

Kübra Aksoy, 2018

Volume 4 Issue 3, pp.533-550

Date of Publication: 10th December 2018

DOI-<https://dx.doi.org/10.20319/pijss.2018.43.533550>

This paper can be cited as: Aksoy, K. (2018). *Designing a New Environment and a New Technique Substantiated with Authentic and Visual Materials in Teaching English Vocabulary to Children with Autism*. *PEOPLE: International Journal of Social Sciences*, 4(3), 533-550.

This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

DESIGNING A NEW ENVIRONMENT AND A NEW TECHNIQUE SUBSTANTIATED WITH AUTHENTIC AND VISUAL MATERIALS IN TEACHING ENGLISH VOCABULARY TO CHILDREN WITH AUTISM

Kübra Aksoy

Yildiz Technical University, Istanbul, Turkey

kbraaksoy10@gmail.com

Abstract

Communication and learning problems occurs very early in development and serves many functions for the young autistic child. It has been implicated in the development of social, cognitive, and language skills. Processing information that is presented via the visual modality reinforces learning (Courchesne et al. 1994; Dubois & Vail, 2001). A substantial number of children with autism fail to develop these important skill and therefore experimenters with both developmental and behavior analytic perspectives have researched methods to teach with the help of visuals, videos and authentic materials in learning environment. It has been used and suggested by many research that visually presented material be used for educating children with autism (Schopler, Mesibov, & Hearshey, 1995). The purpose of this case study was to extend the analysis of typical development of social and communicative skills to the teaching of English with the help of visual, authentic materials and videos to the children with autism. Data from case study of four children with autism are provided.

Keywords

Autism, Learning Problem, Communication, Visual Help, Authentic Materials

1. Introduction and Theoretical Framework

In the 21st century, people are aware of the importance of learning English as second language learning. Not only learning, but also teaching is as much as important. So, the qualities of the teacher hold great importance. In teaching foreign language for the autistic children the effectiveness of the strategy and the method plays a vital role. The teacher should make the situation interesting with shaping her knowledge and experience for the autistic children since they need a special care. When comes to autism, it is a neurodevelopmental disorder which is shaped by verbal and non- verbal communication and social introduction. Also, the behaviors of people with autism are restricted and repetitive that becomes obvious to the parents in early childhood around two and three.

In order to understand autism, we have to understand the causes of it. Besides, being heritable, it can also be caused by both environmental and genetic factors. In rare cases, it can also be caused by birth defects. With this way, Autism effects children's both information processing in the brain by getting control of brain cells and their connections in knowledge organization. So far, despite of many researches, no known cure have been reported but many children with autism live independently after reaching adulthood. So, it should be perceived as a different situation not treated as a disorder. It should be approached to children with this concious. Moreover, children with this disorder are not distinguished not only by a single symptom but also some different characteristics of this disorder such as impairment in communication with their peers and families, restricted interest and social interaction when compared with their peers.

The technique used to teach learners with autism should be different from normal students because they have special needs. Children with autism have a problem in communication. Due to their psychology problem, autistic students need more attention than normal children. They have problems to communicate with their environment.

We studied with the autistic children in Special Education School. We found to chance to examine four children who have autistic syndrome in order to see their English vocabulary development and tendency to learn English with two tutors who are not familiar to them. First of all, it was important to get information about their syndrome and it's relation to their overall English vocabulary knowledge in terms of the subjects they learned this term from the educators.

1.1 Statement of the Problem

People on the autism spectrum face many issues, some problems and some challenges. For example, they may find it difficult to communicate with other people or even look at their eyes to socialize with them. Moreover, they find it difficult to be in social environment because

of people's ignorance of them. They may be frustrated to cope with all these problems. An autistic child may turn in on herself just because of her newborn sister/ brother. They may think that her family care about her normal or not autistic sister mostly. While even a normal child may feel depressed or frustrated when she/ he has a new sister/brother, children with autism feel this more strictly and deeply.

Relatives and careers of autistic people also face many issues, and some problems, on a day to day basis. So, children with autism might encounter maltreatment. For example, many of families become worried and exhausted looking after someone with autism. Especially, wrong methods and treatments can get off the ground in this period. Everybody around the autistic children may have information and comments about how to deal with child's autism syndrome problem. So it is important that autistic people and their careers can find treatments, therapies and services with the help of governments and experts in this field.

