying they opted to use a more standardized class model with traditional teaching structures, focusing on: writing, the use of a blackboard and textbook. However, they also claimed that their traditional method and absence of adapted material did not appear to interfere with the students' learning, as their performance in assessments and activities in class appeared to be satisfactory.

Even though there were not any strategies mentioned in this study, some challenges were mentioned, such as the **Lack of/short span in terms of attention**, which in this study referred to the absence of concentration of the student due to the high level of hyperactivity during the classes that, as seen in the literature review, can influence in the behavior of the ADHD student, leading to a tendency of moving around and not paying attention to the teacher, the explanation or the activity. Another challenge mentioned in this study was the particular case of the teacher **with difficulties with the language**, as the teacher from School B struggled with the language itself, claiming to be learning it together with her students. This is a challenge, though, not related to the disability.

In study I, *O Ensino de LI para alunos com NEE: experiências e reflexões no âmbito do PIBID (2019)*, three students with ADHD (between 13 and 16 years old), two teachers and six pre-service student-teachers, in a regular school in Goiás-Brazil, participated in the

research. The qualitative research focused on describing a teaching experience and aimed to present activities developed for students with special educational needs (SEN) within the scope of the Institutional Teacher Initiation Scholarship Program (PIBID). This study presented five strategies that were used: **Teacher previous and explicit preparation**, which refers to the class preparation of the teachers/researchers; **Visual, concrete and modeling resources**, a strategy already mentioned in study A, which refers to the use of images for better understanding the subject, in this study for example it was very used in different ways, one of them was in the review of content (the topic was food), in which the researcher “selected images to be colored, which represented the foods in question, and produced flashcards to be used in a memory game. In addition to the images, flashcards of equal sizes containing the names of the foods were also made” (LISBOA, 2019, p. 5, my translation); **Multisensorial activities**, which is related to the use of activities that involve several senses. In this study, for example, students were, at a certain point in the unit, "blindfolded and the food contained in the slide would be used in the activity (pieces of fruit, grains, juices). Some would be felt through smell, taste and others through touch" (LISBOA, 2019, p. 9, my translation). As people with ADHD very often have the need to move their bodies, this type of activity seems to allow the student to actively participate and pay attention while keeping their interest in the subject during their interaction. The next strategy **Routines and repetitions** as mentioned before, refers to the need to reinforce the words, meanings and the subject itself, as ADHD students need routines to help them to focus on the activities and pay attention, the use of repetitions can be helpful for them to retain and remember the learnings, as it can be done in more than one type of activity. Finally the fifth strategy, **Concise and direct/objective language**, had to do with using short, objective and directive instructions, the students with ADHD can pay more attention to the subject as they know, exactly what, how and when they have to do it, this way they can maintain the focus on what is important in the moment without feeling lost, distracted or struggle with directions given by the teacher.

The only challenge mentioned by the authors in this study was the **Lack of/short span in terms of attention**, this challenge already mentioned in text A and G, appeared in this study only during one activity in particular (memory game) in which flashcards with food images should match with flashcards with the foods' words. In this activity, one student had difficulties with the memorization of the flashcards places as well as the food vocabulary after a while the others had difficulties to keep attention on the activity after a certain period of time (it was not mentioned how long). Later, it is important to mention that the researchers also highlight the

importance of pedagogical support once

the pedagogical guidance provided by the subproject is fundamental for the theoretical and practical preparation of scholarship students, thus promoting the pedagogical equipment necessary for teaching students with SEN, as well as encouraging teachers in training to prepare for teaching in the scope of inclusive education, since there is a shortage of teachers in this area of activity (LISBOA, 2019, p. 12).

