Addressing Challenges in Educating ESL Learners with Autism: Reviewing Effective Strategies for Language Acquisition

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Abstract:

Language acquisition presents unique challenges to students with Autism Spectrum Disorder (ASD) who are learning English as a Second Language (ESL). This paper aims to review studies examining the intersection between ASD and ESL, focusing on the unique barriers this population encounter and strategies that will be beneficial for them. In particular, learners with ASD face several challenges, including sensory processing, communication deficits, and communication comprehension. Additionally, educators encounter difficulties developing educational materials and teaching strategies appropriate for students with ASD. Furthermore, the review highlights effective interventions such as the use of visual teaching tools, vocabulary acquisition techniques, reading comprehension strategies, and parent collaboration. Consequently, Students with ASD can benefit significantly from ESL learning when educators recognize and address their unique needs, allowing them to develop language skills while balancing their cognitive and sensory needs.

Keywords: Autism Spectrum Disorder (ASD), English as a Second Language (ESL), Challenges, Teaching Strategies, Collaboration.

1. Introduction

Several developmental disabilities are associated with ASD, which can pose significant challenges related to social interaction, communication, and behavior management. The main clinical symptoms are verbal and nonverbal communication deficits, difficulty socializing, and stereotypic or repetitive behavior [1]. However, children with ASD may benefit from improved executive function and social skills through proficiency in multiple languages. According to research by Mohamed and Shaaban, bilingual children with ASD who switch between languages may experience cognitive benefits, including improved attentional control and behavioral regulation. Despite this, ESL learners with ASD often encounter additional challenges when learning a new language due to impaired communication and social interaction [2]. Thus, it is crucial to provide efficient English language learning strategies and teaching methods

for children with ASD. This paper reviews eight studies examining ESL learners with ASD and summarizes the challenges faced by both learners and educators, as well as strategies and interventions found to be effective in enhancing learning.

2. Autism Spectrum Disorder (ASD) and English as Second Language (ESL) Learning

Due to the intersection of two identities which is being both an individual with ASD and an ESL learner, the process of learning English poses unique cultural, psychological, and cognitive barriers that require specific interventions and teaching methods. However, multiple studies have demonstrated that people with ASD are capable of learning ESL when a planned approach is devised for the learner and their caregivers. Considering the linguistic component of the English language, ASD learners prefer and absorb the language more rapidly than other languages (Chinese, Malay, Thai, etc). Particularly, English is known for having fewer syllables, making it easier for young learners with ASD to comprehend and master the language. Therefore, it is expected that children with ASD will be able to learn English more quickly than their mother tongue language [3]. In spite of this, children with ASD continue to face challenges when learning or acquiring language, as the process is not always straightforward for them [4]. For this reason, it is crucial to identify these challenges to tailor strategies and interventions to meet the specific needs of ESL learners with ASD.

3. Challenges faced by ESL Learners with ASD

3.1 Sensory Challenge

Researchers have demonstrated that a significant proportion of individuals with ASD face challenges with sensory processing, which negatively impacts their ability to complete everyday tasks and routines. Specifically, these difficulties arise from an inability to process sensory information efficiently across various systems, including auditory (hearing), visual (sight), and proprioceptive (body position). Consequently, many individuals with ASD are diagnosed with sensory integration (SI) issues, where the nervous system struggles to organize and interpret sensory input in a way that supports adaptive behavior [5]. As a result of these sensory challenges, a variety of symptoms may manifest, such as hypersensitivity to certain sounds or textures, visual overstimulation, or difficulty navigating

unfamiliar spaces. These impairments often hinder cognitive functions and literacy skills, both of which are essential for learning and acquiring foreign languages. Moreover, the difficulties in processing sensory information can make focusing in classroom environments particularly challenging. For instance, students with ASD may struggle to maintain eye contact, which can be misinterpreted as inattentiveness, further complicating their learning experience [6].

