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Teaching English to students with Autism Spectrum Disorder. An Intervention Proposal.

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Abstract

This dissertation presents an intervention proposal for teaching English as a Foreign Language (EFL) to students with Autism Spectrum Disorder (ASD) in an ASD classroom in Spain. The study explores evidence-based methodologies such as Universal Design for Learning (UDL), the TEACCH method, and the use of visual and technological supports, emphasizing the benefits of bilingualism for autistic learners. The intervention consists of 12 structured sessions tailored to the needs of six students aged 5 to 8, promoting communication, social interaction, and language acquisition. Findings from recent literature suggest that bilingualism does not hinder and may even support cognitive flexibility and social communication in students with ASD. The project also includes an assessment rubric and highlights key limitations, such as the lack of empirical application. Future research is encouraged to validate the intervention in real settings and explore long-term effects of bilingual education on autistic students.

Keywords: Autism Spectrum Disorder (ASD), Bilingualism, English as a Foreign Language (EFL), Inclusive Education.

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1. Introduction

Society changes, and so does education, but is teaching evolving as fast as students' needs? This is especially relevant when teaching English as a Foreign Language (EFL) to students with Autism Spectrum Disorder (ASD from now on). As our understanding of neurodiversity has advanced, it has become clear that traditional teaching methods may not fully address the unique learning needs of students with ASD. These students often face challenges regarding social interaction, communication, and stimuli processing (Brahim, 2022), which can hinder their ability to acquire a second language.

While inclusive education frameworks have made progress, students with ASD frequently require tailored interventions that go beyond typical approaches. Cognitive demands can be overwhelming, needing strategies that incorporate visual support, repetition, and individualized instruction (Sweller, 1988; Vanacloig et al., 2020). Differentiated instruction (Sandra & Kurniawati, 2020) and Universal Design for Learning (UDL) (Meyer et al., 2014) offer valuable frameworks, but their application in EFL contexts for students with ASD remains underexplored.

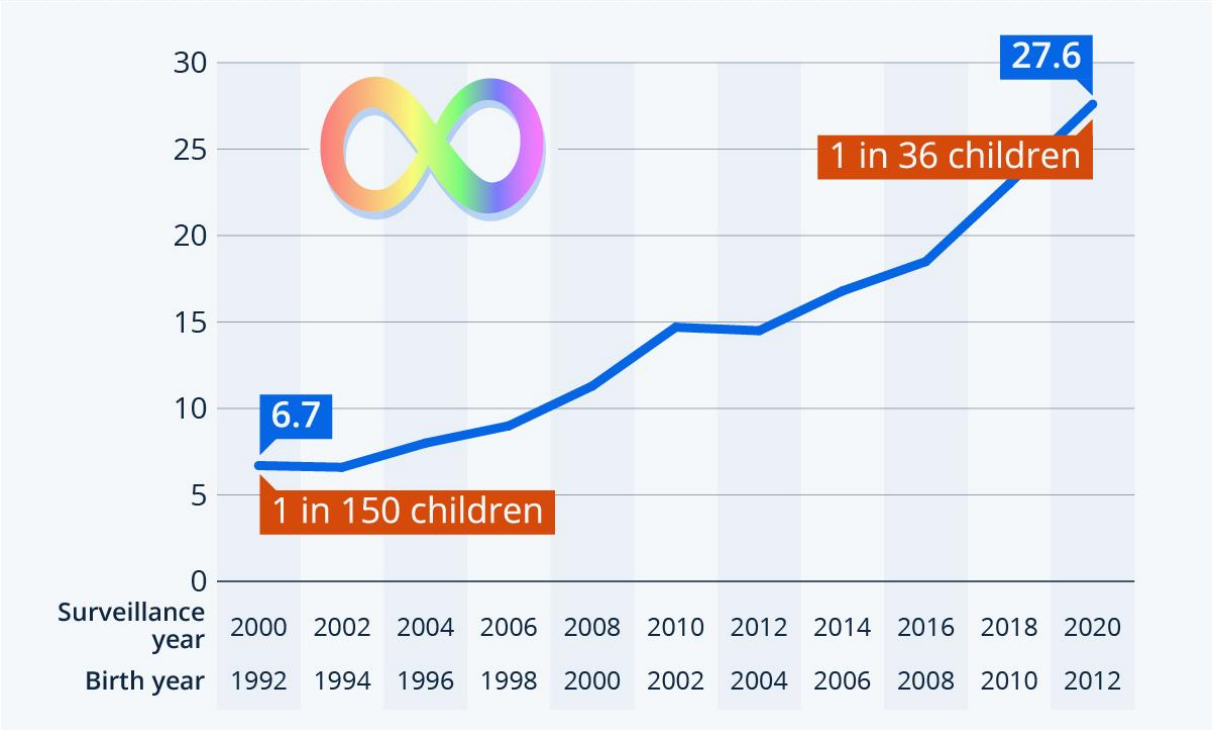
Given the increasing prevalence of ASD and its impact on language acquisition, there is an urgent need for research into specialized, evidence-based strategies for teaching English to these students. This study aims to explore the challenges and strategies in EFL instruction for students with ASD, focusing on the role of differentiated instruction and multimodal interventions in enhancing language learning (Coleman, 2022). Through this research, we aim to contribute to the development of effective, inclusive teaching methodologies that support the integration of students with ASD in language classrooms.

1.1. Justification

The increasing prevalence of students diagnosed with Autism Spectrum Disorder (ASD) and other special educational needs (SEN) in classrooms underscores the urgent need for research-based intervention strategies that cater to these students' unique characteristics (see table 1). While schools are striving to become more inclusive, many educators continue to face challenges in effectively teaching students with ASD due to limited knowledge and

resources (Brahim, 2022). This gap between inclusive education policies and actual classroom practices calls for research that bridges theory with practical application to enhance educational outcomes for neurodiverse learners.

Figure 1. The rising prevalence of Autism.



Source: Statista, "The Rising Prevalence of Autism", 2023.

Language acquisition, particularly English as a Foreign Language (EFL), poses distinct challenges for students with ASD. These students often encounter difficulties with social interaction, abstract thinking, and sensory processing (Reppond, 2015; Vahistorinacloig et al., 2020). Without specialized methodologies, these challenges can result in linguistic and academic disadvantages that limit future educational and professional opportunities. As such, this research aims to contribute to inclusive education by identifying and implementing evidence-based practices for teaching EFL to students with ASD in diverse learning environments.

Another important justification for this study is the need to ensure that students with ASD receive adequate support to thrive in language learning. National and international policies, such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), stress the right to inclusive education. In Spain, educational laws are increasingly advocating

for the inclusion of students with ASD, but significant gaps remain between policy and practical implementation (Garrido, López, & Carballo, 2021). Teacher training and classroom accommodations are often insufficient, leaving educators unprepared to meet students' needs. This study aims to address these gaps by exploring effective strategies for supporting students with ASD in language acquisition.

Moreover, the lack of teacher training in inclusive education exacerbates the challenge. Many educators report feeling unprepared to teach students with ASD due to limited professional development opportunities and inadequate instructional materials (Brahim, 2022). Without proper guidance, teachers struggle to adapt their teaching methods, leading to frustration for both educators and students. Additionally, many EFL textbooks and language-learning platforms are not designed with neurodiverse learners in mind, making it challenging for students with ASD to engage with the material effectively. The development of structured and visually supported teaching materials tailored to diverse learning styles is essential to improving accessibility and effectiveness in EFL instruction for students with ASD (Meyer et al., 2014; Sandra & Kurniawati, 2020).

Furthermore, previous research has largely focused on general EFL teaching strategies or autism-related interventions, but few studies have combined these areas to develop specialized approaches for students with ASD learning a foreign language. By addressing this gap, this research will advance towards a more comprehensive understanding of how ASD affects second language acquisition and how teaching techniques can be adapted to meet these students' needs (Coleman, 2022). The study aims to provide insights that will support educators in designing and implementing more effective and inclusive teaching practices for students with ASD.

Based on the identified gaps, the central question guiding this study is:

How can an intervention model be designed to improve the teaching and learning of English as a Foreign Language for students with Autism Spectrum Disorder in inclusive classrooms?

This question will be explored through an analysis of existing teaching methodologies, the cognitive and linguistic challenges faced by students with ASD, and the development of an innovative intervention approach.

1.2. Brief analysis of the state of the art

The research carried out in this dissertation builds upon multidisciplinary studies from education, linguistics, and psychology. Recent studies indicate that Autism Spectrum Disorder (ASD) presents particular challenges for language acquisition, including difficulties with social communication, phonological processing, and language comprehension (Naess et al., 2023; Peristeri et al., 2021). These challenges underscore the need for tailored educational strategies to support language development in students with ASD. However, structured and individualized approaches can help mitigate these difficulties (De Oliveira, 2015).

One effective strategy in teaching English to students with ASD is the use of visual aids and multimodal instruction. Research suggests that visual schedules, pictograms, and structured learning environments contribute to improved engagement and comprehension (Mariscal et al., 2021). Multimodal communication approaches, which incorporate verbal speech, gestures, and assistive technologies, have been shown to reduce frustration and support language development in young autistic learners (Lund & Snow, 2022). Assistive technologies, such as speech-generating devices and interactive learning applications, have also proven beneficial in supporting language development for individuals with ASD (Arfé et al., 2022). These technologies can enhance communication abilities and promote greater independence in language learning.

The importance of differentiated instruction and individualized learning plans is increasingly recognized in the context of inclusive education. By tailoring teaching methods to meet the unique needs of each student, educators can create more effective learning experiences. Recent studies have demonstrated that individualized education plans, supported by visual media and co-teaching strategies, are effective in helping students with ASD learn English as a foreign language (Thiemann-Bourque et al., 2022).

While research on ASD and foreign language acquisition continues to evolve, existing literature suggests that individualized and evidence-based interventions can significantly enhance learning outcomes. This dissertation aims to contribute to this growing field by proposing a specialized intervention model tailored to the needs of students with ASD in EFL classrooms.

Moreover, recent studies have explored the potential benefits of bilingualism for students with ASD. Contrary to previous concerns that learning multiple languages might exacerbate linguistic difficulties, research suggests that bilingual exposure does not negatively impact language development in children with ASD and may even provide cognitive advantages, such as enhanced executive functioning and cognitive flexibility (Garrido et al., 2021; Coleman, 2022; González-Barrero & Nadig, 2019). Additionally, structured bilingual education programs have been proven to support language acquisition and social communication skills when tailored to the needs of autistic learners (Baker & Chang, 2021). These findings highlight the importance of considering bilingual approaches in EFL instruction, particularly in multilingual contexts where students with ASD may already be exposed to more than one language.

1.3. Objectives of the study

1.3.1. General objective.

The main objective of the present paper is to design an effective intervention model for teaching English as a Foreign Language (EFL) to students with Autism Spectrum Disorder (ASD) in inclusive classrooms that proposes structured and flexible teaching techniques that support language development and incorporates evidence-based strategies to enhance engagement and comprehension.

1.3.2. Specific objectives.

Given the cognitive and linguistic challenges that students with ASD often face, this research aims to:

1. Identify the main difficulties these learners with ASD encounter when acquiring a second language, by analysing the impact of ASD-related characteristics on second-language acquisition and examining communication barriers and cognitive processing challenges specific to this population.
2. Assess current teaching approaches and their effectiveness for students with ASD. This will be done through a review of existing methodologies used in EFL classrooms with inclusive practices determining the suitability of strategies such as differentiated instruction, multimodal teaching, and assistive technologies.

3. Provide recommendations for educators on best practices for inclusive EFL instruction and suggest teacher training programs focused on ASD-inclusive methodologies, advocating for the implementation of inclusive teaching practices and specialized teacher training programs that better support students with ASD in language learning environments.
4. Analyze the limitations of current research and propose directions for future studies on EFL instruction for students with ASD. This includes identifying gaps in existing literature, acknowledging methodological constraints, and suggesting areas for further exploration, such as long-term effects of intervention models, cross-linguistic comparisons, and the role of cultural factors in language acquisition for students with ASD.

2. Literature review

The growing inclusion of students with Autism Spectrum Disorder (ASD) in standard educational environments has brought to light the urgent need for effective and research-informed practices that support their learning, especially in areas as complex as second language acquisition. As English increasingly becomes a global lingua franca, the ability to teach it effectively to diverse learners has become a key area of focus in the field of Teaching English as a Foreign Language (TEFL). This literature review aims to examine the intersection between ASD and EFL instruction, identifying both the challenges and opportunities that arise in the classroom.

The review is organized into three major sections. First, it presents a historical overview of how ASD has been conceptualized and diagnosed over the decades, with an emphasis on how these evolving perspectives have shaped educational practices. Secondly, it looks into the specific communicative and cognitive characteristics of learners with ASD, with a focus on how these traits impact the acquisition of a second language and the role of bilingualism. Finally, the chapter explores evidence-based interventions and methodologies that have been shown to be effective in supporting ASD students in EFL contexts, such as Universal Design for Learning (UDL), TEACCH, and technology-based tools.

By reviewing both classical and current studies, this section seeks to provide a comprehensive understanding of the key theoretical and practical issues that inform effective instruction for autistic learners. Establishing this foundation is essential to develop a pedagogically sound and inclusive intervention proposal, which will be addressed in Section 3. Through this review, the aim is not only to identify what works but also to highlight ongoing challenges, research gaps, and considerations that must be taken into account to ensure meaningful and equitable language learning experiences for students with ASD.