Considering the identified strategies and challenges concerning the three studies that dealt with students with ADHD, it is possible to notice the need for further research, as very few studies about the subject were found, and even fewer identified strategies and challenges, taking into consideration that one study did not presented any strategy and another showed only one challenge to be analyzed. About the challenges encountered, it seems to reflect characteristics of people with ADHD such as a tendency for distraction, trouble focusing, difficulties to sit still and paying attention, which in the classroom can lead the teacher to have certain challenges, such as students' lack of/short span in terms of attention and lack of participation; students moving from their seats; teacher centered classes and even a teacher with difficulties with the language itself. Therefore, the strategies that appeared in the texts analyzed seem to reflect those challenges, as ways of dealing with the difficulties that may show up in the school environment, such as the teacher previous and explicit preparation for class; the use of visual, concrete and modeling resources among with concise and direct/objective language when explaining the content; preparing multi sensorial activities and the use of drawing methodology; altogether with routines and repetition for the students' needs when taking into account the challenges mentioned before. Thus, it is crucial to return to the importance of teacher education, even more when considering the substantial increase of students with a diagnosis and/or similar behaviors but without being clear in the classroom. Besides, the lack of preparation both in pre-service education and in the in-service performance of teachers when preparing and teaching classes may influence directly in students' learning once they have specific needs that demand to be taken into account when preparing classes, activities and managing the classroom environment for including all the students.

5. CONCLUSION

As previously mentioned, two research questions guided this study. This section aims at answering these two questions, as well as discussing limitations of this study and pointing out possible pedagogical implications.

Question 1 asked: do teachers of English as an additional language face challenges, considering preparation, planning and/or assessment, when teaching English as an additional language for students that have ASD and/or ADHD? If so, which are they? As it could be seen in the previous section, the first answer is yes, teachers face challenges when teaching English as an additional language for students that have ASD and/or ADHD, which was expected. It is important to highlight, though, that challenges are always found in teaching, a condition that is not specific to teaching students with disabilities. Considering the reviewed studies, the challenges found were, for teaching ASD students: lack of engagement in class; personalize material according to the students' preferences; lack or difficulties of interaction/socializing with other students; difficulties to acquire new vocabulary; personalize material to get students' attention; short time to adapt; repetition of content; lack of interest + attention; lack of cooperation; not being able to grasp more than 3 syllables; student isolated in and outside of the class; specific behavior aspects; not understanding without visual support; and parents asking for more Portuguese (L1) in class. For teaching ADHD students, the challenges mentioned in the reviewed studies were: Teacher centered classes; the Lack of/short span in terms of attention and Lack of participation; Students moving from their seats and finally, the teacher with difficulties with the language.

The challenges found in the studies seem to contemplate aspects of the specificities of the disabilities in question, as some possible characteristics of ASD and ADHD students seem to be intrinsically related to some of the challenges, such as difficulty in socializing for autism or lack of attention for ADHD. Still, it is important to highlight that some of the difficulties identified are linked to the barriers that are imposed by the system itself, such as teachers having little time to prepare classes, adapt materials or knowledge in the area during their education, such issues having a direct influence in the implementation of activities in the classroom/school environment, drawing attention to the need of more information about inclusive methods.

Another question asked was: what are some strategies and methodological procedures used by teachers of English as an additional language when dealing with these challenges and/or when teaching students that have ASD and/or ADHD? In relation to this question, the strategies/methodological procedures found were, for teaching ASD students: Dialogue and

individual meetings with student; Reduce noise; Gestures for facilitating comprehension; Teacher previous and explicit preparation; Concise and direct/objective language; Offering options for facilitating making choices; Routines and repetitions; Teacher mediation during oral activities; Role play for improving oral skills and socialization; Shadow teacher; Visual, concrete and modeling resources; and Customized materials and classes according to learner. In relation to ADHD students, the strategies/methodological procedures found were: Teacher previous and explicit preparation; Visual, concrete and modeling resources; Multisensorial activities; Routines and repetitions; Concise and direct/objective language; and Drawing methodology.

Regarding the strategies mentioned above, while some of them seem very specific, and may be perceived as appropriate for the context of the study in which it was implemented, others may be beneficial not only for the students with disabilities, but also for the entire class. That is the case of using Concise and direct/objective language, which may help all learners developing an additional language, as direct language may facilitate meaning and form mapping, thus enhancing comprehension. Bearing this in mind, in accordance with Wielewicki and Behnck (2023), it is possible to see that inclusive pedagogical strategies may allow the students to achieve their potential while also creating an environment where every student, with or without disabilities, though with their own needs and specificities, can participate and express themselves while learning. Still, it is imperative to highlight that, for those strategies to be implemented, the teacher must have opportunities for pre-service education that deals with disabilities, along with time for planning and studying when in-service.