3.2 Language Comprehension and Pragmatic Challenge

There is often a lack of vocabulary and background knowledge among students with ASD, which limits their ability to understand words and phrases and to draw connections with prior experiences. Furthermore, these difficulties are compounded by impairments in grammatical knowledge, which adversely affects their comprehension of sentence structure and overall meaning. Therefore, students with ASD may find it difficult to understand lexical and syntactic elements of language. Moreover, students are challenged by pragmatics, which is the social use of language. They may have difficulty interpreting tone of voice, facial expressions, personal space, and body language, as well as recognizing other individuals' perspectives [6]. Due to this, they may have difficulty understanding figurative language, including metaphors, irony, idioms, and humor. Although they may be able to understand individual words and draw conclusions, it is often difficult for them to place this information in its proper context. These challenges are further exacerbated for students who are also ESL learners. For example, limited exposure to English in social contexts can restrict their vocabulary and lead to confusion when interpreting idiomatic expressions, cultural references, or nuances in tone. As a result, the lack of social interaction during language development often results in restricted vocabulary, unusual speech patterns, and difficulties with conversation in both their first language and in learning a second language such as English [5].

4. Challenges to Teach ESL to ASD learner

4.1 Communication Challenges

The presence of communication deficiencies is one of the core characteristics of ASD, which significantly impedes learning in conventional classroom settings. It is common for ESL learners with ASD to experience difficulties with both language comprehension and expression, which can

interfere with their understanding of instructions and content. Thus, educators must adapt their teaching strategies to meet the specific needs of ESL learners with ASD. Moreover, educators of special education emphasize that children with ASD often do not comprehend what is being communicated, making it necessary for them to continuously rephrase and adapt their language to ensure better understanding. Furthermore, children with ASD may present challenges as a result of their intensity, which may manifest in a variety of ways, whether it is introversion, difficulty accepting negative feedback, or a tendency to become easily distracted from their classes. In order to maintain engagement and foster meaningful interactions with these students, educators usually have to experiment with various communication strategies. Ultimately, this process is essential to helping students express their needs and intentions in a manner that is consistent with their abilities and the classroom environment [7].

4.2 Personalize Material

Educators face a number of challenges when attempting to adapt teaching materials to meet the varied needs of students with ASD. As ASD encompasses a wide range of behavioral characteristics and learning challenges, each student's needs are highly individualized. As a consequence of this variability, instructional strategies that are effective for one student may not be effective for another. For instance, students with ASD have a variety of sensory sensitivities. While some students may engage better with colorful visual materials, others may find such materials overwhelming and prefer muted tones or minimalistic designs. Similarly, the frequency with which rest breaks are needed to prevent sensory overload varies by student, with some requiring frequent breaks and others being able to tolerate longer periods of concentrated activity [4]. Additionally, many students with ASD thrive on consistency, and disruptions to daily schedules, changes in classroom environments, or the introduction of new teachers can cause significant distress. Therefore, educators must balance the need for flexibility and the challenge to maintain predictability for these students [6]. Nevertheless, implementing these strategies on a daily basis can be challenging. The constant adaptation of lessons, repetition of instructions, and reintroduction of materials in different ways not only drains the energy of educators, but also increases the risk of burnout. This challenge is further exacerbated by the large class sizes, limited resources, and time constraints that exist in real-life classrooms. Accordingly, it can be overwhelming to manage the needs of multiple students with ASD, especially when educators are required to repeat the teaching process every day to

reinforce the lesson to these students.

5. Effective Teaching Strategies

5.1 Visual Teaching Tools

Several studies have demonstrated that ASD learners possess relatively intact visuospatial abilities, excellent auditory short-term and rote memory skills, as well as remarkable memory for particular types of information. Because of this, visual aids, as well as written words, are ideal for learners with ASD. As a further benefit, videos are capable of teaching a foreign language to individuals of all ages, including young children and adults with ASD. An important aspect of video-based teaching is that it is free of psychological elements such as anxiety, exclusivity, and distraction. Additionally, video-based teaching provides students with a visual parameter of focus, which is essential when dealing with ASD-diagnosed individuals who suffer from short attention spans. Furthermore, video-based instruction can be paused, rewound, or fast-forwarded to accommodate the specific needs of students with ASD and to enhance a more personalized learning experience. Lastly, videos can serve as a visual guide to social interactions and communication skills. There is a tendency for children with ASD to have difficulty communicating socially, and videos can serve as an effective tool for demonstrating proper language usage, turn-taking, and conversational skills. As a result, observing these models will allow them to acquire and practice these skills in a controlled and supportive environment. A study conducted in ten private international schools in China found that videos are powerful tools for improving listening, speaking, and vocabulary skills for ESL learners with ASD. In particular, students with ASD responded most positively to video-based activities such as warm-up multimedia English songs, video demonstrations and pronunciation drills, character imitations, and role-play games. Therefore, these activities are effective in helping students with ASD focus on learning materials while in a positive emotional state, allowing them to memorize words, expressions, and sentences quickly through repeated viewings and imitations [3].