Furthermore, Children with autism may have difficulties while developing language skills and understanding what others say to them. They may face difficulty communicating non-verbally. So, they may prefer to communicate through hand gestures, eye contact, and facial expressions. They may even meet with difficulties using their gestures and contacting with eyes. On the other hand, not every child with autism spectrum will have a language problem. A child's ability to communicate will vary according to children. It totally depends on his or her intellectual and social development while growing up with the help of their family and environment. While some may be unable to speak, others may not be unable. Others may have rich vocabularies and be able to talk about specific subjects in great detail. Some children with autism can pronounce words wrongly. The majority of these children have difficulty using language effectively when compared to their peers especially while they are talking to other people. As well as, they may have problems with the rhythm and meaning of words. They also may be unable to understand other people's body language and they cannot use their gestures so effectively as other people.

Autistic children encounter difficulties not only in learning language but also in learning English as a second language. Due to their special case, they need special care. Not being in critical level autism spectrum disorder, children can also learn their second language besides their mother tongue. Many children with autism develop some different or distinct speech and language skills, they may not be in a normal level of ability but when compared to other children with autism. For example, they develop a strong vocabulary in a particular area very quickly, their brain can focus on this distinctive area very quickly and learning things in this concept can separate them from others. Many have good memories for information that they have just heard or seen while they are repeating this information perpetually. Moreover, some children may be

able to read words before 5 years of age even though they may not be able to understand what they have produced. When they are observed in detailed way, it can be seen that they have some repetitive and obsessive habits on particular area or situations. It can be vary depend on the child but in general, these obsessive behaviors can be observed and somehow, they constrain child from acting normally and being in normal chart of behavior.

Children with autism spectrum have some disabilities on learning pattern of language but it doesn't with old them learning their foreign language. A variety of specialists, including a language pathologist or experts in their area can help them with this process and language progress of them. For younger children, improving verbal communication in their first and second language is a realistic goal of treatment. Parents should give importance of their children's language development in their early ages. For the older ages, If the development of child's language development is well enough, with the help of their teachers and specialist, they can learn second language. Today, knowing second language has become more of an issue. Many children diagnosed with many diseases or handicap can achieve many goals in their lives and learning second language or playing an instrument is just a tiny part of this huge development.

2. Research Questions and/or Hypothesis

- Are children with autism able to learn English words as second language?
- How do the children learn the English words and do they encounter any difficulties?
- Compared with typically developing children, what are the difficulties that the teacher may face while English words to autistic children?

3. Literature Review

There is a lot of literature on autistic children and the education of autistic children. In our research we are trying to teach four autistic children English vocabulary with visual aids and authentic material by giving importance to their autism. Besides, we try to find new ways to be helpful for the autistic teachers to cope with while teaching the autistic children English vocabulary. It is important while teaching autistic children to know their nature and treat them accordingly. While doing this research perhaps the most vital fact is to keep in mind that autistic children are different from the typical students and therefore require a different kind of education and treatment. One study emphasized the difference between autistic children and typical children by pointing out the need of special techniques to gain their attention and interest in learning by compared to typical children. *Banire, Jomhari, &Ahmad (2015) Journal of Autism and Developmental Disorders Volume 45, Issue 10,pp 3069-3084*. Since they are special students special techniques are acquired.

The most important fact is the aid of visuals combined with various authentic aids. Since autistic children are tended to lose their attention easily and quickly it is important to create a learning environment which would get their attention and which would be fun. According to recent research which was held to see if English and English literature can be learned more effectively with the help of visuals it was clear that students showed more interest on visuals and therefore more attracted to English classes. “ The majority (96.2 %) of the teachers believed that the use of visual aids creates enjoyable learning environment in the literature classroom.” (Yunus, Salehi, & AnakJhon, 2014, *Using Visual Aids as a Motivational Tool in Enhancing Students' Interest in Reading Literary Texts*, 115-117)

In this study we proposed a framework, a teaching method for autistic children based on visuals, videos, authentic material, and cooperation with autistic children. With this teaching method the autistic children find a chance to actively engage in the task. Since it is a more complex fulfilment compared to typical children it is easier to see their hesitation. However with getting their attention with visual aids, videos, drawing and dancing which also required physical activity it is easier for them to actively learn and have fun. “Memory tasks that require multiple retrieval cues to be encoded upon presentation of the information, such as free recall, are problematic. This suggests that a contributory cause of the social-communicative deficit in autism is an inability to voluntarily bring to mind things to say” (Kathleen A. Qill, 1997, *Journal of Autism and Developmental Disorder- Instructional Considerations for Young Children with Autism: The Rationale for Visually Cued Instruction*, Vol.27, NO. 6, pp 697-714) We can clearly see that due to their nature they have difficulty and with this method it is easier for them to be a part of a class.