2.1. Historical perspective of ASD.

There are numerous definitions of the core concept addressed in this dissertation, Autism Spectrum Disorder (ASD). Hervás-Zúñiga et al. (2017) describe it as:

> A neurodevelopmental condition with a neurobiological basis that begins in early childhood. It impacts both social communication and behaviour characterized by the presence of restricted and repetitive patterns of behaviour and interests. The disorder follows a chronic course and can vary significantly in terms of severity, functional adaptation, language development, and cognitive abilities, depending on individual circumstances and stages of development (p.92).

The word "disorder" indicates a disruption to typical development or health, as defined by the Royal Spanish Academy (RAE), and in this context refers to a developmental alteration that can influence multiple areas of functioning. Meanwhile, the term "spectrum" reflects the wide range and variability in the presentation and severity of symptoms, which often makes diagnosing ASD complex (De la Torre, 2024).

The understanding of Autism Spectrum Disorder (ASD) has evolved significantly since the early 20th century, shifting from a narrowly defined psychiatric condition to a complex neurodevelopmental spectrum recognized across multiple disciplines.

This section will trace the historical development of ASD, examining how diagnostic practices, scientific research, and societal attitudes have shaped the current understanding of the condition. Special attention will be given to key milestones such as the introduction of the DSM criteria, the emergence of the neurodiversity movement, and recent trends in prevalence and public awareness. Understanding this progression is essential to contextualize how educational and therapeutic approaches have changed and adapted over time.

2.1.1. Early conceptions of Autism

Going back to the origins of the word *autism,* we find that the word derives from the Greek *autos* (self). The early conceptualizations of autism emerged in the first half of the 20th century, reflecting the limited understanding of atypical developmental patterns at the time.

The term “autism” was introduced by the Swiss psychiatrist Eugen Bleuler in 1911 to describe a symptom of schizophrenia, which he was researching. He used the term “autistic” to describe a tendency observed in some patients to withdraw into their own internal world, disconnecting from external reality. Bleuler believed this detachment from the external environment was a core symptom of schizophrenia (Verhoeff, 2021). It is important to note that Bleuler did not conceptualize autism as an independent condition but rather as a symptom within the broader framework of psychotic disorders.

Later on, in 1943, the Austrian-American psychiatrist Leo Kanner, published an unprecedented research titled “Autistic Disturbances of Affective Contact”, in which he described eleven children who exhibited what he termed “early infantile autism.” Kanner identified several core characteristics, including profound difficulties with social interaction, delayed or atypical language development, a preference for routine, and repetitive behaviours. He emphasized the children’s apparent “aloneness” and lack of emotional reciprocity, which he viewed as innate rather than acquired. Importantly, Kanner’s work marked the first clinical attempt to delineate autism as a unique condition, distinct from schizophrenia, shifting the discourse from psychosis to developmental pathology (Kanner, 1943).

Kanner also noted the presence of remarkable cognitive abilities in some of the children, particularly in rote memory and isolated skills, contributing to early discussions about the so-called "splinter skills" often seen in autistic individuals. However, his emphasis on “refrigerator mothers”—a controversial theory suggesting that cold, unloving parenting caused autism—would influence decades of misunderstanding and stigma before being decisively discredited by later research (Evans, 2020; Silverman, 2022).

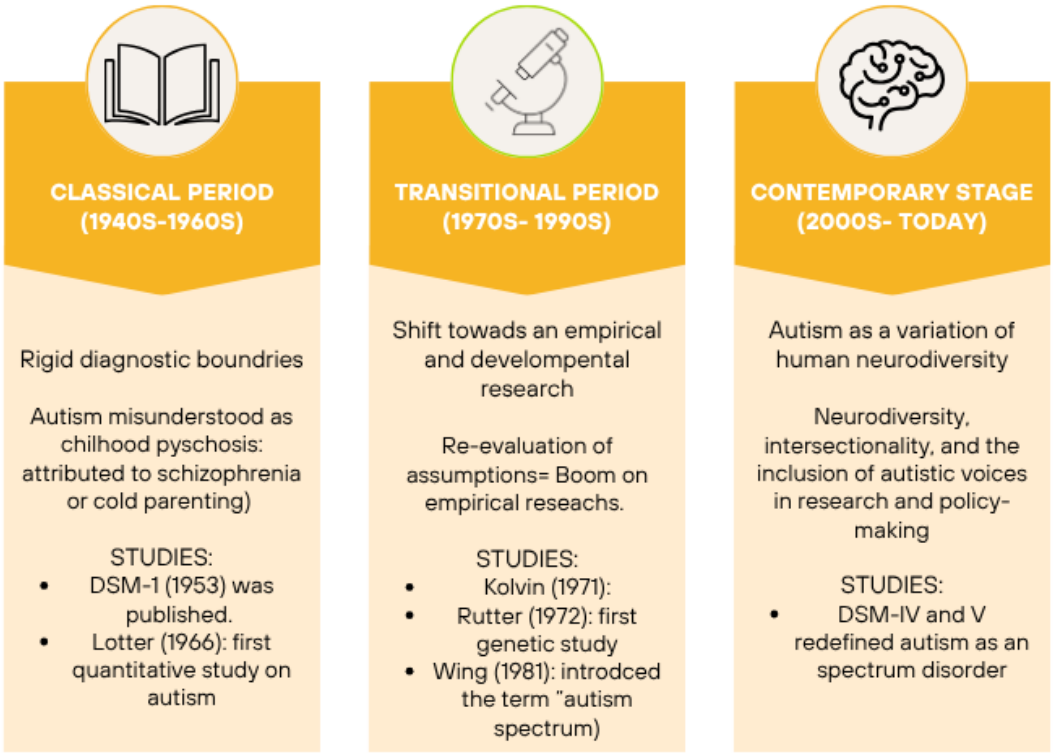
Almost simultaneously, Hans Asperger published his observations in 1944 on children who demonstrated similar social and behavioural difficulties but possessed more advanced language and cognitive skills. These children were described as having a unique profile of high intellectual ability and specific circumscribed interests (Asperger, 1944). Although Asperger’s work remained largely unknown in the English-speaking world until the 1980s, his descriptions contributed to what would later be recognized as Asperger Syndrome.

In the decades that followed, autism was frequently misclassified under other psychiatric diagnoses, such as childhood schizophrenia, due to overlapping behavioural symptoms and a lack of distinct diagnostic criteria (Evans, 2020).

2.1.2. Further research: The three stages of Autism.

Following the foundational works of Kanner and Asperger, the understanding of autism evolved through various stages as clinical, psychological, and neurological research expanded. Scholars have proposed that the historical development of autism studies can be conceptualized in three broad stages: the classical period, the transitional period, and the contemporary period (Feinstein, 2019; Silverman, 2022).

Figure 2: Stages of Autism.



Source: Author's own elaboration based on findings developed below.

2.1.2.1. Classical period (1940s-1960s).

The first stage was marked by rigid diagnostic boundaries and a limited understanding of autism as a rare and severe form of childhood psychosis. During this time, autism was frequently misunderstood, often conflated with childhood schizophrenia, and attributed to emotional neglect or cold parenting. This psychoanalytic approach placed undue blame on families and hindered objective scientific progress.

A major development during this stage was the printing of the first edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-I) by the American Psychiatric Association in 1952. Although autism was not yet clearly defined as a separate condition, the DSM-I included "schizophrenic reaction, childhood type," under which many children with what would now be considered autism were diagnosed. This vague classification contributed to ongoing confusion between autism and other psychotic disorders (Evans, 2020).

Another pivotal contribution came from Victor Lotter (1966), who conducted the earliest quantitative study on autistic children. He identified core behavioural traits such as social withdrawal and communication impairments and emphasized understanding autism as a cognitive rather than affective disorder. Lotter's work laid the basis for future behavioural descriptions and diagnostic criteria (Evans, 2013).

2.1.2.2. The transitional period (1970s-1990s).

The second stage saw a shift toward more empirical and developmental research. Following World War II, researchers began to re-evaluate early assumptions about autism.

Key contributions during this period came from researchers who followed Lotter´s evidence, such as Israel Kolvin (1971) and Michael Rutter (1972). Kolvin was the first to question the validity of previous autism studies and pushed for more rigorous, evidence-based approaches. In 1972, Rutter conducted the first genetic study on autism and argued for a redefinition of the condition, emphasizing that autism should be recognized as a condition affecting cognitive and social development, rather than as an emotional disturbance. These findings played a key role in clarifying diagnostic distinctions and reinforcing the idea that autism was a unique neurodevelopmental condition.

Lorna Wing also made a notable contribution during this time. In 1981, she expanded on Asperger's earlier findings and introduced the term "autism spectrum" to reflect a broader range of autistic traits (Wing, 1981). The publication of the DSM-III in 1980 marked a turning point, officially recognizing autism as a distinct diagnosis under Pervasive Developmental Disorders with the label "Infantile Autism," thereby separating it from psychotic disorders. This distinction was further refined in the DSM-III-R (1987), which reconceptualized autism as a neurodevelopmental condition and introduced the term "autistic disorder." These updates

provided a more standardized diagnostic framework that improved clinical and educational evaluations (Artigas-Pallarès & Paula, 2012).

2.1.2.3. Contemporary stage (2000s-present).

The third stage emphasizes neurodiversity, intersectionality, and the inclusion of autistic voices in research and policy-making. Current perspectives reject deficit-based models and instead recognize autism as a variation of human neurology.

Between 1994 and 2000 the DSM-IV and DSM-IV-TR were published. They further elaborated the diagnostic framework by dividing autism into five subtypes: Autistic Disorder, Asperger's Disorder, Childhood Disintegrative Disorder, Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS), and Rett Syndrome (Autism Europe, 2017). The number of diagnostic criteria was reduced from sixteen to six, prompting both clarity and controversy in clinical settings (Artigas-Pallarès & Paula, 2012). Spanish psychologist Ángel Rivière framed autism as a condition with multiple dimensions, evidencing that there are as many types of autism as there are people with autism (Fiorilli, 2022).

A major turning point in this period was the publication of the DSM-V in 2013, which unified the previous subtypes into a single diagnosis: Autism Spectrum Disorder (ASD). This change aimed to improve diagnostic reliability and reflect the continuous nature of autistic traits across individuals. The DSM-V introduced a dimensional model that classifies ASD based on levels of support needed and focuses on two main domains: social communication difficulties and restricted, repetitive behaviours (Lord et al., 2020). The spectrum model aligns with Rivière's dimensional view, acknowledging a wide range of symptoms and intensities. While genetics is considered a leading factor, ASD's causes are still regarded as multifactorial and not fully understood (Vanacloig, Marín & Martínez, 2020).

Table 1. Grades of Autism.

ASD Level	Support needed	Social communication	Repetitive and restricted behaviours (RRBs).
Level 1	*Requires support*.	Noticeable deficits without supports. May struggle to initiate conversations, show atypical	Behaviour inflexibility interferes with functioning in one or more settings. Difficulty switching

		social responses, or have difficulty maintaining typical back-and-forth interactions.	between activities. Problems with planning and organization that affect independence.
Level 2	*Requires substantial support*.	Marked deficits even with supports. Limited initiation of social interactions and reduced or abnormal responses. Social skills deficits are more apparent.	RRBs and inflexibility are obvious to casual observers. Change causes noticeable distress. Behaviours interfere with functioning across multiple settings.
Level 3	*Requires very substantial support.*	Severe deficits in verbal and nonverbal social communication cause extreme limitations in functioning. Very limited initiation and response to others.	RRBs and inflexibility significantly interfere across all settings. Change causes extreme distress and difficulty. May show great resistance to redirection.

Author´s own elaboration based on DSM-V (2013)

Current perspectives reject deficit-based models and instead recognize autism as a variation of human neurology. Recent studies increasingly explore the diversity of autism across gender, ethnicity, and cognitive profiles, noting how earlier research predominantly focused on white males, leading to underdiagnosis in other populations (Silverman, 2022). The evolving understanding of autism now influences not only diagnostic and therapeutic practices but also educational frameworks and public awareness, supporting a more inclusive and strengths-based approach to autism.

2.1.3. Summary and current challenges.

The history of autism reflects a continual evolution in understanding and approach. Early conceptions, rooted in psychoanalysis and limited diagnostic models, gradually gave way to evidence-based frameworks. The transition from early classifications that conflated autism with childhood schizophrenia to the adoption of more precise diagnostic tools, such as those in the DSM-III and DSM-IV, marked significant progress. Researchers like Lorna Wing and Ángel

Rivière advanced the concept of autism as a spectrum, emphasizing the condition's variability across individuals.

The DSM-5 further unified previous subtypes into the single diagnosis of Autism Spectrum Disorder (ASD), applying a dimensional model based on the level of support needed. This approach better reflects the range of characteristics observed in autistic individuals. At the same time, current perspectives have shifted toward viewing autism as a form of neurodiversity rather than a deficit, encouraging inclusive practices in both clinical and educational contexts.

Despite advances, challenges remain. Disparities in diagnosis remain across gender, ethnic, and socioeconomic groups, often due to outdated stereotypes and limited access to diagnostic resources. Moreover, while genetic factors are believed to play a central role, the exact causes of autism remain unclear and are considered multifactorial. Moving forward, greater attention must be paid to incorporating autistic perspectives, promoting equity in research and diagnosis, and ensuring that support systems are adapted to the variying needs of individuals on the spectrum.

2.2. Communication and bilingualism in ASD.

Communication challenges are a significant feature of Autism Spectrum Disorder (ASD), often influencing an individual's ability to use and understand verbal and non-verbal language in social interactions. These difficulties can become more complex in multilingual environments, especially when children with ASD are exposed to more than one language at home or in educational contexts. Over the past two decades, research has increasingly focused on how autistic individuals acquire a second language, and whether bilingualism presents additional obstacles or, conversely, offers cognitive or social benefits. This section explores current findings related to communication patterns in ASD, the process of second language acquisition, and the effects of bilingual exposure. It also examines how language diversity interacts with diagnostic practices and educational interventions.