5.2 Vocabulary Acquisition

Words recognized at a glance are known as sight words. According to research by Yahya et al., sight words are beneficial for enhancing a variety of reading skills, including word recognition, phonological awareness, fluency, and reading comprehension. As a result, sight words are valuable tools to assist ASD learners in gaining the

language skills they need to function well in society [8]. For example, sight words can aid students with ASD in following daily routines in school by supporting visual schedules with words such as "Recess," "Class," and "Break." This approach not only helps them transition smoothly between activities, reducing anxiety associated with schedule changes, but it also enhances vocabulary development, particularly for ESL learners with ASD, by allowing them to associate words with actions. As a result of the combination of visual support and action-based learning, a smoother academic progression is achieved. Moreover, the use of the first language in the bridging of the second language was effective in educating students on new sight words and concepts. To make learning ESL easier for students with ASD, educators should make use of the learner's first language. Consequently, concepts that they could not understand in the second language could be easily explained to them in their native language. In addition, teachers' ability to adapt their vocabulary level is identified as a critical factor in promoting the acquisition of sight vocabulary by students with ASD. Particularly, educators emphasized the importance of ensuring that students understand the essence of what they are being taught. Therefore, instructors should alter their language to meet students' level so that students are better able to comprehend the learning material [8].

5.3 Reading Comprehension Strategies

Students with ASD are unable to concentrate for a long period of time, which means that their reading abilities are generally limited, especially in the case of long words. Further, the ability to read and write requires intense concentration, which results in anxiety among students with ASD [3]. Therefore, facilitators who teach ESL reading comprehension to students with ASD should break down the text into smaller chunks and provide clear instructions. Additionally, explicit instruction and scaffolding are critical to helping students with ASD develop essential reading skills and strategies. In explicit instruction, students are taught how to read in small, manageable steps, allowing them to focus on one skill at a time. As an example, a teacher might specifically instruct a student on how to decode the sounds of individual letters before combining them into words. Furthermore, scaffolding provides additional support for students to bridge the gap between their current abilities and the learning goal. To assist students with ASD in associating words with their meanings, a teacher may use visual aids such as color-coded word cards or pictures. After a student becomes familiar with the vocabulary, the teacher gradually removes the pictures so that the student may rely more on written information.

In addition, providing opportunities for repeated practice and reinforcement can assist in enhancing reading comprehension in students with ASD. An article written by Melville uncovered some key findings that demonstrated the potential benefits of using punctuation and exaggerated lettering to improve students' intonation and emotional understanding of a character's story. To assist students with ASD in connecting emotional tone to character reactions, teachers can use exclamation marks or bold text, such as reading 'excellent!' with excitement. Similarly, using all capitals for words like 'YELL' signals strong emotion, and students are instructed to adjust their intonation to match the character's level of intensity [2].

6. Collaboration with Parents

In the context of ESL instruction, most educators believe that developing a good relationship with the parents is essential for effective language instruction. It has been found that teachers who receive parental support have higher self-efficacy in problem-solving skills as well as in planning and evaluating interventions for children with ASD [9]. Furthermore, maintaining a child's motivation requires positive reinforcement, acknowledging and celebrating the child's achievements, and creating a pleasant learning environment. Specifically, this study emphasizes the importance of regular communication between educators and parents so that learners receive consistent support and reinforcement at home and in the classroom. In this regard, educators can gain valuable insight regarding students' strengths, challenges, and interests from their parents. On the other hand, watching and participating in their children's learning process may provide parents with opportunities to learn activities and resources to facilitate language learning at home. Therefore, collaboration between educators and parents can ensure that ASD learners learn English organizationally and supportively. This will result in parents becoming more involved in their children's education as well [2].

7. Conclusion

To conclude, teaching ESL to students with ASD presents both challenges and opportunities. Due to sensory sensitivities, language deficits, and communication barriers, students with ASD face specific challenges while learning ESL, but these challenges can be mitigated with targeted strategies. It has been found that personalized learning materials, visual teaching aids, and collaboration with parents are effective methods for supporting the development of language skills. As a result, language acquisition can be enhanced for ESL learners with ASD by incorporating

individually tailored approaches and creating partnerships between educators and families. Significantly, educators must continue to refine and adapt their methods to meet the unique needs of each student with ASD, thereby enhancing both educational and social outcomes.

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