In our study emphasis is put on one of the characteristic features of autistic children which are the routines. Routines refer to the ordinary things in a classroom which occur with order and usually every day. This routine is also needed in teaching autistic children which occurs in the way of repetition. As the specialist on autism suggests while teaching repetition is required. It is not possible for autistic children to learn without repetition since all day learned will be forgotten if they do not repeat. Not only in their life in the classroom but also they need repetitions and routines in their lives outside. It is a must for them which makes them relief. A must which never should be forgotten about autistic people. “Reality to an autistic person is a confusing, interacting mass of events, people, places, sounds and sights... Set routines, times, particular routes and rituals all help to get order into an unbearably chaotic life. Trying to keep everything the same reduces some of the terrible fear. Jolliffe (1992) in Howlin (2004), p.137.

A new way and researches have been conducted in teaching English to autistic children and these ways have made this hard process easier and more intuitive. a new research has put

support behind it via investigating the abilities of individuals who have a combination of language and developmental abilities with autism by using objects including pictures, graphic shapes and symbols and written or spoken words according to *Dixon 1981; Devaney et al. 1986; Sevcik & Ronski 1986; Dube et al. 1989; Green 1990; Eikeseth & Smith 1992; Dube & McIlvane 1997; Carr et al. 2000; Carr 2003*) So as to learning and teaching to autistic children, a concrete and structured environment is required. They are not lean to product effectively and have difficulties in decoding abstract information.' Within the confines of creating a structured and concrete educational environment, various educational interventions and educational programs have been developed and implemented for children and youth with autism.

It has been suggested that eye contact, sometimes referred to as developmental factor in learning in autistic children. It serves an important social function for young children even before vocal responding begins to develop (*Stern, 1985*). This makes clear that many factors actually effects the autistic children's language development with the help of communicative ways. It regulates the face to face interaction in language learning and coordinates the visual attention. It influences the variables in language acquisition. So, we also focused on face to face and eye to eye interaction with children while teaching English to them. We warned the children in learning process so as to look our eyes because it was important factor for them to concentrate on such things. They have also some obsessions and concentration problems but this also can help their learning because they can easily memorize words and have high level of learning. When compared with their peers, for those children develop speech, their ability to communicate is often less advanced. This makes the learning process much more difficult for both them and their teachers. Besides the students that we have observed, there are many autistic children have problem in displaying speech that is often characterized by short utterances. They make sentences lacking of appropriate use of pronouns, relations in time structures and restricted use of grammatical structures while speaking. According to a survey conducted in 1993 "Over the past four decades behaviorists have explored strategies for teaching language to children with autism that have yielded effective data based interventions. These interventions have been described in sufficient detail and thus, have been often replicated successfully. Furthermore, these interventions have generated advanced use of language in individuals with autism (*Lovaas, 1987, 1993; McEachin, Smith, & Lovaas, 1993*).

When they face effective and usage of language continuously, they reflect this developmental output in a good way. During all teaching period lasts 8 weeks, we have taken the advantage of using visuals in teaching effectively. Concordantly, we have given students something they can associate with concepts of their learning. Later, when they try to recall it, their brain makes the process easier to bring up the image we have used. In this regard, Pictures

were great for presenting many nouns, adjectives and simple sentence for us. We have tried to use realia, such as pictures from newspapers or magazines, flashcards along with the reinforcement after each teaching period.