By reviewing contemporary research, we aim to provide a clearer understanding of how bilingualism intersects with autism and what implications this holds for inclusive education and clinical support.

2.2.1. Communication in ASD and Acquisition of a Second Language.

2.2.1.1. Communication in ASD

As mentioned before, communication is one of the most affected areas in people with ASD. Autism doesn´t only affect verbal but also and non-verbal interaction. Common difficulties include delayed speech development, echolalia, atypical intonation, and reduced use of gestures or eye contact. These difficulties stem from deeper neurological differences, especially in areas related to social cognition, such as joint attention, theory of mind, and pragmatic language skills (American Psychiatric Association, 2022; Tager-Flusberg, 2021). Joint attention, which refers to the ability to coordinate focus with another person on an object or event, is frequently impaired, which limits early language learning opportunities. Additionally, theory of mind deficits can hinder an individual's ability to interpret others' intentions, emotions, or communicative cues, complicating social exchanges (Advanced Autism Services, 2025).

Another significant aspect is pragmatic language impairment, which includes difficulty for understanding context, using appropriate conversational skills, such as turn-taking, topic maintenance, or adapting speech to different contexts, or interpreting non-literal language such as idioms, metaphors and sarcasm. These pragmatic deficits can result in communication that may appear rigid, overly formal, or disconnected from social norms, making interactions challenging even for individuals with strong vocabularies or fluent speech (Durrleman & Delage, 2020).

2.2.1.2. The Acquisition of a Second language in ASD.

Language development is a complex process involving the mastery of three interrelated domains: form (grammar and phonology), content (semantics), and use (pragmatics) (De la Torre, 2024). According to Chomsky's theory of Universal Grammar, all humans possess an innate ability to acquire language structures through social interaction (Birchenall & Müller, 2014).

Historically, it was believed that children with ASD lacked the necessary communicative intent for language acquisition, as many did not use speech intentionally and often engaged in repetitive behaviours such as echolalia. However, more recent findings challenge this

assumption, showing that echolalia may serve as a communicative attempt or coping mechanism in situations where their linguistic competence is limited (De Castro et al., 2018).

However, it has been proven that when it comes to acquiring a second language, learners with ASD show a wide range of outcomes, depending on individual cognitive profiles, language exposure, and educational support. Contrary to outdated concerns, current research indicates that the presence of ASD does not inherently hinder the capacity to learn a second language. Instead, autistic learners can acquire a second language successfully, especially when the learning environment is supportive and consistent (Gonzalez-Barrero & Nadig, 2021; Reetzke et al., 2021).

Research indicates that bilingualism does not negatively impact language development in children with ASD. In fact, studies have shown that bilingual autistic children perform comparably to their monolingual peers in language and social communication skills. For instance, a study by Hastedt et al. (2022) found no significant differences in language skills between bilingual and monolingual autistic toddlers and even observed a bilingual advantage in socialization skills.

Interestingly, some studies suggest that certain children with ASD acquire a second language more easily than their first. For instance, cases have been reported in which children had limited speech in their native language but were more communicative in a second language learned in a bilingual environment or school context. This observation may relate to structural differences between languages and how they align with the individual's cognitive or communicative strengths (Málaga et al., 2019).

2.2.2. Role of Bilingualism and Multimodal contexts.

Bilingualism, defined as the capacity to communicate effectively in two languages in daily life, has become increasingly relevant in research on Autism Spectrum Disorder (ASD). While language acquisition in general presents unique challenges for children with ASD, bilingualism offers particular opportunities and complexities. In fact, it was once believed that learning two languages could overburden children with ASD, but recent studies have shown that bilingual environments may offer valuable benefits for both cognitive and social development (Gonzalez-Barrero & Nadig, 2021). Moreover, the use of multiple modes of communication,

such as visual aids, gestures, and alternative communication tools, can support language acquisition and interaction in more inclusive and adaptive ways.

2.2.2.1. Bilingualism and Cognitive Development in ASD.

Recent studies on bilingualism in children with ASD have demonstrated that being exposed to two languages does not necessarily hinder language development. On the contrary, bilingual children with ASD show cognitive advantages, such as enhanced cognitive flexibility, better executive function, and increased metalinguistic awareness compared to their monolingual peers (Gonzalez-Barrero & Nadig, 2021). The ability to switch between languages can strengthen attention and problem-solving skills, which are important for overall cognitive development in children with ASD.

As proven in the previous dissertation by this author, students with ASD can sometimes acquire better a second language than their first one, since some languages, such us English, have simpler grammatical structures and more precise vocabulary what makes it easier for students with ASD to understand the internal structures from a language (Cóleman, 2022).

Therefore, bilingualism offers an opportunity to develop a richer understanding of language, both in terms of its structure (grammar, phonology) and use (pragmatics). For children with ASD, the development of social communication skills, such as understanding context, turn-taking in conversation, and interpreting non-literal language, is often delayed. However, the exposure to two languages allows for more chances to learn and practice these skills in a variety of social situations. The repeated practice in diverse communicative settings -whether at home, at school, or in the community- can enhance pragmatic abilities, which are a key challenge for children with ASD (Hastedt et al., 2022).

2.2.2.2. Multimodal Language Environments.

For many autistic learners, especially those with limited verbal skills or delayed speech development, traditional language instruction based solely on spoken or written communication can be insufficient. Multimodal language environments are those that integrate different forms of communication such as visual symbols, gestures, body language, and digital supports. They provide more accessible ways for individuals with ASD to both

understand and express themselves. One of the most widely used tools in these settings is the pictogram, or pictorial symbol, which represents a concept, action, or object through a simple visual image (Zaccariello et al., 2020).

This author explains that pictograms are particularly effective because they reduce the cognitive load required to process and interpret spoken or written language. Children with ASD often struggle with auditory processing and abstract thinking. Furthermore, Hart & Banda (2021) state that pictograms, by contrast, provide concrete visual representations that are immediate, predictable, and less ambiguous. This can support the development of vocabulary, sentence structure, and comprehension by offering a stable reference that remains visible and repeatable over.

Another benefit of visual aids such as pictograms is their ability to scaffold both expressive and receptive communication. When used systematically, for example through systems like the Picture Exchange Communication System (PECS), pictograms enable non-verbal or minimally verbal children to initiate communication by selecting images that correspond to their needs, emotions, or intentions. This promotes autonomy and reduces frustration, which is often a source of behavioural challenges in classroom settings (Boesch et al., 2021).

These tools are also valuable in bilingual contexts, as they provide a shared visual base that can be associated with vocabulary in more than one language. For example, a single image of a cup can be linked to both “cup” and “taza,” facilitating second language acquisition by reinforcing semantic understanding across languages (Fleury & Hugh, 2022). In this way, pictograms help bridge linguistic gaps and support cross-language transfer.

Finally, visual supports such as pictograms enhance social communication by aiding routines, transitions, and emotional regulation. Tools like visual schedules and social narratives improve predictability and support the understanding of social norms, helping learners navigate everyday interactions more successfully (Wang et al., 2023). Their integration into classroom instruction also aligns with inclusive education frameworks, such as Universal Design for Learning, by ensuring access to language for all learners (CAST, 2022).

2.2.2.3. Opportunities and Challenges of Bilingualism in ASD.

As explained in the previous sections, the inclusion of bilingualism in the lives of autistic learners has shifted from being seen as potentially harmful to increasingly recognized as a beneficial and enriching experience. Research from the last few years emphasizes that learning more than one language may support cognitive growth and social engagement (Gonzalez-Barrero & Nadig, 2021).

Bilingual exposure has been linked to improvements in executive functions such as attention control, task switching, and working memory. Bilingual autistic children have demonstrated strengths in these areas compared to monolingual peers, suggesting that managing two languages might help strengthen neural pathways associated with flexibility and self-regulation (Sharaan et al., 2021).

Nevertheless, there are practical challenges. Children with ASD may require more structured support to navigate the differences between two linguistic systems, especially when pragmatic skills are underdeveloped. Inconsistent exposure or conflicting language models at home and school can create confusion if not properly coordinated (Tager-Flusberg, 2021).

Furthermore, children with ASD may face inconsistent language input, especially in environments where bilingual resources or specialized support are limited. Families and educators often struggle to find or implement strategies that support both languages equally. Additionally, professionals may lack adequate training to address the unique intersection of bilingualism and autism, resulting in uneven support (Reetzke et al., 2021).

However, overall evidence shows that, when bilingualism is introduced gradually and supported with appropriate strategies, it does not delay or disrupt language acquisition in autistic children. Personalized approaches that consider each child's developmental profile and communication needs are essential to make bilingualism a realistic and positive experience.

2.2.2.4. Educational Support in Bilingual and Multimodal Contexts

The role of educators and the school environment is critical in ensuring that bilingualism becomes a resource rather than an obstacle. Schools can support bilingual children with ASD

using multimodal communication strategies which can significantly improve understanding, reduce stress, and enhance classroom participation (Díaz-Castro & Palacios-González, 2021).

Teachers' attitudes are also essential; positive perceptions of bilingualism can encourage families to maintain their home language and help children develop both linguistic systems with confidence (Hastedt et al., 2022).

Educational programs that promote the use of spoken and non-verbal communication, adapted to the individual needs of learners, can create inclusive environments where bilingual autistic students can thrive. Multimodal learning approaches also allow for more flexible and accessible communication, supporting both language development and meaningful participation in school life (Reetzke et al., 2021).

To maximize effectiveness, educators and families need training on how to incorporate visual aids consistently across daily activities. When used strategically, these supports help create inclusive learning environments that promote autonomy, social interaction, and a stronger sense of security for autistic students.

2.2.3. Effective EFL Strategies for Students with ASD.

To support English as a Foreign Language (EFL) learners with Autism Spectrum Disorder (ASD), educators are encouraged to implement flexible, inclusive methodologies that accommodate diverse learning needs. Below, we can find some strategies that can help ASD students in their learning process:

- Differentiated instruction, which involves tailoring content, process, and outcomes to match individual abilities and interests, has proven particularly effective in promoting engagement and language acquisition in autistic students (Alnahdi, 2020).
- Universal Design for Learning (UDL) complements this approach by emphasizing the importance of offering multiple means of representation, expression, and engagement, reducing learning barriers and fosters accessibility to resources (Rappolt-Schlichtmann et al., 2021). This will be explained in detail in the following sections.
- Assistive technologies, such as speech-generating devices, visual schedule apps, and interactive language tools, can support communication, structure routines, and

reinforce vocabulary and grammar in meaningful, multimodal ways (Knight et al., 2020).

These tools not only enhance comprehension but also help foster independence and self-regulation. When used together, these strategies create a more inclusive EFL environment that aligns with both neurodiverse learning profiles and the linguistic demands of second language acquisition.

2.2.4. Summary and main considerations.

This section explored the complex relationship between Autism Spectrum Disorder (ASD), communication, and bilingualism within educational contexts. Communication difficulties—especially in pragmatics, joint attention, and theory of mind—are central to ASD and influence how individuals acquire and use language. While these challenges affect both verbal and non-verbal interaction, they do not prevent successful language learning, including the acquisition of a second language.

Contrary to outdated assumptions, current research indicates that bilingualism does not harm, but benefit most autistic learners in cognitive flexibility, metalinguistic awareness, and social communication (Hastedt et al., 2022; Reetzke et al., 2021). The use of multimodal strategies, such as pictograms, visual schedules, and technology, further supports comprehension and engagement, particularly in inclusive and multilingual environments.

However, educators must face persistent challenges, including misconceptions about bilingualism, insufficient training, and limited resources. By adopting inclusive frameworks like Universal Design for Learning (UDL), differentiated instruction, and based on evidence supports, EFL classrooms can become more efficient to attend the needs of autistic students. Continued research and teacher development are essential for ensuring that language learning environments respect neurodiversity and offer meaningful opportunities for all learners.

2.3. Evidence-based Interventions and Methodologies

Effective interventions are crucial in supporting language development and communication in individuals with Autism Spectrum Disorder (ASD), especially in foreign language learning contexts. Interventions must be tailored to address the unique needs of students with ASD, emphasizing strategies that enhance communication, social interaction, and cognitive flexibility. Evidence-based approaches are critical to ensure that interventions are effective in promoting language skills, including English as a Foreign Language (EFL).

Below, different methodologies and approaches that have been proven successful for students with ASD will be detailed. This is necessary to understand section 3, which will consist of an Intervention Proposal.

2.3.1. Universal Design for Learning (UDL) and Differentiated Instruction.

Universal Design for Learning (UDL) is an inclusive educational program that aims to create flexible learning contexts that can respond to the diverse needs of all students, including those with Autism Spectrum Disorder (ASD). UDL focuses on providing multiple means of representation, action, expression, and engagement to ensure that every student has the chance to access, participate in, and demonstrate learning. For students with ASD, UDL's emphasis on flexibility is particularly valuable, as it allows instructors to adapt materials, methods, and assessments in ways that align with individual students' strengths and challenges. By offering various modes of instruction, UDL ensures that language learning, including English as a Foreign Language (EFL), is accessible regardless of the student's sensory or communication preferences (CAST, 2018).

UDL has been mentioned and included in the last Educational Spanish Law, The Organic Law 2/2006 of 3rd May of Education, modified by the Organic Law 3/2020, of 29th December, known as "LOMLOE" in Spanish. This law highlights the importance of using UDL as an inclusive resource for students with special needs, which is ASD students' case.