Considering these results, it can be said that the strongest limitation of this study was the difficulty to find enough articles that met the criteria selected for inclusion. Therefore, this review only dealt with 10 studies, a small number for this research type. This seems to signal that more studies that attempt to discuss challenges as well as the development and implementation of strategies for students with disabilities are needed.

In relation to pedagogical implications, the results brought in this study seem to signal the importance of studies on the matter of strategies/methodological procedures along with challenges and difficulties when teaching English as an additional language for students with disabilities (FERREIRA; TONELLI, 2020; VILLALOBOS, 2011). As mentioned in the previous section, there is no formula nor step-by-step list to be followed or to be applied with the students with ASD/ADHD or other disabilities (or even any student, for that matter), that will ensure that students are going to learn, although the lack of this type of work, concerning

strategies to be used in class, seems to have great impact in the lives of teachers and students and, for this reason, this type research is important.

With that in mind, this systematic review of literature aimed to investigate the strategies and challenges as a contribution for the area of inclusive education, more specifically concerning the disabilities of ASD and ADHD, aiming to present a brief discussion for supporting the teachers who, within their development process, do not usually receive enough information on how to be prepared to deal with specific scenarios of disabilities and Special Needs Education (VITALIANO, 2010). Although ASD had more findings than ADHD studies, most studies presented strategies with positive feedback that can enlighten future teachers when they encounter the reality of having a diverse class with different students with special needs. This way, the more the teachers understand the context in which they are working, who are their students, their traits, their specific needs and how the classroom environment may work, the better they will be able to prepare the activities, taking into account different ways to work the content, and always keeping in mind that each student has their own way of learning and each classroom has different demands according to the student-teacher and student-student relationship.

REFERENCES

ABREU, Thiago. **O que é neurodiversidade?**. Goiânia: Cãnone Editorial, 2021.

ALHASSAN, Bawa; OSEI, Mavis. Integrating Drawing in Teaching English Language at Yumba Special School for Children with Intellectual Disabilities. **Journal for Learning through the Arts**, v. 16, n. 1, p. n1, 2020. Available in <https://eric.ed.gov/?id=EJ1289937> Accessed in 30 Jun 2024

BELISÁRIO FILHO, José Ferreira; CUNHA, Patrícia. A educação especial na perspectiva da inclusão escolar. Transtornos globais do desenvolvimento. 2010. Disponível em: https://repositorio.ufc.br/bitstream/riufc/43219/1/2010_liv_jfbelisariofilho.pdf Acesso em? 14 Jun. 2023

BENESCH, Sarah. Needs Analysis and Curriculum Development in EAP: An Example of a Critical Approach. *TESOL Quartely*, [S.l.], v.30, n.4, 1996, p.723-738.

BÖCK, Geisa Letícia Kempfer; GESSER, Marivete; NUERNBERG, Adriano Henrique. Contributions of the Universal Design for Learning to Distance Education. **Educação & Realidade**, v. 46, p. e95398, 2021. Available in <https://www.scielo.br/j/edreal/a/rSpmKB4BcbDmqdwsnHWRzPx/?lang=en> Accessed in 30 Jun 2024

BRADLEY, Monica. Case study: Second language acquisition with asperger syndrome in a university setting. **Research in pedagogy**, v. 9, n. 2, p. 166-180, 2019. Available in <https://www.ceeol.com/search/article-detail?id=820775> Accessed in 30 Jun 2024

BRAHIM, Mohammed Ghedeir. Teaching English to Students with Autism Spectrum Disorders: Challenges and Teaching Strategies. **English Studies at NBU**, v. 8, n. 2, p. 203-214, 2022.

BRASIL. 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). Disponível em: http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2015/lei/113146.htm. Acesso em: 14 jun. 2023.