4. The Design--Methods and Procedures

4.1 Instrumentation

We will mostly use the observations we make with the autistic students in İTO. We will use interviews with the teachers, the pedagogy teacher and the parents of the autistic children in this school. In this section, we have applied a pre-test to evaluate the English vocabulary knowledge of students with autism in İTO Otistik Çocuklar Eğitim Merkezi. Moreover, we have divided the vocabulary part into three stages to get real and basic results of their knowledge. It has been put into practice under favor of experts in pedagogy and autism spectrum disorder. We gathered the information about children there and for eight weeks we have taught English words and sentences in beginner level before apply it. After applying, we get the help of visuals and authentic materials to teach better and provide the permanence in learning. Due to the importance of language learning in children with autism, we have tried to describe what are the strategies and difficulties that teacher may face in the process of teaching English for autistic children. And also, we have tried to find out how is the ability of children with autism in İTO to learn vocabularies in second language. They may be lack of some grammar and vocabulary knowledge. But, with repetition, right and multiple guidance, they can easily learn second language and its structures. We have thought that first we have to work with the autism and gain their trust and cooperation. They need to work with people they trust in this period. Children with autism need structure and to feel secure. They have difficulty in processing and memorizing verbal information. So, incorporating with visual supports, even for those with higher intellectual ability may help them to learn English.

We have encountered that there are many similarities between students learning their second language and students with autism learning to deal with the complexities of their native language. Hence, we have tried to create a regular routine in class and give instructions to them. We have used repetition as often as possible with variation. It makes up the milestone of planning the learning for children with autism. For those struggling and attempting to distract their friend's attention, we have used instructions by looking directly their eyes, making eye contact. We have always used reinforcement in their learning because reinforcement makes the important constituent of it. Since their primary language is not English, we have used picture symbols we can find online to create the environment.

As a part of our teaching, we have tried to teach basic social skills embedded in our tutoring such as ability to maintain eye contact, understanding gestures and facial expressions.

Always using strategies to activate their background knowledge and what they have learned a week ago has made the important part of our teaching and been a guide on what we are teaching. If we see that they lack background knowledge we think of fun ways to build it. We, also, asked the students translate the terms into Turkish and If some words are similar to English word, they provided a bridge between two languages that they already know and they are trying to learn. Having incredible brain capacity, memories; being aware of them, Children astonished us very much. Even for children who haven't any disorder, learning the second language is a big challenge.

4.2 Participants

In our research we studied with four autistic children in İTO Otistik Çocuklar Eğitim Merkezi. Their names are Alihan, Ismail, Sevinç, and Rıza. The autistic degrees of these four students are approximately close except for Alihan. His autistic degree is more crucial compared to the other three students.

a. Alihan:

Alihan is fifteen years old. He is in this special school for autistic children since the age of seven. He is able to talk only a few sentences and refuses talking. He can write simple words with three or four letters. He doesn't always obey the classroom rules. His family is interested in his education and is cooperating with the teacher.

b. Ismail:

Ismail is fourteen years old. He is in İTO since the age of seven. He can talk as fluently as a typical student. He can do some mathematic calculations. He can write and read. He is obeying most of the classroom rules. His family is interested in his education and tires to be helpful to his son.

c. Sevinç:

Sevinç is fourteen years old and the only girl student in the class. She is in İTO since the age of seven. Sevinç can speak but only when necessary. It is hard to get the words out of her mouth. She is the shiest student in the class. She can read and write. When she first came to İTO she developed quickly but with her puberty and newborn tween brothers it got harder to teach her for the last two years. Her mother knows her routines and act accordingly.

d. Rıza:

Rıza is fourteen years old. He is in İTO since the age of seven. He is the smartest students in İTO. He is a good memorizer. He memorizes quickly. He is very willing to learn. Unlike the

other autistic children his communication with other people is good. He can speak well. He is able to read and write.

4.3 Procedure:

In our study we were the teachers of the four autistic children for eight weeks. We prepared eight lesson plans and conducted them with the students. All their actions, behaviors, developments, reactions are observed.

In each of our lesson plans we used techniques to teach vocabulary which are mostly based on visual aids. The techniques we used were combined with other techniques and various activities to get the attention of the students and make it easier for them to learn with lots of repetition. The students did all the activities with us and behaved like they were told.

In the first lesson plan the topic is body parts. In this activity we used a video and pictures of the body parts. Visuals are used to get the attention of the students and make it easier for them to learn. The students got engaged with the song and were happy to have a chance to sing and dance with that particular song. In this activity repetition by showing the parts of the body was difficult for the students to memorize. Without seeing the picture it was not very easy to recall the body part.