Differentiated Instruction, on the other hand, adapts lessons to individual students' needs, adjusting content, process, and product. In the context of EFL, teachers might differentiate by offering alternative ways to learn vocabulary, such as using pictures, realia, or digital tools, for students with ASD who may struggle with traditional text-based instruction. The process can

also be adjusted by providing more time, fewer distractions, or a quieter space for students who need a more controlled environment to focus. Differentiated Instruction recognizes that students with ASD may have varying levels of language proficiency and social interaction skills, and it offers flexible strategies to support these differences. This ensures that each student has the chance to engage with the material at their own pace and in a way that works best for them (Gregory & Chapman, 2013).

One of the significant benefits of UDL and Differentiated Instruction in an EFL context is that they foster an environment where students with ASD can build language skills in a way that respects their learning differences. By providing diverse avenues for participation, these approaches encourage active engagement and reduce barriers to communication. Additionally, these strategies promote a sense of autonomy and agency, as students are empowered to choose methods of learning that suit their individual needs. This personalized approach is crucial in helping students with ASD develop both linguistic and social communication skills, as it recognizes their unique learning styles and allows them to make meaningful progress at their own pace (Baker et al., 2021; Hall, 2017).

2.3.2. Structured Teaching (TEACCH Method).

The TEACCH (Treatment and Education of Autistic and Communication-Handicapped Children) method is rooted in the principles of structured teaching, designed to support individuals with autism by fostering independence, clarity, and predictability in learning environments. This approach prioritizes physical organization, visual schedules, work systems, and clearly defined expectations to help students understand their daily routines and reduce anxiety (Hume, Steinbrenner & Odom, 2021).

In the context of EFL, structured teaching offers a practical framework for adapting classroom environments to suit the needs of autistic learners. The use of visual supports can enhance comprehension and facilitate smoother transitions between tasks. These elements help mitigate sensory overload and foster a sense of control, which is essential for language learning and classroom participation (Odom et al., 2021).

Importantly, this method values individualized learning. Teachers are encouraged to design activities based on each student's strengths and preferences, promoting engagement and

meaningful learning. For instance, some students might better grasp vocabulary through images or symbols, while others may respond to songs or tactile materials. This flexibility makes the TEACCH approach a valuable tool for supporting language development in autistic students (Lord et al., 2020).

2.3.3. Applied Behaviour Analysis (ABA) and its Role in EFL

Applied Behaviour Analysis (ABA) is one of the most widely researched and evidence-supported interventions for students with ASD. ABA focuses on reinforcing positive behaviours and teaching new skills through structured techniques, often with one-on-one sessions. In the context of EFL, ABA can be particularly effective in teaching vocabulary, grammar, and conversational skills. It uses repetition and reinforcement, helping learners engage with new language structures and practice social interactions in controlled, predictable environments (Smith, 2015).

2.3.4. Social Skills Training

Social Skills Training (SST) is another critical intervention for students with ASD. Since social communication can be a challenge, SST aims to teach appropriate social behaviours, helping learners engage effectively with peers and teachers. In the EFL classroom, SST can be combined with language lessons to improve not just language acquisition but also the social interactions necessary for language use. Students learn how to navigate conversational exchanges, ask questions, and respond appropriately, which can significantly enhance their language acquisition process (Bellini & Peters, 2008).

2.3.5. Technology-Based Interventions

Technology-based interventions have shown promise in providing individualized support for EFL learners with ASD. Tools such as speech recognition software, communication apps, and interactive language learning platforms cater to the unique needs of students with ASD. These technologies offer visual, auditory, and tactile support, allowing for multisensory learning experiences. They are especially beneficial for learners with limited verbal communication skills, as they can provide alternatives for language practice, vocabulary building, and comprehension (Jelínková, B. 2019).

2.4. Main conclusions.

This literature review has explored the theoretical and empirical foundations necessary to understand the intersection of Autism Spectrum Disorder (ASD) and English as a Foreign Language (EFL) instruction. Beginning with a historical overview, we traced how conceptions of ASD have evolved from early diagnostic models focused on deficits to more recent, inclusive perspectives that emphasize neurodiversity and individualized support. These shifting views have influenced how learners with ASD are approached in educational settings, especially in foreign language acquisition.

In the section on communication and bilingualism, it was established that although individuals with ASD often experience significant communication challenges, such as delayed speech, limited pragmatic skills, and echolalia, recent research suggests that these barriers do not necessarily preclude second language learning. In fact, some autistic learners may demonstrate equal or even greater communicative competence in a second language, particularly when instruction is supported with visual aids, structured routines, and multimodal input. The benefits of bilingualism, when supported by appropriate interventions, may extend beyond language proficiency to improvements in cognitive flexibility and social interaction.

Finally, the discussion of evidence-based interventions emphasized the need for tailored methodologies in EFL classrooms. Universal Design for Learning (UDL), Differentiated Instruction, the TEACCH method, Applied Behaviour Analysis (ABA), Social Skills Training, and Technology-based tools all offer adaptable and supportive frameworks. These interventions help create accessible, inclusive, and engaging learning environments where students with ASD can thrive linguistically and socially. Importantly, they also reflect a broader educational shift toward equity and individualization, both of which are essential in promoting meaningful learning outcomes for all students.

In sum, the literature clearly supports the potential for students with ASD to succeed in EFL contexts when instructional strategies are responsive to their unique profiles. This foundational understanding paves the way for the intervention proposal in Section 3, where practical applications of these insights will be detailed.

3. Intervention proposal

The following intervention proposal has been designed with the theoretical basis from sections above. To create a complete and structured unit, we will explain the main aspects in the following sections.

3.1. Aims of the proposal

3.1.1. General Objectives.

This didactic unit is the first of the school year. All contents have already been taught in the previous years; thus, the main goal is to welcome students back to school and reinforce the routines and previous knowledge, considering the students' characteristics that will be detail in the next sections.

The unit aligns with the general objectives of Primary Education established in the Organic Law 2/2006 of 3rd May of Education, modified by the Organic Law 3/2020 of 29th December, known in Spanish as "LOMLOE", which regulates Spanish educational System; the Royal Decree 157/2022 1st of March, which establishes the organisation and the minimum teachings of Primary Education nationwide; the Decree 81/2022, July 12th, which establishes the organisation and the curriculum in the Community of Castilla la-Mancha; and the Decree 85/2018 of 20th November, which regulates Educative inclusion in the Community of Castilla la-Mancha.

3.1.2. Specific objectives

The specific objectives of this intervention are aligned with the individual needs of students and the key competencies outlined in the Spanish curriculum.

The main specif goals of the unit can be divided into:

3.1.2.1. Linguistic and Communicative Objectives

- To foster the development of basic communicative competence in English through meaningful and functional use of the language.
- To acquire basic vocabulary related to familiar contexts (e.g., school, family, food).
- To understand and produce simple oral and written sentences using learned structures.

- To follow simple instructions and participate in predictable classroom routines in English.
- To develop awareness of turn-taking and other pragmatic rules of communication.
- To facilitate access to English language learning using multimodal resources, including visual aids and assistive technologies

3.1.2.2. Cognitive and Social Objectives

- To provide a safe and structured environment that supports the learning needs of students with ASD.
- To promote social interaction and collaboration through cooperative and inclusive activities.
- To enhance attention and memory through structured and visually supported tasks.
- To encourage the use of alternative communication systems when needed (e.g., pictograms, gestures).
- To increase confidence and motivation in using English as a means of communication.
- To develop interpersonal skills such as cooperation, empathy, and respect through peer interaction.

3.2. Educational context and/or Target group

3.2.1. Educational context

The following Didactic Unit has been designed to be implemented in a state-funded primary school, specifically in an ASD classroom, in the city of Guadalajara, Spain. This type of classrooms can be found in some schools where there more than five students with ASD. These classrooms are part of an inclusive education model promoted by the Spanish Ministry of Education, aiming to combine specialised instruction with opportunities for partial integration into mainstream classrooms when appropriate. They provide a structured, low-stimulation environment and are staffed with professionals trained in both ASD and special education, including therapeutic and communicative support services.

The classroom is part of a specialised educational setting within a mainstream public Primary School in Castilla-La Mancha, Spain. It follows a tailored curriculum adapted to the

developmental and communicative profiles of the students. Instruction is delivered by a specialised teacher with training in both English as a Foreign Language (EFL) and special educational needs, assisted by a speech therapist and a classroom assistant. Class sizes are kept small to ensure high levels of individualised support and to facilitate social interaction in a controlled environment.

The overall goal of the educational setting is to foster the students' communicative, cognitive, and social skills while gradually introducing them to a second language, in this case, English. Lessons are designed to incorporate multisensory materials, frequent repetition, and routines that promote predictability and reduce anxiety. Visual supports such as pictograms, schedules, and realia play a central role in instruction, alongside alternative and augmentative communication (AAC) systems when needed. This context provides a strong foundation for the implementation of an adapted, evidence-based EFL intervention for students with ASD.

3.2.2. Target group

The classroom composed entirely of students diagnosed with Autism Spectrum Disorder (ASD). The group consists of six children aged between 5 and 8 years: two are 5 years old, two are 6 years old, one is 7, and one is 8. These students present varying degrees of language delay and communication challenges, but all are verbal and capable of participating in structured learning activities with visual and sensory support.

Table 2. *Students' charcteristics.*

AGE	*GRADE*	*DIAGNOSIS*	*MAIN CHARACTERISTICS*
5	Infant 3rd grade	ASD, Level 2 (moderate support)	Limited verbal communication, uses AAC; enjoys music and rhythm, good visual memory.
5	Infant 3rd grade	ASD, Level 1 (requiring support)	Communicates using short phrases; good receptive skills; needs support in transitions.
6	Primary 1st	ASD, Level 2	Strong routine dependency, uses pictograms; good with structured activities.
6	Primary 1st	ASD, Level 1 + ADHD	Verbally fluent but impulsive (echolalia); attention difficulties; benefits from movement.

7	Primary 2nd	ASD, Level 1	Very verbal; enjoys reading; struggles with turn-taking and group work.
8	Primary 3rd	ASD, Level 3 (requiring substantial support)	Non-verbal; uses AAC; very sensitive to sensory stimuli (uses headphones).

Source: Author's own elaboration, 2025.

3.3. Timing

The unit includes twelve sessions in total, 4 times a week. Each session lasts 45 minutes and they will be structured as shown in the table below:

Table 3: *Organization of the learning sessions:*

WEEK	*SESSION*	*NAME*	*TIME*
1	1	Welcome and Presentation	45 minutes
1	2	Colours all around me	45 minutes
1	3	What's this? Learning classroom objects	45 minutes
1	4	Let's move! Learning action verbs	45 minutes
2	5	My feeling today	45 minutes
2	6	My favourite toys	45 minutes
2	7	Animals: sound and movement	45 minutes
2	8	Let's count! Numbers and actions	45 minutes
3	9	Where is it? Prepositions with objects	45 minutes
3	10	Food time! Likes and dislikes	45 minutes
3	11	Let´s Play! Review	45 minutes
3	12	What have I learnt? Assessment and Feedback	45 minutes

Source: Author's own elaboration, 2025

3.4. Methodology of the proposal

The methodological foundation of this didactic unit is grounded in inclusive, flexible, and evidence-based approaches tailored to the diverse cognitive and communicative profiles of students with Autism Spectrum Disorder (ASD), as well as in the benefits of bilingualism for children with ASD. Considering the characteristics of the target group (six students aged 5 to 8 enrolled in a specialised ASD classroom), the teaching methods prioritise structure, predictability, visual supports, and multimodal communication.

Recent studies have highlighted the potential cognitive and social benefits of bilingualism for children with Autism Spectrum Disorder. Contrary to earlier concerns that bilingual environments might confuse or overwhelm autistic learners, current research suggests that exposure to two languages can support executive functioning, cognitive flexibility, and even social communication skills. For instance, Gonzalez-Barrero and Nadig (2021) found that bilingual autistic children showed comparable, and in some cases enhanced, performance in areas such as attention shifting and social responsiveness when compared to their monolingual peers. Similarly, Hantman et al. (2022) reported that bilingualism may foster adaptive behaviours and reduce some of the communication challenges typically associated with ASD. These findings support and lead the perspective of the proposal, since it has been shown that the integration of English as a Foreign Language (EFL) in inclusive classrooms, including specialized ASD settings, not only promote linguistic development but also broaden cognitive and social gains.

At the core of the proposal is the Universal Design for Learning (UDL) framework, which ensures that the content is accessible to all students regardless of their sensory, social, or linguistic needs. UDL encourages the use of multiple means of representation (e.g., visual aids, gestures, audio), multiple means of engagement (e.g., choice, interest-based tasks, sensory-friendly activities), and multiple means of expression (e.g., verbal responses, pointing, pictograms, drawing). These principles allow learners to interact with the content at their own pace and according to their strengths and preferences (CAST, 2018; Rose & Meyer, 2002).

Complementing UDL, Differentiated Instruction is applied to adapt the materials, language input, and outputs to the individual profiles of the students. Lessons are tailored according to cognitive level, learning style, and communicative ability. For example, a student who is non-verbal will participate using AAC (Augmentative and Alternative Communication) systems like pictograms or tablets, while another with emerging verbal skills will repeat or name objects orally. Activities are carefully structured to offer varied levels of support, ensuring that all students can participate meaningfully.

The proposal also incorporates strategies from the TEACCH method (Treatment and Education of Autistic and Communication-Handicapped Children), which emphasizes environmental structure, visual schedules, and work systems (Hume et al., 2021). In the classroom, visual timetables and consistent routines help reduce anxiety and enhance predictability. Students are supported with clearly structured learning zones, consistent classroom layout, and individual work systems where needed. This structure not only facilitates smoother transitions but also supports focus and independence.

Furthermore, visual aids and multisensory materials play a central role in this proposal. As established in the literature, many children with ASD process information more effectively through visual channels (Johnston et al., 2003). Therefore, each session includes visual flashcards, real objects (realia), body movement, and pictographic instructions to reinforce comprehension and participation. These tools support understanding of abstract concepts, increase motivation, and reduce communicative frustration.