DE GODOY WIELEWICKI, Hamilton; BEHNCK, Vítor Pluceno. EDUCAÇÃO INCLUSIVA NA SALA DE AULA DE LÍNGUA INGLESA: o estágio como lugar de questionamento e ressignificação. **Sobre Tudo**, v. 14, n. 2, p. 178-192, 2023. Disponível em: <https://ojs.sites.ufsc.br/index.php/sobretudo/article/view/5980> Acesso em 30 Jun 2024

DISORDER. In: OXFORD learner's dictionary. Oxford: Oxford University Press, 2023. Disponível em: <https://www.oxfordlearnersdictionaries.com/definition/english/disorder?q=disorder>. Acesso em 06 jun. 2023

DÖRNYEI, Zoltán; SKEHAN, Peter. Individual differences in second language learning. **The handbook of second language acquisition**, p. 589-630, 2003. <https://doi.org/10.1002/9780470756492.ch18>

DOS SANTOS, Ane Caroline; SENEFONTE, Fábio Henrique Rosa. Ensino de Inglês para Alunos com Transtorno de Déficit de Atenção e Hiperatividade. **Revista de Ensino, Educação e Ciências Humanas**, v. 22, n. 2, p. 170-177, 2021. Available in <https://revistaensinoeducacao.pgsscogna.com.br/ensino/article/view/7945> Acesso em 30 Jun 2024

FERREIRA, O. H.; TONELLI, J. R. Ampliando horizontes: ensino de inglês para crianças com transtorno do espectro autista. **Revista Desenredo**, v. 16, n. 3, 5 out. 2020. Disponível em: <http://seer.upf.br/index.php/rd/article/view/11449>. Acesso em 14 jun. 2023

FREITAS, Glória Maria Miranda. Estratégias de ensino da língua inglesa para alunos com transtorno do déficit de atenção com hiperatividade. 2017. Available in <https://repositorio.ufpb.br/jspui/handle/123456789/2807> Accessed in 30 Jun 2024

GALVÃO, M. C. B.; RICARTE, I. L. M. Systematic literature review: concept, production and publication. **Logeion: filosofia da informação [Internet]**, v. 6, n. 1, p. 57-73, 2019.

LEITÃO, Alex Bezerra. Metáforas no país do espectro autista: um caso de ensino e aprendizagem de língua estrangeira. 2018.

LISBOA, Joel Victor Reis. O ensino de li para alunos com nee: experiências e reflexões no âmbito do pibid: experiências e reflexõesno âmbito di pibid. **Itinerarius Reflectionis**, v. 15, n. 2, p. 01-15, 2019. Disponível em: <https://revistas.ufj.edu.br/rir/article/view/58377> Acesso em 30 Jun 2024

LOBO, Lais Amelia Silva; DE LIMA, Diógenes Cândido. O Processo de Ensino-Aprendizagem de Língua Inglesa para Deficientes Auditivos—Um Olhar Psicopedagógico. **Línguas & Letras**, v. 20, n. 48.

ORRÚ, Sílvia E. **O Autismo em meninas e mulheres: diferença e interseccionalidade**. Petrópolis, RJ: Vozes, 2024.

PADMADEWI, Ni Nyoman; ARTINI, Luh Putu. Teaching English to a Student with Autism Spectrum Disorder in Regular Classroom in Indonesia. **International Journal of Instruction**, v. 10, n. 3, p. 159-176, 2017. Available in <https://eric.ed.gov/?id=EJ1151081> Accessed in 30 Jun 2024

ROCHA, Eduardo Pimentel da; TONELLI, Juliana Reichert Assunção; "O ensino de inglês a alunos com Síndrome de Asperger na perspectiva docente", p. 179 - 201. In: Diálogos (im)pertinentes entre formação de professores e aprendizagem de línguas. São Paulo: Blucher, 2017.

SILVA, Charles Lima; FACIOLA, Rosana Assef; PEREIRA, Rosamaria Reo. O processo de ensino-aprendizagem em língua inglesa de um aluno com autismo: um estudo de caso em uma escola inclusiva. **Revista Diálogos e Perspectivas em Educação Especial**, v. 5, n. 2, p. 43-58, 2018. Disponível em: <https://revistas.marilia.unesp.br/index.php/dialogoseperspectivas/article/view/7932> Acesso em 30 Jun 2024.