In the second lesson plan we thought students verbs. They are thought four verbs. This activity is a little different from others because we focus on verbs and not nouns. Again we used pictures of the verbs and since they have difficulty in responding without seeing the visuals we prepared a match activity in which they match the words with pictures. Along these activities repetition is very important. We added another version of activity. The students got the chance to act what the word required. They ran when they learnt the word run. They pretended to swim when they were repeating the word swim. Therefore, along with the visuals various activities were included.

In the third lesson plan we thought adjectives with the antonyms. In this lesson plan we used the visuals again but this time we also showed the antonyms words of the adjectives. Again a video with the activities is prepared. The antonyms words are combined to make a different activity for them.

The fourth activity is about fruits. In this lesson plan we used the pictures of fruits and brought real fruits in the classroom. The attention of the students was easy to get since they had a chance to eat the fruits. We used a video about fruits but students had difficulties in watching the video for the second time. They couldn't listen and got distracted.

In the fifth activity we thought vocabulary about animals. We used visuals about the animals, a video about the animals and an easier activity which is painting a draft of the animals. First the students learned the vocabulary with the pictures and a lot of repetitions. After watching

the video twice and dancing and clapping their hands while watching it they were given drafts to paints. In the last activity the students painted the animals so that they do not lose their attention.

In the sixth week, we worked on Colors unit. We introduced the seven colors to students. We added some example questions about the colors objects from environment (apples, sun, flowers, grass, grapes, carrots) also prepared colored paper which are enough colors for each student in class. We distributed the sheets drawn animal pictures on it, wanted students to paint the pictures the color they liked most and write the name of color on it.

In the seventh week, we have worked on the clothes topic with children. First of all, students had no background knowledge about clothes. First, we used flashcards to introduce the clothes and from our clothes we had brought to classroom, we thought the clothes vocabulary to students. In first period it was not easy for them to recall because of their needs of repetition. We showed the vocabulary from examples on students. Also, we wrote the vocabulary to the board. Then after each 3 or 4 new items, we asked comprehension questions 'Is this a red skirt or a blue skirt? And wanted them to answer correctly. Students matched clothes names with their pictures after we distributed the flash card of clothes. As the last one, Students drew a picture and paint it then, told what they h drew and what color was the item they had painted.

In the last week, Seasons unit was taught and so as to be authentic learning, we drew pictures of seasons to the board with appropriate environment. We added vocabulary to the below. We opened a video and seasons song from the internet and while showing the posters of seasons to students played the song more than one time to make the information clear and permanent for students.

4.4 Interview with the Teacher Nihal Araz from Ito

Can you introduce yourself to us?

My name is Nihal ARAZ. I am working in ITO for eight years. I am working with the same students for nearly seven years. I graduated from economic and administrative sciences. I developed myself with the help of education seminars about autism and the education of autistic children. This is all I can tell about myself.

Did you encounter any difficulties with the autistic children?

After understanding the autistic children, I realized that they are more difficult compared with the other mentally impaired children. I first worked with the autistic children, I never worked with the other mentally impaired students. Autistic children are different from the other students because they have difficulties in communicating and socializing with people. However with using the techniques right you can connect with them in one way. I didn't encounter a lot of problems about communication with my students since I work with them for a long time.

Can you describe autistic children in general, what are their features?

Like I told you, the biggest feature of them is that they are not open to communication. They pretend not to hear what you say even if they hear and understand you. One of the biggest hardships is the obsession. They can be obsessed to an object, trying to pay attention with that particular object, doing rhythmic actions over and over again, or watching something moving for hours. These are some main features of autism. For example one student is always holding something when he is talking. He feels more relaxed when he has something to hold in his hands. The autistic children mostly have problems in building sentences. Most of the students in our school do not talk. The ones who talk are confused with the tenses and mix the verbs. There are some points in which there are very good compared to typical children. For example, they can memorize quickly and do not forget. This is connected with obsession because they want to memorize something. Sometimes these obsessions help the students learning but mostly it is a hinder for their learning.

1. . What kind of materials do you use for the autistic children?