Lastly, technology-based supports are selectively used to increase engagement and provide alternative modes of learning. Interactive whiteboards, simple educational apps, and videos are included to illustrate vocabulary and encourage repetition in a dynamic, interactive way (Jelínková, 2019). These digital tools also provide opportunities for self-paced exploration and immediate feedback.

In conclusion, the methodology of this intervention is characterised by inclusivity, individualisation, and structure, ensuring that all students, regardless of their language or social communication skills, can access and benefit from English as a Foreign Language instruction. The integration of UDL, Differentiated Instruction, TEACCH, visual supports, and

selected technology ensures that the teaching approach is developmentally appropriate**,** research-informed**,** and responsive to the real needs of students in a Spanish aula TEA setting.

3.5. Sessions and activities

Before starting developing the sessions in detail, it is important to know that all of them will follow the same structure so as to provide students with a structured environment that help lower their anxiety.

All sessions will have a welcome and a closing consisting of the following:

The welcoming is an essential part, since students are anticipated what they will be doing in the following hour. To do so, the routine panel is used (see Annex 1). In this part, students paste in order the activities in in pictograms. The routine panel works with an arrow that either the student or the teacher moves every time an activity is over, and a new one is about to start. This way, students learn how to follow orders like pay attention, listen or move. This is a way to structure the session.

After this, a welcome song is sung to start the class so that students change their mind and the environment is set into the foreign language context. This part should last no more than 5 minutes.

On the other hand, the closing part is a transitional step where students are introduced that the session is about to end. For this to happen, students listen to a goodbye song that marks the time to either sit down and relax to listen to the next teacher, or to move in and active recovery where students can reduce mental fatigue after an intense class. After this, students gather around the routine panel where they will be shown the steps for the next class.

Finally, it is to mention that all pictograms used along the unit come from the ARASAAC page, which is the Spanish general system of Pictograms.

The didactic unit will be developed following the plan bellow:

Session: 1	**Name: Welcome and Presentation.**	**Week: 1**
Duration: 45 minutes		

Grouping: Whole group with individual turns and small groups.	**Materials:** "Hello Song", "Goodbye song", Name tags, flashcards with faces and names, mirror, speaker/audio device, emotion cards.

Objectives:

- To learn and practice greetings in English.
- To introduce oneself using "My name is…".
- To recognize and name peers.
- To begin identifying emotions (happy, sad) when greeting.

Development:

1. **Welcome & Emotional Check-in (5 mins):** The teachers will greet students one by one after the summer asking "How are you?" using visuals of faces (happy/sad). Students choose a matching emotion card. Students will be shown again the classroom and will be explained step by step the structure of the class, using the routine panel (Annex 1).
2. **Warm-Up Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Presentation (10 mins):** Show flashcards with faces (See Annex 3) and model "Hello, my name is…" and "How are you?". Let students repeat with AAC/pictogram support.
4. **Practice (15 mins):** Using the mirror and name tags, each student says "Hello, my name is…". Verbal students will be asked to continue saying "Today I feel…" and choose their emotion card. As the activity goes on, students will be asked to start naming the emotions (happy, sad). Non-verbal students will only be asked to point at the emotion after saying their names. The teacher will reinforce with praise the verbal interactions.

   EXTENSION: As the activity goes on, the teacher may add other expressions if students already remember and manage the previous feelings and greetings.

5. **Pair Work (10 mins):** Students, with the help of the teacher, if necessary, will go around the class greeting each other in pairs using the learned phrases.
   EXTENSION: Students could go around the school asking other students or school staff like the caretaker or teachers.
6. **Closing (2 mins):** Students will recap the names learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session focuses on fostering basic social interaction and vocabulary development through structured and repetitive language use. The objective is to promote verbal expression and name recognition in a low-pressure, predictable setting. Using mirrors and visuals supports self-awareness and reinforces the speech act of self-introduction. Pair work helps encourage turn-taking and listening, key elements in pragmatic language development.

<table>
<tr><td><u>Session</u>: 2</td><td colspan="2"><u>Name</u>: Colours all around me</td><td><u>Week</u>: 1</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2" colspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", colour flashcards, coloured objects/realia (blocks, balls), pictograms, interactive whiteboard or tablet, AAC device, routine panel, "Colour Song" video.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group and individual turn.</td></tr>
<tr><td colspan="4"><u>Objectives</u>:
- To identify and name basic colours in English (red, blue, yellow, green).
- To improve vocabulary and comprehension.
- To use visual supports to link words and object.</td></tr>
<tr><td colspan="4"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song,", "Flashcards," "Games," "Tablet activity," "Bye-bye song." Each step will be shown with pictograms. This helps reduce anxiety and fosters predictability.</td></tr>
</table>

2. **Hello Song (3 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Presentation of Colours (7 mins):** The teacher will introduce the 4 basic colours using flashcards and real objects (e.g., a red ball, a green block). Students will be encouraged to touch or point and repeat the word after the teacher. For non-verbal students, AAC devices will be used as needed.
4. **Matching Activity (10 mins):** Students will be given coloured cards and must match them with the corresponding real objects placed on a table. The teacher will use simple prompts such as "Find red," "Put it here.", so as to language is practiced and all students get familiarised not only with simple words but also with short sentences.
5. **Sorting Game (10 mins):** In pairs or small groups, students will be given a basket of items by colour. The teacher will guide them using English phrases like "This is yellow," "Let's put all the blue ones together". Students will be asked to repeat, and the teacher will reinforce with praise the verbal interactions.
6. **Interactive Practice (5 mins):** Using a tablet or interactive whiteboard, students will complete a drag-and-drop colour activity. This reinforces visual learning and word-object associations, and it is a way of using AAC materials, what is beneficial for all students, especially non-verbal ones. The teacher will go around and will encourage students to repeat colours as they complete the activity.
7. **Closing (5 mins):** Students will recap the colours learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session supports vocabulary building and verbal language development through visual scaffolding, sensory-rich materials, and predictable structure. The integration of matching and sorting promotes categorization and cognitive flexibility. The welcoming and closing routines enhance self-regulation and prepare students for transitions, which is essential in ASD classrooms.

Session: 3	**Name: What's This? Learning Classroom Objects**	**Week: 1**

<table>
<tr><td><u>Duration</u>: 45 minutes</td><td rowspan="2"><u>Materials</u>: “Hello Song”, “Goodbye song”, Real classroom objects (pencil, chair, table, book, eraser), flashcards with images and words, pictograms, AAC devices.</td></tr>
<tr><td><u>Grouping</u>: Whole group with individual turns and small groups.</td></tr>
<tr><td colspan="2"><u>Objectives</u>:
- To recognize and name common classroom objects in English.
- To strengthen receptive and expressive language.
- To foster turn-taking and social interaction.</td></tr>
<tr><td colspan="2"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: “Hello song,” “Flashcards,” “Guessing game,” “Tablet time,” “Story time,” “Goodbye song.” Each step is reinforced with pictograms.
2. Hello Song (2 mins): Students will watch and sing the “Hello Song” (Annex 2) with gestures while the teachers encourage joining in.
3. Flashcard Presentation (6 mins): The teacher will present flashcards of classroom objects, like tables, chairs or windows, showing both image and word. Real objects will be shown at the same time for multisensory input. Students will be encouraged to touch the objects and repeat the names. Once the teacher has shown all of them.
4. “What’s This?” Guessing Game (10 mins): Objects from the classroom will be hidden in a box or bag. One by one, students will go to the middle, pull out an item and name it or match it to a card/pictogram. For students with limited speech, AAC devices or pointing can be used.
5. Matching Game on Tablet (8 mins): Students will take turns to play a matching game that links pictures of classroom items to their names. This reinforces vocabulary visually and interactively.
6. Story Time (9 mins): The teacher will read the book Lulu’s First Day (Annex 4). This story shows different classroom object in a familiar context for students. Then, students will hear the story again from the blackboard, so as to show students</td></tr>
</table>

different accent and language inputs. Finally, the teacher will read the story again and as each object appears, the teacher will pause to label it and show the corresponding real object or flashcard.

7. **Closing (5 mins):** Students will recap the objects learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session promotes vocabulary acquisition by using realia, visuals, and multisensory learning. Classroom objects are part of students' daily lives, making them meaningful targets for EFL learning. The guessing game enhances engagement and encourages expressive language, while the tablet activity reinforces vocabulary in a fun, structured way. Welcoming and closing routines support predictability, helping students with ASD manage transitions smoothly.

<table>
<tr><td><u>Session</u>: 4</td><td colspan="2"><u>Name</u>: Let's Move! Learning Action Verbs</td><td><u>Week</u>: 1</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", Flashcards with action verbs (jump, run, sit, clap, dance), video with actions, pictograms, AAC support, routine panel, action dice.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group, with individual participation and pair work.</td></tr>
<tr><td colspan="3"><u>Objectives</u>:
- To understand and use common action verbs in English.
- To promote verbal expression and body movement.
- To encourage imitation, attention, and engagement through movement.</td></tr>
<tr><td colspan="3"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Flashcards," "Action video," "Action dice game," "Movement song," "Goodbye song." Each activity is paired with a pictogram.
2. Hello Song (2 mins): Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.</td></tr>
</table>

3. **Flashcard Presentation (6 mins):** The teacher will show action verb flashcards one by one and will model each action physically (e.g., jumps while saying "jump"). Students will be encouraged to imitate the action and say or sign the word.
4. **Watch and Imitate (6 mins):** Students will listen and watch the song "I can Jump!" (Annex 5). In this video, an animated character performs different actions (jump, run, swim…) which serves as a graphical representation of what they need to do. Then, students will watch the song again while the teacher pauses it after each action to review vocabulary and act it out together.
5. **Action Dice Game (10 mins):** Using a large dice with pictures of the action verbs, students will take turns rolling and then performing the action shown. This combines physical engagement (TPR) with vocabulary reinforcement. AAC devices or visual cards can help non-verbal students participate.
6. **Movement Song (11 mins):** Before finishing, the teacher will play the well-known action song "If You're Happy and You Know It" since it includes new verbs. The teacher will encourage participation with gestures and verbal prompts. We have to take into account in this session that some students may not be engaged in this last activity since it can be to many stimuli for them, so we will let rest those students who need it.
7. **Closing (5 mins):** Students will recap the verbs learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session uses Total Physical Response (TPR) to teach action verbs, engaging students through movement and imitation. This approach is particularly effective for children with ASD. It enhances comprehension and memory by linking language with motor activity. The visual and physical cues accommodate diverse learning styles, and the predictable structure of the session helps manage transitions while reinforcing vocabulary and social interaction.

Session: 5	**Name: My feelings today**	**Week: 2**
Duration: 45 minutes		

Grouping: Whole group, with individual expression and small group sharing.	**Materials:** "Hello Song", "Goodbye song", Emotion flashcards (happy, sad, angry, scared, tired), mirrors, visual emotion wheel, AAC devices, routine panel, storybook about feelings.

Objectives:

- To identify and name basic emotions in English.
- To develop emotional awareness and verbal expression.
- To use visual and AAC supports to communicate feelings.

Development:

1. **Welcoming and Routine Preview (5 mins):** Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Emotion flashcards," "Mirror play," "Storytime," "Feelings chart," "Goodbye song.".
2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Emotion Flashcards (7 mins):** The new vocabulary will be introduced using flashcards that show different emotions. The teacher will say each feeling aloud while showing an expressive face. Students will need to repeat the word and imitate the expression. Using AAC and emotion pictograms will help non-verbal students express themselves.
4. **Mirror Play (10 mins):** Each student will receive a mirror and choose an emotion to act out. The group will have to guess the feeling using the vocabulary in English. The teacher will assist with language prompts (e.g., "Are you happy?"), and AAC tools will be available for them to point out when they identify the emotion.
5. **Storytime (12 mins):** The teacher will read *The Colour Monster* (Annex 6). In the meanwhile, pauses will be used to discuss what each character feels and connect it to the vocabulary learned.

6. **Feelings Chart Activity (5 mins):** Finally, we will try to identify the different grades of a feeling. Students will be shown a visual emotion scale that we will call "emotionmeter" (Annex 7). They will be asked, "How do you feel today?" and students will have to place their photo or name next to the emotion they identify with. We will encourage verbal or AAC-based responses. This activity will be included in the daily routine at the beginning of the session to keep revieing this difficult topic
7. **7. Closing (5 mins):** Students will recap the feelings learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session promotes emotional literacy by introducing feelings vocabulary in a multimodal way, combining visual, auditory, and kinaesthetic strategies. Activities like mirror play and the feelings chart support self-expression and empathy, essential for social communication. By using familiar routines, AAC tools, and visual supports, the session creates a safe, structured environment where children with ASD can explore and communicate emotions in English at their own pace.

This topic is particularly difficult since, in general, ASD students have lots of troubles identifying their emotions, which often leads to frustration than can be shown with aggressive behaviours. Therefore, emotional education is of especial importance in these cases. Furthermore, by including activity 6 in their daily routing, we will help students review and keep identifying their feeling. The "emotionmeter" (Annex 7) will be placed at the front of the class so that at any time students can change their photo or name if they start feeling something different that they want to communicate.

<table>
<tr><td><u>Session</u>: 6</td><td colspan="2"><u>Name</u>: My favourite toy</td><td><u>Week</u>: 2</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td colspan="2" rowspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", Routine panel, student's toy from home, microphone or talking stick, pictograms for support, emotion chart.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group, with individual participation and group work.</td></tr>
<tr><td colspan="4"><u>Objectives</u>:</td></tr>
</table>

- To enhance verbal expression using simple sentence structures.
- To encourage peer listening and respectful turn-taking.
- To foster confidence and personal sharing.