TARDIF, Maurice; LESSARD, Claude. O trabalho docente: elementos para uma teoria da docência como profissão de interações humanas. Petrópolis: Vozes, 2005.

HASHIM, Haida Umiera; YUNUS, Melor Md; NORMAN, Helmi. Autism children and English vocabulary learning: A qualitative inquiry of the challenges they face in their English vocabulary learning journey. *Children*, v. 9, n. 5, p. 628, 2022. Available in <https://www.mdpi.com/2227-9067/9/5/628> Accessed in 30 Jun 2024

UMIERA HASHIM, Haida; MD YUNUS, Melor; NORMAN, Helmi. English as secondary language learning and autism spectrum disorder: the obstacles in teaching and learning the language. *Arab World English Journal (AWEJ) Volume*, v. 12, 2021. Available in https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3892840 Accessed in 30 Jun 2024

VILLALOBOS, Olmedo Bula. Attention-deficit hyperactivity disorder in the EFL classroom: A case study. *Innovaciones educativas*, v. 13, n. 18, p. 23-33, 2011. Disponível em: <https://revistas.uned.ac.cr/index.php/innovaciones/article/view/578>. Acesso em: 08 Maio 2023.

VITALIANO, C. R. Educação inclusiva e as reconstruções necessárias no processo de formação de professores. In: LIMA, Angela Maria de Sousa et al. (org.). *Inclusão: debates em diferentes contextos*. Londrina: Universidade Estadual de Londrina, 2013. v. 1. p. 15-25.

ZOHOORIAN, Zahra; ZERAATPISHE, Mitra; MATIN SADR, Nader. Effectiveness of the picture exchange communication system in teaching English vocabulary in children with autism spectrum disorders: A single-subject study. *Cogent Education*, v. 8, n. 1, p. 1892995, 2021. Available in <https://www.tandfonline.com/doi/full/10.1080/2331186X.2021.1892995> Accessed in 30 Jun 2024

APPENDIX A - TABLE WITH TEXTS INFORMATIONS

General Information	Disab.	Methodology
<p>Text A</p> <p>Name: Integrating Drawing in Teaching English Language at Yumba Special School for Children with intellectual Disabilities</p> <p>Authors: ALHASSAN, B. & OSEI, M.</p> <p>Year: 2020</p> <p>Written in: English</p>	ADHD	<p>Type of research: Action research</p> <p>Objective: To integrate drawing in teaching and learning of English Language for children with intellectual disabilities to facilitate language learning.</p> <p>Context: Study took place at Yumba Special School, in Ghana. The age of students varies from 11 to 20 years old because intellectual disabilities' schools do not go beyond high school in that context.</p> <p>Participants: 21 students</p> <p>Procedures and Instruments: Researchers observed two weeks of English classes and took notes using an observation checklist. Then, for five weeks, they implemented the intervention and took notes using the same observation checklist. They also look at the drawing activities made by the students to see if comprehension was achieved.</p>
General Information	Disab.	Methodology
<p>Text B</p> <p>Name: Case Study: Second Language Acquisition with Asperger Syndrome in a University</p>	ASD	<p>Type of research: Longitudinal Case study</p> <p>Objective: To examine one particular student's progress in order to compile some general characteristics and recommendations for educators.</p> <p>Context: Examines one particular student's progress over two years of observation in a English as Foreign language environment at the</p>

