

How to Improve English Vocabulary for Students with Autism?

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ABSTRACT

Children with autism typically have trouble speaking. This research aimed to determine whether teaching students with autism English vocabulary using the TEACCH technique may assist those with autism in developing an enjoyment, excitement for learning simple English vocabulary, and correctly recognizing the words. This study employs a combination of qualitative and quantitative methods for its analysis. This school offers educational services to students with autism, mainly through the TEACCH technique for learning simple English vocabulary. The research will focus on ten children who have autism spectrum disorder as its subjects. The TEACCH approach is used in learning activities conducted with students with autism who speak English. This method incorporates both the photograph and the actual object. A pre-test, a post-test, and an observation sheet collected the data. Several exercises are carried out in English learning vocabulary activities, such as pairing objects or things and naming the words in the picture correctly. The findings indicated that autistic students were highly interested in acquiring simple English vocabulary. The fact that the total score on the post-test was 82% demonstrates that it was higher than the score on the pre-test, which was 65.5%. They reacted appropriately and communicated effectively. In addition, students start to take a greater interest in concentrating on their instructor.

INTRODUCTION

When embarking on the study of English, it is crucial to prioritize vocabulary as a fundamental component of the language. This is because vocabulary is one of the most crucial elements of speech. Students need to have a strong vocabulary as their foundational knowledge. Learners must first demonstrate an understanding of vocabulary to progress to the next stage of language acquisition: acquiring language skills. Because vocabulary is at the heart of language, developing one's vocabulary will prove valuable in everyday communication.

Learning a language through memorization alone places a premium on vocabulary study more than anything else. It is possible to conclude that vocabulary refers to the entire quantity of words and that nothing can be communicated without vocabulary. Because speech is the organ of the sentence, all pupils will need to have a vocabulary that will assist them in producing and applying meaningful sentences when it comes to communication. In this sense, having a good command of terminology is vital. English is currently a language of instruction in the sphere of education (Chandran & Hashim, 2021). According to (Chu et al., 2020), parents and educators have a part to play in assisting language learners with autism on their path to language proficiency. Essential skills comprise the process of acquiring proficiency in English, including reading, writing, speaking, listening, grammar, and vocabulary. On certain occasions, both educators and students need to pay more attention to the importance of enhancing one's vocabulary in the English language.

But some student classes have trouble communicating, which directly affects the students' capacity to learn English, especially when it comes to vocabulary mastery. The student with autism is one example of a student that fits into this group. A limited range of interests and behaviors, challenges with communication skills, difficulties with everyday tasks and activities, and problems with social interaction and communication are all described as aspects of the disease (Vogindroukas et al., 2022). Vocabulary, as defined by (Ur, 1994, pp. 60), is the list of terms taught to foreign language learners.

In alternative terms, it refers to the compilation of words that are retained within an individual's cognitive faculties, from which they will discern and choose those that encapsulate the core of the intended messages, therefore facilitating comprehension by the recipients. When it comes to mastering a second language, having a large vocabulary is of the utmost importance since it will be used to produce richer sentences for the goal of communicating. Autism students have difficulty understanding words and pronouncing them. Because of this problem, students with autism need to learn English vocabulary to communicate.

LITERATURE REVIEW

A. Teaching English Vocabulary for Autism Students

While studying English can be difficult and unpleasant for any student, it can be far more difficult and uncomfortable for kids with autism. Nevertheless, it is incumbent upon the educator to ensure that the learning environment is a

safe and conducive space for students to acquire knowledge in a structured manner and in a manner that fosters educational growth. The methods and techniques used while teaching English to autistic pupils should take into account their interests and needs. According to (Rasyid, 2021, pp. 2982), the primary manifestation of autism in children is characterized by deficiencies in language proficiency. The programs implemented in this study are specifically tailored to address these challenges, encompassing areas such as pronunciation, vocabulary, and grammar.