Development:

1. **Welcoming and Routine Preview (5 mins):** Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Let's learn phrases," "Practice time," "Show and Tell," "Goodbye song."
2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Let's Learn Phrases (6 mins):** The teacher will bring different toys to the carpet. In a circle, she will show them using phrases like "This is my ___," "It is ___ (colour/texture)", using pictograms and gestures to support understanding.
4. **Practice Time (7 mins):** Before the session, students will have been asked to bring their favourite toy from home. Each child will practise presenting their toy with teacher help using the sentences from activity 3. For nonverbal children, AAC or PECS cards will be used. These students will be asked to start making sentences with pictograms.
5. **Show and Tell Presentations (15 mins):** In pairs, students will take turns to present their toy using the guided phrases. They will use a talking stick or microphone to indicate whose turn it is. Peers will listen quietly.
6. **Peer Connection (5 mins):** Peers will be asked to use simple phrases like "I like it," or match pictograms with emotion or opinion (e.g., "happy," "fun," "big") to the toy. They will be encouraged to use the "emotionmeter" presented in the previous session to show how the toys make them feel.
7. **Closing (5 mins):** Students will recap the toys learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session aims to support the development of verbal language and social communication through a highly engaging and personalized task. Show and Tell gives students a platform to talk about something familiar and meaningful while using simple English sentence structures. This activity helps students practice language rules and turn-taking, which is a deficit area in ASD. The structure fosters a supportive and respectful environment, building both confidence and communication skills. Moreover, the emotional connections formed through peer sharing promote empathy and classroom cohesion, which are essential for students on the autism spectrum.

<table>
<tr><td><u>Session</u>: 7</td><td colspan="2"><u>Name</u>: Animals: sound and movement</td><td><u>Week</u>: 2</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2"><u>Materials</u>: “Hello Song”, “Goodbye song”, Routine panel, animal flashcards, speaker for animal sounds, stuffed animals, visual movement cards, AAC boards.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group with individual turns and small groups.</td></tr>
<tr><td colspan="4"><u>Objectives</u>:
- To recognize and name common animals and their corresponding sounds and movements in English.
- To imitate animal sounds and actions using verbal language or gestures.
- To encourage turn-taking, attention, and gross motor engagement.</td></tr>
<tr><td colspan="4"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: “Hello song,” “Animal flashcards,” “Sound & move,” “Guess the animal,” “Animal yoga,” “Goodbye song.”
2. Hello Song (2 mins): Students will watch and sing the “Hello Song” (Annex 2) with gestures while the teachers encourage joining in.
3. Animal Flashcards (6 mins): The teacher will present the flashcards of animals (dog, cat, cow, duck, elephant, snake, etc.) and will say each animal name and sound (e.g., “The dog says woof!”) and students will have to repeat or imitate.</td></tr>
</table>

4. **Sound & Move Game (6 mins):** The teacher will play an animal sound on the speaker. Students will have to guess the animal and imitate its movement (e.g., hopping like a frog, flapping like a bird). Verbal students will be asked to say the name of the animal while non-verbal will be given AAC and gesture options.
5. **Guess the Animal (10 mins):** A student will be asked to act out an animal silently (e.g., slither like a snake, stomp like an elephant). The others will have to guess in English using pictures or speech. The teacher will encourage peer involvement and will act as a model at the beginning so that students can repeat his actions.
6. **Animal Yoga (11 mins):** This TPR activity will involve guided movement. With poses representing animals, students will relax and go back to a calm state doing yoga (e.g., cat-cow stretch, downward dog, butterfly pose). The teacher will add visual supports and will allow students to choose animals to mimic.
7. **Closing (5 mins):** Students will recap the animals learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session is designed to develop vocabulary, auditory discrimination, and motor imitation skills through TPR and an engaging, movement-rich topic: animals. By incorporating sound and action associations, students with ASD can connect abstract language with concrete sensory experiences. Activities support multisensory learning and enhance auditory processing and expressive language, while also promoting physical coordination and self-expression. Furthermore, the last activity intends to raise self-regulation and body awareness, important for both communication and classroom readiness.

<table>
<tr><td><u>Session</u>: 8</td><td colspan="2"><u>Name</u>: Let's count! Numbers and actions</td><td><u>Week</u>: 2</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td colspan="2" rowspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", routine panel, number flashcards (1–10), counting songs, objects to count (blocks, animals), dice, movement cards, AAC boards.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group with individual turns and small groups.</td></tr>
<tr><td colspan="4"><u>Objectives</u>:</td></tr>
</table>

- To identify and name numbers 1 to 10 in English.
- To associate numbers with quantities and simple actions.
- To promote motor coordination and cognitive flexibility through movement-based counting.

Development:

1. **Welcoming and Routine Preview (5 mins):** Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Number flashcards," "Counting song," "Action counting," "Roll and move," "Goodbye song."
2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Number Flashcards (6 mins):** The teacher will present flashcards from 1 to 10 and will say each number in English, inviting students to repeat. We will use AAC boards for nonverbal participation and will encourage these students to count using fingers or toys.

   EXTENSION: Those students who already know numbers from 1 to 10 will be invited to keep on counting and will be given more difficult number of toys to count. They will be told to act as a teacher to show the others the higher numbers they know.
4. **Counting Song (6 mins):** Students will listen to the song and watch the video "One, Two, Buckle My Shoe" (Annex 8), which uses gestures and props. Students will be encouraged to join in through singing, dancing, or holding up fingers. This song also serves as a continuation of session 4 where students learnt how to follow instructions, broadening their vocabulary.
5. **Action Counting (10 mins):** Continuing with what was learn in session 4, students will be asked to count while performing simple actions: e.g., "Let's do 5 jumps!" or "Clap your hands 3 times!". The teacher will use number cards to guide the count. After some rounds, each student will be given a turn to pick a number and an action. Non-verbal students will be given AAC devices to interact, choose and express the actions they want the others to perform.

6. **Roll and Move (11 mins):** The teacher will paste the flashcard with numbers from 1 to 6 around the class. Then, using a large soft dice, a student will roll the dice and name the number (with help if needed). Then, they will have to run and touch the flashcard of the right number

   EXTENSION: since this topic has been practiced for years, we expect students to manage numbers. If they know them as they should, the previous activity will be more complicated: students will be asked to form groups of the number shown in the dice with their partners or with toys, practicing this way turn-taking and motor planning.
7. **Closing (5 mins):** Students will recap the numbers learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session targets early numeracy and oral language development in a dynamic and inclusive way. Through the combination of counting, movement, and repetition, students with ASD can build connections between spoken numbers, visual representations, and quantities. Activities provide opportunities to practice following instructions, gross motor coordination, and joint attention, which are often areas of difficulty for autistic learners. By embedding learning into physical activity and song, the session also promotes memory retention, turn-taking, and enjoyment of English through playful interaction, laying foundational skills for further academic development.

<table>
<tr><td><u>Session</u>: 9</td><td colspan="2"><u>Name</u>: Where is it? Prepositions with Objects</td><td><u>Week</u>: 3</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2" colspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", Routine panel, toy animals/objects, a small box/house prop, preposition flashcards (on, in, under, next to, behind), AAC support.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group with individual turns and small groups.</td></tr>
<tr><td colspan="4"><u>Objectives</u>:
- To introduce and reinforce basic spatial prepositions in English (on, in, under, next to, behind).
- To support comprehension of positional concepts through visual and tactile aids.</td></tr>
</table>

- To encourage the use of prepositions in short phrases or structured expressions.

Development:

1. **Welcoming and Routine Preview (5 mins):** Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Preposition flashcards," "Object placement," "Where is it? game," "Preposition book," "Goodbye song."
2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Preposition Flashcards (6 mins):** The teacher will show flashcards with each preposition and demonstrate using a toy and a box (e.g., "The cat is in the box"). Then, students will have to repeat the phrases or use AAC symbols.
4. **Object Placement Practice (8 mins):** Each student will choose a toy and will be asked to place it in different locations following a verbal prompt ("Put the dog under the table"). Support with gestures and repetition. This will serve as a review of vocabulary learnt in sessions 3, 4, 6 and 7, introducing new grammar.
5. **Where is it? Game (10 mins):** The teacher will hide a toy in a visible location (e.g., under, on, behind an object). Then, students will be asked: "Where is the ____?" and prompt answers like "It's under the chair!". We will encourage both verbal and symbolic answers using visual cues or AAC.
6. **Preposition Mini-Book (9 mins):** Finally, the teacher will provide each student with a mini-book to assemble. Each page contains an object and a location (e.g., "The ball is in the box"). Students glue, colour, and attach Velcro-backed pieces to complete sentences visually.

   We have to take into account that some students find difficult to follow instructions when working on printed materials and working autonomously. Therefore, the teacher will go around and help them, with the help of the special needs teacher, and will ask students to help each other when they finish their mini-books.

7. **Closing (5 mins):** Students will recap the prepositions learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session aims to review previous vocabulary while introducing new one. Spatial awareness and functional language are fostered using hands-on activities focused on prepositions. Prepositions are essential for navigating daily environments, understanding instructions, and building basic sentence structures. For autistic learners, the use of concrete visual models, repetition, and manipulatives strengthens both comprehension and expression of these relational terms. Activities support fine motor skills, sequencing, and sentence construction. By presenting language in a clear, consistent, and multisensory way, this session encourages meaningful use of prepositions and supports generalization across settings, a common challenge for students with ASD.

<table>
<tr><td><u>Session</u>: 10</td><td colspan="2"><u>Name</u>: Food time! Likes and dislikes</td><td><u>Week</u>: 3</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", routine panel, food flashcards, realia/plastic food, thumbs-up/thumbs-down symbols, visual sentence frames (e.g., "I like ___"), AAC support</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group with individual turns.</td></tr>
<tr><td colspan="3"><u>Objectives</u>:
- To introduce vocabulary related to common foods.
- To express personal preferences using simple language structures.
- To encourage self-awareness and communication of likes and dislikes.</td></tr>
<tr><td colspan="3"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Food flashcards," "Taste and choose," "Preference chart," "Drawing activity," "Goodbye song."</td></tr>
</table>

2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Food Flashcards (6 mins):** The teacher will introduce various food items using flashcards or real objects. He/she will say each item in English and encourage students to repeat. We will use AAC for non-verbal learners.
4. **Taste and Choose (8 mins):** If feasible, the teacher will allow students to see, smell or taste a few safe, familiar foods, If students don`t want to participate in the activity, plastic versions will be used, encouraging them to guess the food by touching it. After each one, students will be asked to indicate with thumbs-up or thumbs-down symbols or sentence frames ("I like apple / I don't like broccoli") what they think of that food.
5. **Preference Chart Activity (10 mins):** Each student will select 3 or4 food items from the flashcards or realia. Using a visual board, they will sort them into "like" and "don't like" columns with teacher support, adding their name/photo to each choice.
6. **Drawing Activity (9 mins):** Students will draw pictures of 2 or 3 foods they like and 1 or 2 they don't. Under guidance, they will complete a sentence frame ("I like ___ / I don't like ___"). Non-verbal students can use symbols or AAC to complete this.
7. **Closing (5 mins):** Students will recap the food learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session enhances expressive language and self-advocacy by encouraging students to identify and communicate their personal preferences. The focus on food vocabulary connects to students' daily experiences, since ASD students often have diverse eating problems (they are very restrictive with what they eat and when they eat it). This promotes emotional awareness, decision-making, and functional communication, all crucial in both social and academic contexts.

Session: 11	**Name: Let's play! Review**	**Week: 3**
Duration: 45 minutes		

Grouping: Whole group with individual turns and mainstream classroom interactions.	**Materials:** "Hello Song", "Goodbye song", routine panel, flashcards and materials from previous sessions, communication aids, sensory tools, visual supports.

Objectives:

- To review and reinforce vocabulary and concepts learned in previous sessions.
- To promote social interaction and communication with peers and school staff.
- To encourage participation in a mainstream classroom environment with support.

Development:

1. **Welcoming and Routine Preview (5 mins):** Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Review games," "Classroom interaction," "Goodbye song."
2. **Hello Song (2 mins):** Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. **Review Games (15 mins):** Conducting fun, interactive games students will revise vocabulary and concepts from past sessions (e.g., emotion charades, animal sounds, number games, food preferences). Flashcards, AAC, and visual prompts will be used to support participation.
4. **Mainstream Classroom Interaction (15 mins):** Taking students to the mainstream classroom or inviting other school staff to join the session, we will facilitate guided interactions where students practice greetings, simple questions, and expressing likes/dislikes using learned vocabulary. Staff and peers will provide positive feedback and encouragement.
5. **Calm Down and Sensory Break (5 mins):** Finally, students will be provided with a brief sensory break with calming tools (weighted blanket, stress balls) to ensure smooth transition.
6. **Closing (3 mins):** Students will review the vocabulary learned. Finally, they will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session aims to consolidate and generalize language and social skills acquired in previous lessons by providing meaningful, enjoyable review activities and real-world practice opportunities. Interaction with peers and staff in the mainstream classroom encourages social communication, confidence building, and inclusion, which are vital for students with ASD. By revising familiar vocabulary in a dynamic setting, learners strengthen retention and apply skills in natural contexts. The session balances active engagement with sensory support to accommodate students' needs, ensuring a positive and effective learning experience.