<p>Setting</p> <p>Author: BRADLEY, M.</p> <p>Year: 2019</p> <p>Written in: English</p>		<p>University of Costa Rica</p> <p>Participant: Pablo, a 3rd year microbiology student at University of Costa Rica (UCR). The case study starts when the student begins Intermediate 1. The student is observed in three courses (a total of 2 years with a one semester break between): intermediate 1, an optional course called Academic Writing, and Upper-Intermediate 2.</p> <p>Procedures and Instruments: The following procedures were implemented (although their order is not clear):</p> <ul style="list-style-type: none"> - Application of an Oral Proficiency Exam - Survey after completed the program - Class observation (teacher diary notes) and interactions - Observation of online discussion forums to confirm if Pablo's experiences and perceptions seem to be typical of English language learners with ASD.
General Information	Disab.	Methodology
<p>Text C</p> <p>Name: English As Secondary Language Learning and Autism Spectrum Disorder: The Obstacles in Teaching and Learning the Language</p> <p>Authors: HASHIM H. U., YUNUS M.M. &</p>	ASD	<p>Type of research: Qualitative research</p> <p>Objective: To investigate the obstacles that the learners with autism face in English as secondary language learning. To investigate the challenges faced by the teachers who are in charge of teaching learners with autism.</p> <p>Context: Two Autism centers in urban area located in Selangor, Malaysia</p> <p>Participants: 45 learners with autism - preschool, age between 7-10 years old and 14 teachers</p>

<p>NORMAN, H.</p> <p>Year: 2021</p> <p>Written in: English</p>		<p>Procedures and instruments: Observation of teaching context using field notes to identify challenges faced by learners in their ESL learning process. Interview with teachers to get insight into what they face and encounter during their teaching process involving the students with autism.</p>
<p>General Information</p>	<p>Disab.</p>	<p>Methodology</p>
<p>Text D</p> <p>Name: Teaching English to a Student with Autism Spectrum Disorder in Regular Classroom in Indonesia</p> <p>Author: PADMADEWI & ARTINI</p> <p>Year: 2017</p> <p>Written in: English</p>	<p>ASD</p>	<p>Type of research: Mixed-method Case study</p> <p>Objective: Investigating appropriate strategies of teaching English to a student with Autistic Spectrum Disorder (ASD) included in a regular classroom.</p> <p>Context: Bilingual School in Indonesia with an inclusive program for special needs students.</p> <p>Participant: Student of 10 years old</p> <p>Procedures and instruments: Conducted through non-participatory observation for 10 hours a week during 1 semester. Also an analysis of results of language receptive skill assessment and interview with “shadow” teacher and the school principal.</p>
<p>General Information</p>	<p>Disab.</p>	<p>Methodology</p>
<p>Text E</p> <p>Name: Effectiveness of the Picture Exchange Communication System in Teaching English Vocabulary</p>	<p>ASD</p>	<p>Type of research: Single-subject study</p> <p>Objective: Employ PECS to ESL vocabulary development of children with autism</p> <p>Context: The study happened in a school for students with special needs in Iran.</p>

<p>in Children with Autism Spectrum Disorders: A single-subject study</p> <p>Authors: ZOHOORIAN Z., ZERAATPISHE M., & MATIN SADR N.</p> <p>Year: 2021</p> <p>Written in: English</p>		<p>Participants: 2 male participants aged 12 and 9 years old, from a public school</p> <p>Procedures and Instruments: 15 sessions in which the students were instructed separately in different classes, following three phases: a) Baseline phase - Evaluation of the children on their English knowledge , b) Treatment phase - The employment of PECs, c) Repeated measurement - Assessment of the vocabulary learnt every session together with the previous session's words.</p> <p>The researchers videotaped all the 15 sessions.</p>
General Information	Disab.	Methodology
<p>Text F</p> <p>Name: Autism Children and English Vocabulary Learning: A Qualitative Inquiry of the Challenges They Face in their English Vocabulary Learning Journey</p> <p>Authors: HASHIM, H.U., YUNUS, M.M. & NORMAN, H.</p> <p>Year: 2022</p>	ASD	<p>Type of research: Qualitative study</p> <p>Objective: At investigating the challenges children with autism face in their English vocabulary learning</p> <p>Context: A school in Malaysia but not clear the kind of school.</p> <p>Participants: 45 children with autism, 4 Autism education teachers, 2 occupational therapists, 1 parent.</p> <p>Procedures and Instruments: They used field notes and focus group discussions to collect data. The findings were gathered, analyzed, then thematically arranged into emerging themes to discuss the challenges autism children face in their English vocabulary learning journey. A Cohen Kappa Value analysis was used to ensure reliability.</p>