Children with autism can improve their communication skills when learning a foreign language. Students who have been given a diagnosis of autism may present an additional barrier for teachers of English as a Second Language (ESL), according to research by (Baker et al., 2018). Creating a warm, encouraging environment that motivates students to meet the stated learning objectives is essential to successfully teaching English to children with autism. Students with autism spectrum disorder (ASD) can access the English lesson by using strategies including using visual aids, acting out the lesson in advance, and giving clear instructions for each exercise. Educators act in this way to enhance the student's enjoyment of the English lesson. Word wall visuals, flashcards, and songs can be useful instructional media forms, as shown by another study (Ekayanti et al., 2020), which is relevant given the current difficulties this school is facing.

It has been established in several studies, including one by (Safitri et al., 2022), that one of the interventions considered to influence the success of teaching and learning vocabulary is the selection of appropriate media in the classroom setting. According to the study conducted by (Asik & Humaerah, 2016), it is recommended that educators employ various strategies when teaching vocabulary to children with autism. The relative strengths of autistic pupils must be considered whenever plans are being formulated for those students. A few examples of these strengths are the individual's capacity for visual processing, their memory, and their particular interests, all of which are areas in which the individual can be assisted in adjusting to the demands of the environment in which they are situated. It has been shown that successful methods of meeting their educational requirements involve building physical surroundings, establishing a transparent organization, and delivering exact activities, schedules, and routines. These are the three main components.

B. Identify Autism Students

Individuals diagnosed with autism spectrum disorder (ASD) will encounter persistent challenges in social communication throughout their lifespan. Autism spectrum disorder (ASD) is a neurodevelopmental illness that lasts throughout a person's lifetime and is characterized by persistent deficiencies in social communication and socially constrained and repetitive patterns of behaviour and interest (Victoria, 2004). According to research published by the (Autism Society of America, 2014), there are three distinct forms of autism spectrum disorders.

- The condition is known as autistic disorder (sometimes called "classic" autism). Most people have this image once they hear the word "autism." People who have autism typically have substantial language delays, challenges pertaining to social contact and communication, and typical behavioural habits and interests. There is a high incidence of intellectual disability present in autistic disorder patients.

- The Syndrome of Asperger People who have Asperger syndrome typically have some of the less severe characteristics of autistic disorder. They may be dealing with societal challenges, unique behaviour, and hobbies.

- On the other hand, they typically do not have difficulties with language or intellectual disabilities. Pervasive Developmental Disorder – Not Otherwise Specified (sometimes known as "atypical autism") is another name for PDD-NOS. PDD-NOS is a diagnosis that can be given to individuals who satisfy some of the criteria for autism spectrum disorder or Asperger syndrome, but not all of them. People with PDD-NOS typically have fewer and less severe symptoms than those with autism spectrum disorder (ASD). These symptoms could result in issues with one's social life and communication abilities. Even though children with ASD have the same symptoms, the impact on the behavior of each autistic child will be different from that of the other autistic children. This is because autism spectrum disorder ranges from mild to severe (Junaidi et al., 2020). Even though children with ASD have the same symptoms, the influence on the behavior of each autistic child will be different from that of the other autistic children. Due to their limits in social interaction, autistic children have trouble comprehending and expressing their feelings (Dawson in Junaidi et al., 2021).

Furthermore, autistic children have difficulty forming, sustaining, and understanding social interactions with other people (Junaidi et al., 2020). In addition, autistic children typically tend to cling to the activities that have become ingrained in their routines. This means that if those routines are disrupted in any way, autistic children will have difficulty or be unable to cope with the changes that occur around them properly. According to (Lord & Jones, 2012), this can cause autistic children to experience depression, stress, and anxiety about these changes, resulting in outbursts of anger.

C. TEACCH Technique

The TEACCH program, formally referred to as the Treatment and Education of Autistic and Communication Handicapped Children, was founded in the 1960s by the Department of Psychiatry at the University of North Carolina. The acronym TEACCH represents the Treatment and Education of Communication Handicapped and Autistic Children. The notion was initially invented and conceptualized by Eric Schopler. The comprehensive intervention approach is generally recognized for its ability to address the diverse contextual elements that contribute to the development of individuals with autism spectrum disorder, encompassing both home and classroom environments. The aforementioned findings align with the perspective put forth by (Sa'adah et al., 2022), who assert that the implementation of TEACCH is

exemplified by its systematic instructional practices, including: the presence of a functional system that facilitates clear and organized actions, the utilization of activity schedules to promote transparency and predictability, the structuring of the physical learning environment, and the incorporation of visual aids. According to the research conducted by (Mazza et al., 2021), the utilization of TEACCH has the capacity to improve core symptoms, such as social communication, social interaction, and behavior. The research conducted by (Eftekhari et al., 2022) further substantiates prior evidence indicating the efficacy of TEACCH, when supplemented with visual aids, in enhancing social communication abilities within the everyday lives of children diagnosed with autism spectrum disorders.