<table>
<tr><td><u>Session</u>: 12</td><td colspan="2"><u>Name</u>: What have I learnt? Assessment and feedback</td><td><u>Week</u>: 3</td></tr>
<tr><td colspan="2"><u>Duration</u>: 45 minutes</td><td rowspan="2"><u>Materials</u>: "Hello Song", "Goodbye song", routine panel, visual aids (charts, stickers), flashcards, communication devices, assessment sheets.</td></tr>
<tr><td colspan="2"><u>Grouping</u>: Whole group</td></tr>
<tr><td colspan="4"><u>Objectives</u>:
- To assess students' comprehension and retention of key vocabulary and concepts from the unit.
- To provide positive, constructive feedback to support motivation and self-awareness.
- To encourage students' reflection on their learning progress and celebrate achievements.</td></tr>
<tr><td colspan="4"><u>Development</u>:
1. Welcoming and Routine Preview (5 mins): Students will sit in a circle on the carpet. Using the visual routine panel, the teacher will present the steps of the session: "Hello song," "Review questions," "Interactive assessment," "Feedback time," "Goodbye song."
2. Hello Song (2 mins): Students will watch and sing the "Hello Song" (Annex 2) with gestures while the teachers encourage joining in.
3. Review Questions (10 mins): Using visual aids and flashcards students will be asked one by one, in a corner simple, familiar questions related to emotions, animals,</td></tr>
</table>

numbers, food, and prepositions. They will be encouraged to use verbal interactions, or AAC responses, adapting as needed.

4. **Interactive Assessment (15 mins):** Students will be presented fun, hands-on activities that demonstrate their understanding, such as matching games, sorting tasks, or role-playing. We will provide prompts and support individualized responses.
5. **Feedback Time (8 mins):** Students will be offered positive reinforcement through praise, stickers, or tokens. We will use visual charts to show progress. Finally, we will encourage students to express how they feel about their learning using emotion cards or AAC.
6. **Closing (5 mins):** Students will sing the "Goodbye song" (Annex 2) as an active recovery. Afterwards, they will gather around the panel for transition.

This session is designed to evaluate and celebrate the learning journey of students throughout the unit. Through a combination of informal assessments and interactive tasks, educators will identify each student's strengths and areas for growth in vocabulary, communication, and social skills. Providing immediate, positive feedback enhances students' motivation, self-confidence, and engagement, which are essential for continuous learning. Additionally, encouraging students to reflect on their progress fosters self-awareness and supports the development of metacognitive skills, although this is highly difficult is ASD students, especially in the youngest ones. This session concludes the unit with a meaningful, affirming experience that acknowledges the efforts and achievements of every learner.

3.6. Assessment

Assessment is a fundamental component of this intervention proposal, ensuring that the learning objectives are met and the needs of each student with Autism Spectrum Disorder (ASD) are effectively addressed. Given the individualized nature of ASD education, assessment strategies are tailored to capture both academic progress and communicative-social development in a supportive and flexible manner. The evaluation process integrates ongoing formative assessment during sessions with summative reflections at the end of the unit to provide a comprehensive picture of student growth and the intervention's efficacy.

3.6.1. Learning assessment

Learning assessment focuses on monitoring the acquisition and application of language skills, social interaction, and cognitive abilities targeted throughout the sessions. Given the diverse profiles and communication preferences in the ASD classroom, multiple modes of assessment are used:

- **Observational Assessment:** The teacher systematically observes students during activities, noting their use of vocabulary, ability to follow routines, verbal or AAC responses, engagement with peers, and demonstration of targeted skills (e.g., emotion recognition, use of prepositions, expressing preferences).
- **Checklists and Rubrics:** Structured checklists aligned with session objectives are employed to track specific behaviours and skills, such as appropriate turn-taking, correct use of new words, and participation in group activities. Rubrics provide qualitative insight into each student's progress over time.
- **Interactive and Hands-on Tasks:** Through games, role-plays, and matching or sorting activities, students' comprehension and expressive abilities are assessed in a natural, low-pressure context.
- **Student Self-Assessment and Reflection:** Where possible, students are encouraged to participate in self-assessment using emotion charts, choice boards, or simple feedback tools, fostering metacognition and autonomy.

The learning assessment emphasizes positive reinforcement, focusing on effort and progress rather than errors. Data gathered inform ongoing adjustments to the teaching approach and personalized supports.

To assess the learning of the students, the following rubric will be used:

Table XX: *Learning Assessment Rubric for EFL in ASD Classroom (Ages 5–8).*

Assessment Criteria	**4 - Excellent**	**3 - Good**	**2 - Emerging**	**1 - Beginning**

Participation & Engagement	Actively engages in all activities; shows enthusiasm and consistent attention.	Participates in most activities; generally attentive and responsive.	Participates with prompting; limited attention span but attempts engagement.	Rarely participates even with support; frequently distracted or withdrawn.
Vocabulary Use (Receptive & Expressive)	Consistently understands and uses target vocabulary (spoken or via AAC).	Understands and uses most vocabulary words with minimal support.	Recognizes or attempts to use some vocabulary; requires frequent support.	Little to no recognition or usage of vocabulary, even with support.
Following Instructions / Routine	Consistently follows classroom routine and task instructions independently.	Follows most instructions with minimal assistance.	Requires frequent guidance to follow routines or complete tasks.	Struggles to follow instructions, even with direct support.
Social Interaction & Turn-Taking	Initiates or responds to social interaction; waits turn and engages with peers.	Engages in social interaction and turn-taking with minimal prompting.	Attempts interaction or turn-taking with significant support.	Avoids or resists social interaction or turn-taking despite support.

Communication (Verbal, AAC, or Gestural)	Clearly communicates needs, ideas, or responses in English or using AAC/gestures.	Communicates with some prompting or support; attempts English or symbols.	Communicates basic needs or ideas inconsistently with frequent support.	Rarely communicates, even with AAC, gestures, or structured support.
Emotional Expression & Self-Regulation	Identifies and expresses feelings accurately; manages emotions appropriately.	Usually identifies emotions and self-regulates with occasional support.	Expresses some feelings but struggles to regulate without assistance.	Has difficulty identifying feelings or regulating emotions, even with support.

Source: Author's own elaboration, 2025.

This rubric has been designed with the flexibility necessary for an ASD classroom, where students exhibit diverse communication profiles and cognitive abilities. It allows for the assessment of both verbal and non-verbal responses, including the use of Augmentative and Alternative Communication (AAC), pictograms, and gestures. Rather than focusing on a fixed score, the rubric is intended to support formative, individualized tracking of each student's progress throughout the intervention. Teachers can use it at the end of each session or weekly to monitor development in areas such as vocabulary acquisition, participation, communication, and emotional regulation. The tool promotes a qualitative, strength-based approach to evaluation that aligns with the principles of inclusive education and the methodologies outlined in this proposal.

We have to remember that in this Unit, contents will not be new for students but rather a revision of the previous years, that's why there are different contents in each session. This is done for teachers to plan the next units accordingly to the results obtained in these first weeks.

3.6.2. Assessment of the proposal

Evaluating the overall effectiveness of the intervention proposal involves analysing both the implementation process and outcomes:

- **Teacher Reflection and Logs:** Educators maintain detailed records of session delivery, noting successes, challenges, and adaptations made in response to student needs. This reflective practice supports continuous improvement.
- **Feedback from Stakeholders:** Input is gathered from other school staff, therapists, and, when appropriate, families to assess perceived benefits and alignment with broader educational goals.
- **Student Engagement and Well-being:** Indicators such as attendance, enthusiasm, reduction in challenging behaviours, and positive social interactions serve as qualitative measures of the proposal's impact.
- **Achievement of Aims:** The extent to which the proposal's aims (improving vocabulary, social communication, critical thinking, etc.) are met is reviewed through synthesized data from learning assessments.

Together, these methods ensure a holistic evaluation of the intervention's success and guide future iterations or scaling to other ASD classrooms

4. Discussion

This dissertation explores the intersection of bilingualism, ASD, and inclusive English language instruction through an evidence-based intervention proposal designed for an ASD classroom in Spain. The results of the implementation suggest that students with ASD can benefit significantly from structured and visually supported EFL instruction. The positive student responses during the 12-session unit indicate that, when lessons are designed with clear routines, visual aids, predictable language, and interactive activities, students not only engage but also demonstrate progress in receptive and expressive English language skills. Notably, the students showed increased participation during group activities, more consistent use of target vocabulary, and improved responses through alternative communication systems or verbal approximations.

A particularly important finding of this proposal is the reinforcement of the idea that bilingualism can be beneficial for students with ASD. Contrary to traditional concerns that introducing a second language might overwhelm neurodivergent learners, recent studies (e.g., Uljarević et al., 2023) have shown that bilingual children with ASD can develop comparable or even superior metalinguistic awareness and cognitive flexibility than their monolingual peers. These benefits may stem from the cognitive demands of switching between languages, which promote attentional control and working memory, areas that are often targeted in therapeutic interventions for ASD. The intervention in this dissertation, which used carefully scaffolded English input within multimodal supports, aligns with these findings and demonstrates that the benefits of bilingualism are achievable when appropriate methodologies are in place.

The success of this unit also mirrors trends in recent literature, such as the growing emphasis on Universal Design for Learning (UDL) and Differentiated Instruction (Baker et al., 2021), which advocate for adapting educational environments to accommodate diverse learners. The integration of structured teaching methods, inspired by the TEACCH approach, and the use of Augmentative and Alternative Communication (AAC) tools further contributed to the accessibility and clarity of each session. These strategies have been widely validated in ASD-

specific education (Hume et al., 2021) and, as shown in this unit, are just as effective in EFL contexts when they are intentionally and consistently applied.

Moreover, the intervention revealed that language learning for ASD students should not be viewed solely through a linguistic lens, but also through a social and emotional framework. Activities that involved role-play, games, and peer interaction helped students not only develop vocabulary but also practice essential communication skills, such as turn-taking, requesting, and expressing preferences. This supports Bellini and Peters' (2008) work on Social Skills Training (SST) and shows that EFL instruction can be a vehicle for broader developmental goals when carefully aligned with students' communicative needs.

Finally, the inclusion of mainstream classroom interaction during the final sessions allowed students with ASD to apply their language skills in socially meaningful ways, contributing to a more inclusive school climate. The intervention thus underscores the importance of collaboration among educators, therapists, and families, as well as the need for ongoing professional development to equip teachers with the tools to support neurodiverse learners in bilingual environments. Future research could explore long-term outcomes of such interventions and the impact of bilingual exposure on emotional regulation, academic performance, and social inclusion in ASD populations.

5. Conclusions

This dissertation set out to explore how English as a Foreign Language (EFL) instruction could be effectively tailored to meet the needs of students with Autism Spectrum Disorder (ASD) in a specialized educational setting in Spain. The primary objective was to design an inclusive, evidence-based intervention proposal for an ASD classroom, fostering English language development through structured sessions grounded in pedagogical strategies proven to support neurodiverse learners. In parallel, a secondary objective was to examine the potential cognitive, communicative, and social benefits of bilingualism for autistic students, contributing to the ongoing academic debate on whether acquiring a second language is appropriate or beneficial for this population.

The proposed didactic unit, carried out over three weeks, incorporated visual aids, AAC tools, routines, and predictable language input, and was carefully crafted in accordance with methodologies such as the TEACCH approach, Universal Design for Learning, and elements of Total Physical Response and multi-sensory learning. The design of the sessions also prioritized emotional regulation, communication, and social interaction alongside linguistic competence. This interdisciplinary approach allowed the unit to address the diverse developmental and communicative needs of the six students in the classroom, who were between 5 and 8 years old and presented varying degrees of verbal ability, attention regulation, and sensory sensitivity.

In evaluating the achievement of the proposal's objectives, the results were largely positive. The students demonstrated clear progress in engaging with English vocabulary through gestures, repetition, visuals, and participation in routines. While fluency and grammar were not the primary targets, students increasingly responded to instructions, initiated communication, and showed greater awareness of classroom language structures. Moreover, the inclusion of themes such as emotions, animals, food, and classroom objects allowed for vocabulary to be tied to meaningful daily contexts. The sessions that included shared reading, music, movement, and collaborative games proved particularly effective in sustaining attention and fostering verbal or symbolic expression.

One of the most significant findings was that bilingualism did not present a disadvantage for the students but quite the opposite. When the learning environment was supportive, consistent, and visually structured, students with ASD could access and benefit from English instruction. This aligns with recent research suggesting that bilingual exposure can enhance executive functioning, flexibility, and even emotional expression in autistic learners. Through the gradual acquisition of vocabulary, routines, and classroom expressions, students not only developed a basic linguistic foundation in English but also improved their ability to predict social scripts and respond to cues, which are often areas of difficulty in ASD.

Throughout the development of this project, several reflections emerged. Firstly, the need to move away from deficit-based views of autism in education became increasingly apparent. Rather than focusing on what autistic students "lack," the unit centred on their strengths, such as visual memory, pattern recognition, and affinity for routines, and built instruction around those traits. Secondly, the importance of collaboration was underscored. The proposal would not be feasible without support from teaching assistants, therapists, and the broader school team, especially during mainstreaming activities. Finally, this process highlighted how critical teacher training is in inclusive methodologies. Many educators lack the specific tools or confidence to teach foreign languages to students with special educational needs, and yet, with the right resources and frameworks, it is not only possible but highly rewarding.

In conclusion, the objectives of this dissertation have been met to a significant degree. The intervention demonstrated that EFL instruction can be adapted to support meaningful learning and inclusion for students with ASD. Furthermore, the exploration of bilingualism within this context contributes to the growing evidence that, rather than posing a risk, it can act as a powerful tool for language and social development in neurodiverse populations. Future work should involve the real-life application of such proposals in ASD classrooms and systematic longitudinal studies to assess language acquisition and social integration outcomes over time

6. Limitations and further research

While this dissertation offers a practical and theoretically grounded intervention proposal for teaching English as a Foreign Language to students with Autism Spectrum Disorder in an ASD classroom, it is not without limitations. First, the intervention remains a hypothetical proposal and has not been completely implemented or tested in a real classroom setting, although it is based on a proven practice from the author. As such, its effectiveness in practice, including student engagement, learning outcomes, and teacher workload, remains to be empirically validated. Moreover, the small sample size (six students from a single ASD classroom) limits the generalizability of the findings. Each child with ASD presents unique cognitive, communicative, and sensory profiles, meaning that even within this controlled group, adaptations would need to be further individualized.