Written in: English		
General Information	Disab.	Methodology
<p>Text G</p> <p>Name: Ensino de Inglês para Alunos com Transtorno de Déficit de Atenção e Hiperatividade</p> <p>Authors: SANTOS, A.C. & SENE FONTE, F.H.R.</p> <p>Year: 2021</p> <p>Written in: Portuguese</p>	ADHD	<p>Type of research: Qualitative Case study</p> <p>Objective: To identify and describe strategies and methodologies used for teaching English for students with ADHD.</p> <p>Context: Public schools in Brazil. First school: 7th grade with 12 students was observed for 3 weeks (August, 2018). Teacher graduated in <i>Letras-Inglês</i> and Pedagogy. Second school: 8th grade with 10 students was observed for 3 weeks (September, 2018). Teacher graduated in Biology, specialized in Inclusive education, Sociology and Children's literature.</p> <p>Participants: Two teachers from different schools in Andirá, Paraná</p> <p>Procedures and Instruments: Observation of 6 classes, Field notes (diaries), Pre-structured interviews (audio recorded with both teachers separately).</p>
General Information	Disab.	Methodology
<p>Text H</p> <p>Name: Ampliando horizontes: ensino de inglês para crianças com transtorno espectro autista</p> <p>Authors: FERREIRA, O.H.S & TONELLI, J.R.A</p>	ASD	<p>Type of research: Qualitative Case study</p> <p>Objective: Discuss the role of the English language for students with ASD.</p> <p>Context: Supervised internship context in English at an early childhood education center in Paraná in a pre-5 class.</p> <p>Participants: A student with a high level of ASD in preschool.</p> <p>Procedures and Instruments: 3 activities inserted in a didactic sequence</p>

<p>Year: 2020</p> <p>Written in: Portuguese</p>		<p>developed and applied in specific interventions. The results of the activity are analyzed and implementation procedures described.</p>
General Information	Disab.	Methodology
<p>Text I</p> <p>Name: O ensino de LI para alunos com NEE: experiências e reflexões no âmbito do pibid</p> <p>Authors: LISBOA, J.V.R.</p> <p>Year: 2019</p> <p>Written in: Portuguese</p>	<p>ADHD</p>	<p>Type of research: Qualitative research with a descriptive focus of an experience.</p> <p>Objective: Describe developed activities and analyze, based on the experience report of a scholarship holder, principles that underpin pedagogical practice.</p> <p>Context: A regular school in Goiás-Brazil that has an inclusion project.</p> <p>Participants: The study included 3 students with ADHD reports, between 13 and 16 years old, 6 PIBID scholarship holders and 2 teachers.</p> <p>Procedures and Instruments: The scholarship holders offered monitoring and, during this, a teacher of 3 students with ADHD requested help to develop specific activities. Activities are described and analyzed theoretically.</p>
General Information	Disab.	Methodology
<p>Text J</p> <p>Name: O Processo de Ensino-Aprendizagem em Língua Inglesa de um aluno com Autismo: um estudo de caso em</p>	<p>ASD</p>	<p>Type of research: Qualitative, descriptive and exploratory case study</p> <p>Objective: To investigate the reality and possibilities regarding English teaching to students with ADHD, to describe and explain strategies/ methods for English teaching to students with ADHD.</p> <p>Context: Local private school (English class first year of elementary school, a group of 22 students)</p>

<p>uma escola inclusiva</p> <p>Authors: SILVA, C.L., FACIOLA, R.A. & PEREIRA, R.R.</p> <p>Year: 2018</p> <p>Written in: Portuguese</p>		<p>Participants: 1 diagnosed student with autism and 1 English teacher graduated in <i>Letras-português/inglês Licenciatura</i> (24 years old)</p> <p>Procedures and instruments: A recorded semi-structured interview (12 questions), Observation diary with a descriptive part and a reflective part (comments based on what was observed). Interview to find out her educational background, profile and the language strategies she uses to teach English to autistic students as well as find out her difficulties and problems in achieving her goal. The analysis included identifying emerging themes within the data.</p>
---	--	--