The TEACCH technique, which stands for Treatment and Education of Autistic and Related Communication-Handicapped Children, is widely recognised as a very efficacious strategy in the field of autism intervention. The TEACCH intervention method, as outlined in the study conducted by (Sanz-Cervera et al., 2018), focuses on understanding the cultural dimensions related to autism. Its objective is to modify and organize the surrounding environment in a way that adequately addresses the unique strengths and challenges encountered by individuals who have been diagnosed with autism spectrum disorder (ASD). TEACCH endeavors to foster the development of self-reliance among children diagnosed with autism spectrum disorder (ASD). This enhances the capacity of children with autism to comprehend information and express their desires and requirements, despite potential limitations in their verbal communication abilities. Social communication can be facilitated and taught by providing a language that emphasizes social interaction and promotes the observation of others and their behaviors. The utilization of visual aids, such as items or images, can be advantageous in reinforcing social language. In order to enhance the child's understanding of the content being conveyed, it is advisable to supplement the information with a visual representation, such as an image.

The TEACCH technique places a strong emphasis on visual organization. Visual aids have been found to be highly advantageous for children diagnosed with autism spectrum disorder (ASD), especially for those who have limited or impaired verbal communication skills. Visual aids can be employed for several goals, such as facilitating the review of expectations, acting as a reminder, providing an outlet for student self-expression during breaks, indicating transitions between activities, and reinforcing positive conduct. Additionally, visuals can indicate when to change activities.

The principles of TEACCH teaching: Organizing the physical environment and structure, establishing a predictable sequence of activities and scheduling, using visual schedules, maintaining routine while allowing for flexibility, implementing activity/work system structures, and incorporating visually structured activities.

D. Inclusive School

Children who have unique requirements are frequently subjected to discrimination from other people. Even getting an education is tough for some

people. They are not welcome as pupils in some traditional schools, which is unfortunate. This is because the teachers at these institutions do not have the necessary qualifications to instruct students with special requirements properly. Many children with special needs do not get an education because the special schools that serve them are not always conveniently located near their homes. To overcome these challenges, it must provide various educational or school services for children with special needs. These services must concern the educational system, supporting facilities, and teachers' very significant role in providing motivation and constructive guidance for their students. Inclusion policies are implemented at schools suitable for students with special needs.

An inclusive school acknowledges the value of diversity and works to ensure that all students have equal access to participation and educational opportunities.

Each student with exceptional needs has an individualized education plan that helps that student realize all of his potential according to his abilities. Inclusive education is a government policy that seeks education that every citizen can enjoy to obtain an equal distribution of education. This ensures that all children can attend school and get a respectable and high-quality education for the rest of their lives, regardless of their unique needs. As part of the educational service system known as inclusive education, it is envisaged that children with special requirements will attend surrounding schools and engage in general education courses alongside children their age. Inclusion refers to listening to the many different needs posed by each student. This can be accomplished by encouraging a higher level of participation in educational, cultural, and social activities while at the same time trying to cut down on the number of kids who are denied access to and participation in educational opportunities. In addition, this calls for establishing a collective vision that considers all children in the proper age range. Every student with exceptional needs is given a customized education plan that assists that kid in reaching all of his potential in a manner commensurate with his abilities. Inclusive education is a policy that seeks education that every citizen may enjoy to get an equal distribution of education. Autism spectrum disorder (ASD) causes children to have a more difficult time learning new things and developing their skills efficiently, which is why the physical layout of the classroom is so important. This should set delineated physical limits and always include visual cues; this will provide the learner with autonomy and benefit the learner. According to (Sanchez, 2019), The classroom will be partitioned into a variety of distinct portions or corners, some of which will include the following:

- One-on-one work area: the learner will receive more individualized attention in this setting and feel comfortable and unburdened by visual stimuli. - The term for this kind of setting is a "one-to-one work area."
- A location that is set aside solely for the use of autonomous student work, in which the student is permitted to work on their tasks without the presence of a teacher present to provide oversight.
- Students with autism spectrum disorders can collaborate with their classmates in the cooperative work area.