Another limitation lies in the lack of formal assessment tools within the proposal to track progress in specific linguistic or social-emotional competencies. Although the rubric and continuous observation strategies provide some structure, more standardized pre- and post-assessment measures would be necessary to demonstrate learning gains with academic rigor.

In terms of future research, several avenues emerge from this study. One critical area is the longitudinal impact of bilingualism on students with ASD, especially regarding executive functioning, communication, and social behaviour. Additional research could explore how early second language exposure interacts with neurodevelopment in autistic learners over multiple academic years. Another promising line of inquiry involves testing the proposed intervention in diverse educational settings, such as inclusive classrooms or schools with varying levels of support services, to evaluate its adaptability and scalability. Future studies could also incorporate teacher training models to determine how best to prepare EFL educators for working in neurodiverse classrooms. Finally, given the growing role of digital tools in special education, further research into the integration of technology and augmentative communication systems within EFL instruction for ASD students could contribute with meaningful advancements in accessibility and engagement.

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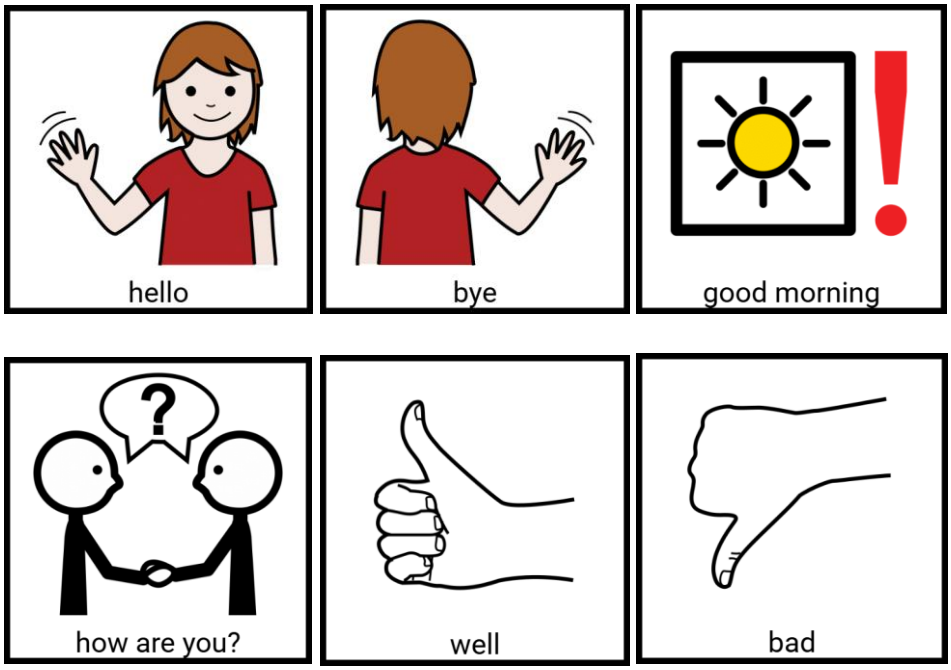
Centers for Disease Control and Prevention (CDC). (2023). *Prevalence of autism spectrum disorder among children aged 8 years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2020* [Chart]. Retrieved from [https://www.statista.com/chart/29630/identified-prevalence-of-autism-spectrum-disorder-in-the-us/?utm_source=chatgpt.com]

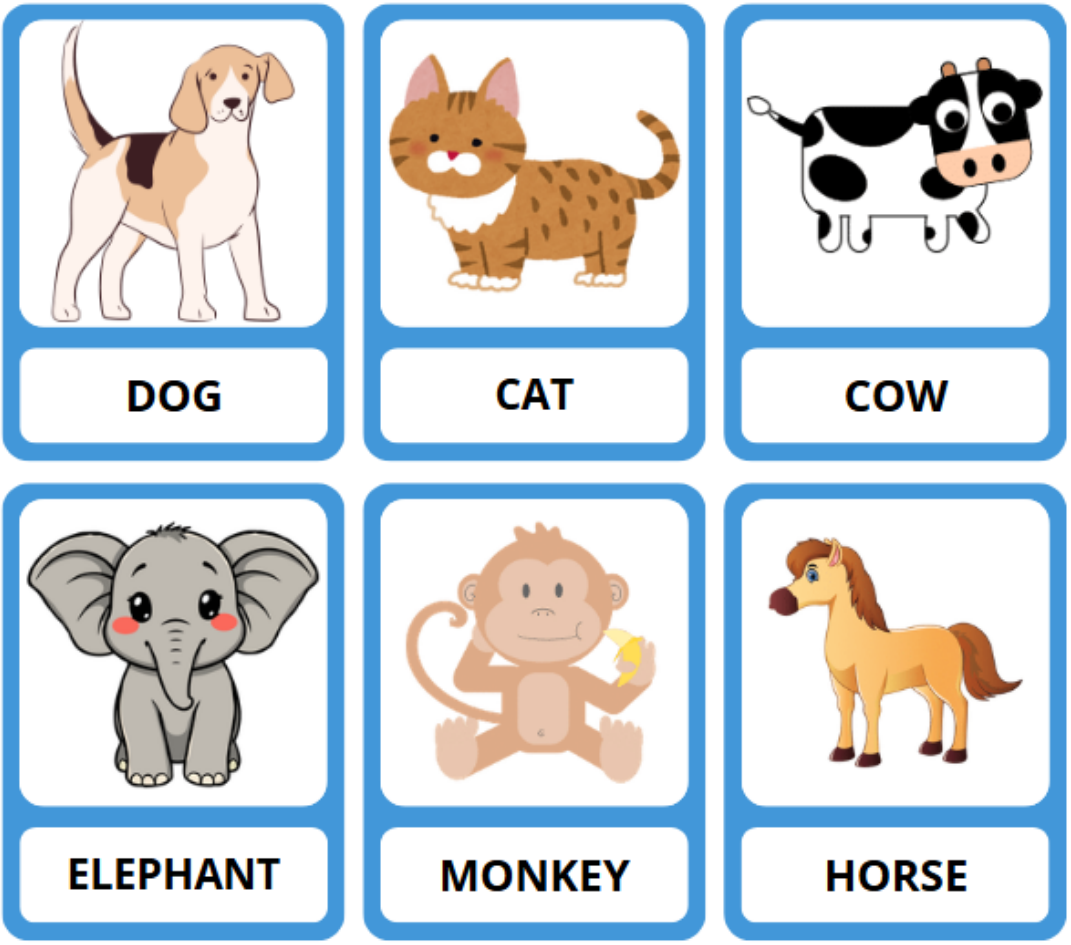
Annexes

1. ROUTINE PANNEL

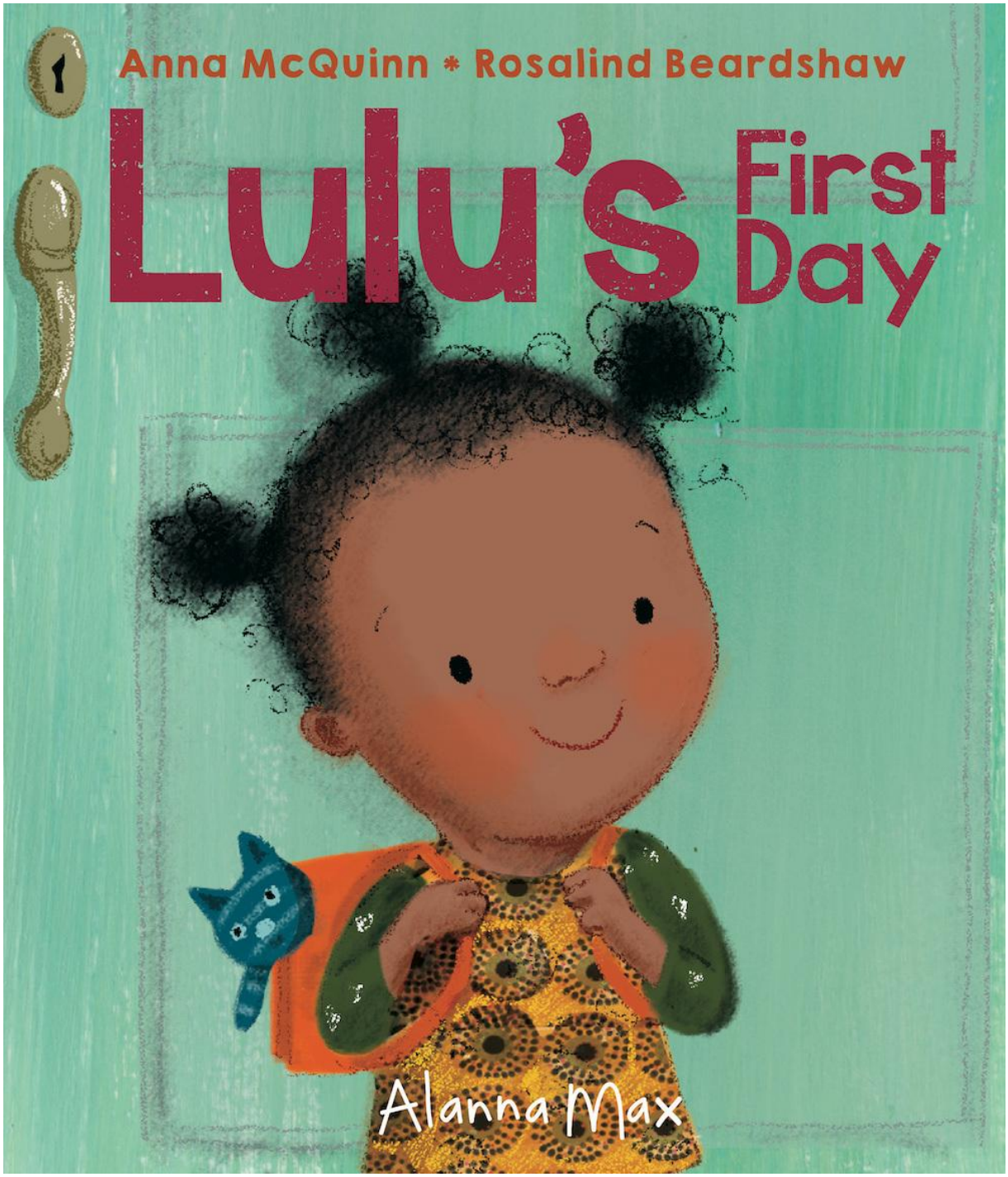
2. HELLO SONG, GOODBYE SONG

3. FLASHCARDS AND PICTOGRAMS EXAMPLES.





4. LULU'S FIRST DAY



5. SONG I CAN JUMP!

I Can Jump

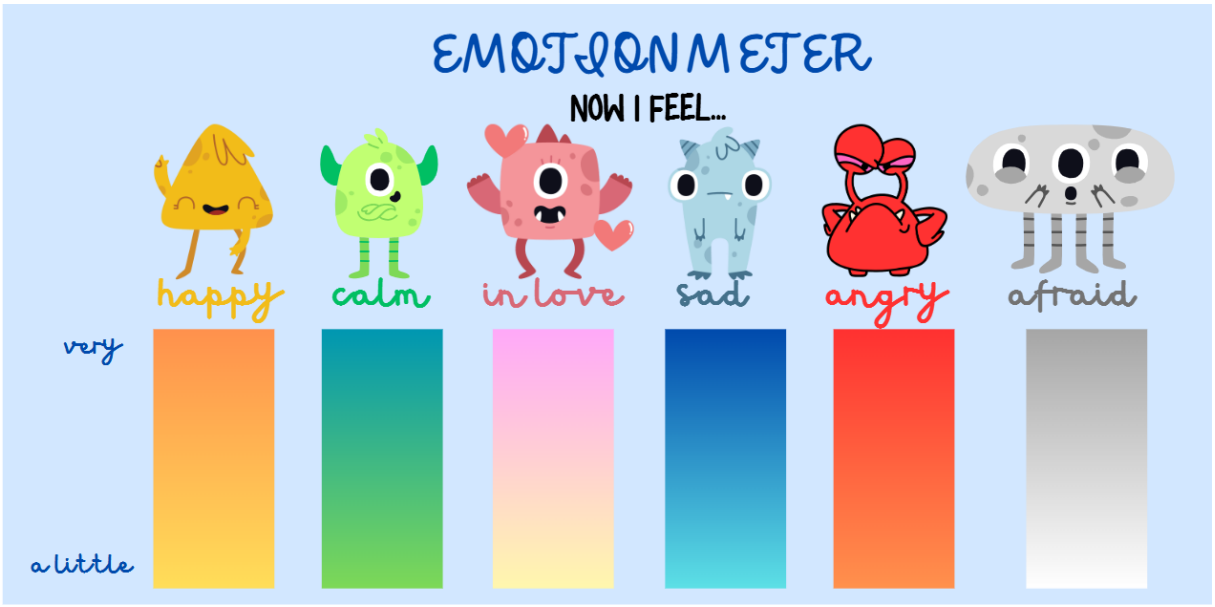
Canción · 2022

YouTube • Fun Kids English

I Can Jump! | Actions Song for Kids | Fun Kids English

6. THE COLOUR MONSTER

7. EMOTIONMETER



8. SONG ONE, TWO, BUCKLE MY SHOE.

Counting Songs for children - One, Two, Buckle My Shoe - Kids Songs by The Learning Station