- After completing their responsibilities, students can take some time to relax and enjoy themselves in the classroom's designated play area. They can put objects in this room that appeal to them, such as books or toys, and this space is entirely theirs to customize. Students have access to a wide array of technological resources within the ICT area, letting them take part in a variety of extracurricular pursuits. Every class hour, at the start or finish, students can hone their oral and gestural language abilities in the assembly area.

E. Teacher's Role

Teachers have a significant role to perform because they are such an essential cog in the inclusion wheel. Because of this, educators need to get over their biases and acquire the skills that will enable them to participate in educational reform while displaying a positive attitude about transitioning away from the classroom. In accordance (Escareno, 2016), it is imperative for instructors to engage in collaboration with all constituents of the academic community in order to facilitate the advancement of the inclusion process and foster the development of learning communities where each participant assumes the principal role in their own educational journey. The construction of these groups and the advancement of the inclusion process can be considered viable with the use of this approach.

According to Vygotsky's social learning theory (apud Golshan et al., 2019), there is an inversely proportional link between the growth of a person's social abilities and their ability to acquire linguistic knowledge. Hence, educators may employ a suitable social model and potentially establish a conducive learning environment to sustain collective attention among autistic students, there by facilitating their cognitive development and social progress within the educational setting (Golshan et al., 2019). During the learning process, this can assist youngsters with autism in maintaining their joint focus. For children with autism, maintaining focus can be facilitated during the learning process.

According to (Aran, 2017), structuring classes on the foundation of social interaction will provide children with autism spectrum disorder the best opportunities to interact and form connections with other students in the classroom.

According to research that was recently published by the Autism Research and Autism Network (Aran, 2017), when engaging with individuals diagnosed with Autism Spectrum Disorder (ASD), it is advisable to utilize visual cues and avoid overwhelming them with an excessive number of instructions. It may be a considerable challenge for teachers to incorporate this new experience into a typical class's lesson plans because of the topic's novelty. Because kids with regular developmental peers and students with diverse learning styles were placed in the same circumstances, a competition was developed to find the most effective technique to educate these students in their separate settings. Students with autism have the potential to follow lessons if educators fully comprehend the obstacles to learning, as well as the gaps in knowledge that already exist, and put in place an appropriate curriculum, set of teaching strategies, and set of

practice instruments to effectively instruct this demographic of pupils (Reppond, 2015).

METHODOLOGY

The Research Methodology part goes into great detail about how the study was carried out. Creswell and John W. (2009) say that this study uses a mixed-method approach, which means that both qualitative and quantitative data are used for analysis. Ten students with autism are giving their time freely to be participants in this project. It will be the researcher's job to look into the information gathered from the action research tasks in the classroom. The data was collected through a teaching and learning procedure that included administering a vocabulary test and completing an observation sheet. The quantitative method had a vocabulary test divided into a pretest and a post-test portion. The tabular data was utilized to determine each student's average Score, which was then shown. The kids with Autism who had improved their vocabulary were evaluated using pre-test and post-tests, each with 20 distinct items. The researcher gave these exams. The exams consisted of exhibiting the items and pairing them with natural objects. The Score on the exam ranged from 0 to 100 and was determined by tallying up the number of questions answered correctly and applying the following formula:

$$S = \frac{RX100}{N}$$

S = The value of one's Score on a test

R = Equals the total number of appropriate responses.

N = Equals the number of items on the test.

$$X = \frac{\sum X}{N}$$

\bar{X} = The average Score of the students

$\sum X$ = The aggregate Score of all of the pupils

N = Equals the total number of students in the class.

The following is an explanation of the particular standard evaluation that will be utilized to determine a success criterion for the academic performance of students:

The table presented here in serves as an indicator of success

Number	Range of Score	Category	The concept of Quality
4	85-100	Very High	A
3	70-84	High	B
2	60-69	Average	C
1	50-59	Low	D
0	0-49	Very Low	E

RESEARCH RESULT

Only one classroom, including ten students diagnosed with Autism, was used for this study, and that classroom served as the research subject. There

was a total of ten students: six males and four females. According to the researcher's data from the homeroom instructor, nine pupils in this class have previously participated in autism therapy conducted outside the classroom, while the remaining student has not. Their attitude was satisfactory in all respects. During the interval, they might compete against their pals in games. PRA is a child who is nine years old, and the homeroom instructor says he has learning problems. This information comes from the homeroom teacher. PRA works diligently to complete his tasks and gets everything done that he has to. PRA displays verbal ability that is about average. DA is a young lady who is nine years old. In addition to this, it was discovered that she had difficulties learning when she was a student. DA is eager to participate in the learning process and the actual work. Sometimes, DA will come into the classroom with a positive attitude and an optimistic and joyful demeanor. ZAI is a young boy who will turn ten years old this year. It was established that he was a student who struggled with studying and communication difficulties. When he gets to school, he is eager to learn, but he needs to be coaxed into completing his project within the permitted time. ADM is a little guy who will be ten years old this year.

Additionally, pupils with learning difficulties were able to identify him. He could do the assignment with the help of his homeroom teacher. The area of articulation is one in which he is deficient. NRA was a young girl, ten years old. She was determined to be a student who had difficulties learning. According to the teacher in the pupils' homeroom, NRA showed diligence and neat writing but lacked language. EAT was a young girl of, nine years old. She was categorized as a student with learning problems and difficulties communicating with others. She was a student who put in a lot of effort, but she had a poor vocabulary. MBR had reached the age of 10 when she was also diagnosed as a pupil with a communication impairment. She is a diligent worker who puts in a lot of effort to finish the task, but she still needs assistance from the homeroom instructor. She enjoys listening to the homeroom teacher. TWP was ten years old when it was determined that she had learning difficulties and qualified for special education services. According to TWP's homeroom teacher, TWP performed in the below-average range in speaking, reading, and writing comprehension; nonetheless, the teacher noted that she worked diligently to complete her assignment each day in class. IND was in the 9th year of her life.

Additionally, pupils with learning difficulties were able to identify him. He tried hard to finish the task but did not have a large vocabulary. WIL had just turned 10 and was a conscientious student. When it comes to school, he's never late. At school, he showed concern for their friendships with their classmates. To do tasks such as writing, counting, and measuring, he requires additional assistance from the instructor in his homeroom. These students had never been exposed to the English language before this class. However, the researcher did find certain teaching facilities in the classroom, such as hanging pictures on the wall that described items such as fruits, animals, parts of the body, and numerical expressions in English.

a. Analysis Pre-test

The preliminary test was carried out right at the start of the project. The students' level of familiarity with the terms was the focus of this test, designed to gauge their level of comprehension. During the pre-test, the students will be asked to complete several should vocabulary questions by matching the picture with the corresponding object. In our English Vocabulary class, we review the idea of class property. The results of the pre-test are listed in the table that may be found below:

No.	Student's Code	Number of items that successfully perform	Score (%)
1.	PRA	14	70%
2.	DA	14	70%
3.	ZAI	13	65%
4.	ADM	12	60%
5.	NRA	13	65%
6.	EAT	14	70%
7.	MBR	12	60%
8.	TWP	11	55%
9.	IND	15	75%
10.	WILL	13	65%
Total of the students			655

Mean of the student's Score = $X = \frac{\sum X}{N}$

$$X = \frac{655}{10} = 65.5\%$$

According to the table of results that was just presented, the average Score students received was 65.5%. This outcome was a very long way from being considered "Average." According to this study's findings, the pupils with Autism do not have prior experience with specific phrases. The student incorrectly used the term's vocabulary to link the picture with the object and the real thing. They have never been exposed to this information in their previous classes. This preliminary examination was carried out on Monday, May 16th, 2023. This pre-test's topic was class property, and it included items such as an eraser, pencil, pen, book, whiteboard, chair, desk, door, crayon, ruler, colored pencil, bookshelf, pencil case, clock, picture, scissor, pencil sharpener, air-conditioning, lamp and drawing book. The learner is making the connection between the picture and the actual object. The researcher began the exercises by placing the real thing on the table and then putting an image of the object in the opposite corner of the classroom. The researcher calls on the students individually, instructing them to take the real thing and place it under the appropriate hung picture while the timer runs. The researcher took note of the

outcome involving the students. The pupils discuss each of the class's assets in a manner that is pronounced very clearly.

b. Analysis Post-test

On Monday, June 20th in, 2023, the participants were given the post-test to complete. On the post-test, the students must finish the should vocabulary items by matching the picture with the relevant object. Before the post-test, the pupils received treatment using the TEACCH technique. The pre-test and the post-test each contained 20 questions that were very similar to one another. The following table presents the results of the student's achievement post-tests daily, which may be observed by referring to the table below:

No.	Student's Code	Number of items that successfully perform	Score (%)
1.	PRA	19	95%
2.	DA	17	85%
3.	ZAI	16	80%
4.	ADM	16	80%
5.	NRA	15	75%
6.	EAT	18	90%
7.	MBR	17	85%
8.	TWP	16	80%
9.	IND	15	75%
10.	WILL	15	75%
Total of the students			820

$$\text{Mean of the student's Score} = X = \frac{\sum X}{N}$$

$$X = \frac{820}{10} = 82\%$$

DISCUSSION

The table of results that was just provided indicates that the students received an average score of 82%. This outcome did not even come close to meeting the criteria for "High." According to these statistics, the students' overall performance on the post-test averaged out to be 82%. This one turned out to be a lot better as compared to the result of the preliminary exam, which was 65.5%. The findings led the researcher to the conclusion that the TEACCH technique is advantageous for students to embrace in their pursuit of better command of the English language. This conclusion was reached as a direct result of the findings.

According to the observations made by the homeroom instructor, this involved obtaining information regarding the researcher's behaviour's, students'

attitudes, and class involvement in addition to teaching and learning while conducting the research. Nine autistic children have received therapy outside the classroom; one student does not. The classroom was opened, and as part of this instruction or treatment, as well as learning activities in the TEACCH style of implementation, the research discovered that the students could learn English vocabulary, correct pronoun words, and recognize the proper names of items. In turn, the researcher questioned each participant's name, to which they responded "great" and "introduced." Even though the researcher was already familiar with their name, to provide a speaking stimulus, the researcher asked them about equipment or objects around the classroom.

The researcher noticed the participants were interested in performing this vocabulary learning activity utilizing the TEACCH approach. The students consistently demonstrated their eagerness to advance their English language skills. From the first gathering, they have delighted to acquire fundamental English vocabulary. This action and activity showed a high level of attention in focusing on their teacher to link the real thing with the picture and correctly say the simple words. Despite the challenges they face, they can respond and communicate effectively. Because they are gaining new knowledge, the pupils will likely pay slightly more attention to their teacher. In addition, several challenges are associated with learning simple English vocabulary using the TEACCH technique. For example, students frequently experience sudden lapses in concentration and mood when learning and often become disruptive while studying.

CONCLUSIONS AND RECOMMENDATIONS

The researcher draws the following conclusion from the analysis findings: The TEACCH technique can assist children with Autism in learning simple English vocabulary, mentioning the words appropriately pronoun, and enhancing the comprehension of numbers in the English language. One of the benefits of the TEACCH technique is that it enables children with autism to learn simple English vocabulary with joy and excitement, recognize the words, and correctly name the sentences using the appropriate pronoun. The comparison of the pre-test score to the post-test score demonstrates that it is true. The outcome of the pre-test showed a mean score of 65.5%, however the score on the post-test was 82%, which was a considerable improvement over the score on the pre-test. It was shown that using the TEACCH method as a means for students with autism to learn elementary English vocabulary can be beneficial to these students. Taking advantage of the TEACCH methodology is the way to realize this benefit. The students had a good time identifying the real thing that went with the illustration.

ADVANCED RESEARCH

It is advised that English teachers teach individuals diagnosed with autism using the Teach method to increase their vocabulary in the English language. The researcher hopes this study's findings could serve as references for English vocabulary teachers who wish to teach pupils with autism by implementing this strategy in the classroom.

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