- There is no special education program for autistic children. There is an education program for mentally impaired students and we use this one in our education. There is 'Tohum Autism Institution', we teachers got education from these institution for three years. We are doing activities and programs according to the techniques they showed us. We are preparing activity files, magazines, legos, toys, tablet pc in order to make it easier for them to understand. They are very interested in technologic devices. Sometimes I buy some editions like 'pencersey' and 'yaşam ve çocuk'. These are special books for distractibility. We use these to develop their comprehension and sense transfer. I have to use some additional sources like these. But our techniques are very changeable according to the mood of the students. So, we decide what to teach to the students because their mood can change.

1. How should the parents behave the education of autistic children?

- The parents in our school know their children better than we do. They understand and accept autism. They know the obsessions of their children. They know how to act. We teachers give information about the children's situation. We are always in connection. We are also giving the parents seminars about autism. For example about healthy life. I think that the seminars are very beneficial for the parents.

2. What kind of techniques do you use to teach the autistic children?

- We use the techniques which the 'Tohum Autism Institution' showed us. We use them in order to make the students act in the class independent. We prepare daily plans which we call activity plans. Sometimes, students also write down what they are supposed to do

during the day. We usually make groups while working since their difficulty is in communicating. In the first lessons we do theoretical activities, in the last lessons we move to practical activities. We don't have a very special plan for the autistic children, it depends on the personal traits of the child.

3. *What are the differences when we compare autistic children to typical children?*

- There are advantages and disadvantages. However, the disadvantages are more. Their memorization capacity is very high. They don't forget what they have learnt for a long time but they can forget what they memorize. When they do not finish their homework they feel uncomfortable. They want to finish the homework due to their obsession. For example they won't get to the next page without writing the first page. There can be advantages like these examples but there are more disadvantages. They perceive behind time. What you can teach in one lesson to a typical student is not so easy for them to understand and they perceive it in two days. They cannot move freely because they are detained. They are not allowed to play in the playground alone.

4. *What can be done to enhance their condition?*

- In our school we pay attention more to social activities instead of academic activities because what they really need is socialization and communication. In this sense our music, art and sport teachers are very active. We organize small-scale competitions for music, paintings or information. In April we do a lot of social activities since it is the month of awareness for autism. We are trying to make them a part of life. In academic ways we think that that reading, writing, and a little mathematic is enough.

- *What can go wrong if we do not enhance their condition?*

- If we do not enhance their conditions they will be dependent people. They will be dependent to people and their homes. In order to hinder this we have to make them a part of the daily life and community.

5. *What kinds of differences are there between the girls and the boys with autism?*

- The students of this school are mostly boys. The numbers of boys with autism is higher compared to girls. The rate of the boys with autism is 4/3. However, it is more serious in girls. They are hard to educate and make them understand something. Boys in comparison are easier to educate only their rate is higher.

4.5 Teacher observation

Observing the behaviors of autistic 4 children takes many times for us and autistic children teachers. It generally takes from 30 to 60 minutes to assess them. During this time the teacher provides a series of opportunities for the subject to show social and communication

behaviors in connection with their situation. First of all, we tried to choose appropriate modules and topics in parallel with their Turkish and communication skill level. We worked with 4 good-level autistic children. We tried to coordinate eye-gaze and eye- contact. They generally shift their looks to other sides and escape eye contact while you are talking to them. In every speech action, we warned them to make an eye contact while talking. Then, before every activity we introduced the activity for them, we made dictations in Turkish because they are not in appropriate English level to understand them.

Students haven't much appropriateness of social responses but the students we work with are in really good level compared with their autistic peer. They also have unusual occupations while doing an activity such as running in class or shout at suddenly. Autistic children mainly have excessive interest in unusual or highly specific topics or objects for example time obsession or name obsession. For example, one of our students (Alihan) has hand- finger mannerism. Also he is using excessive amount of gestures. After we observed manner of our other student (Sevinç), we concluded that Sevinc is self- enclosed child after her baby sister was born. Her sister is not autistic and her family's caring of her has made Sevinç self- enclosed while her treatment is getting better day by day.

In this period, I have observed that the more you are informed about autism, the better you are equipped to get informed decisions while you are going further. Like everyone else, autistic children have an entire life to grow up and develop her/his skills.

5. Data Analysis and Interpretations

5.1 Quantitative Data

5.1.1 Pre- Test Results

The following themes emerged from the analysis of the pre-test, post-test and students' answers. Following themes include the false and true answers.

	RIZA		ALIHAN		SEVINC		İSMAİL	
	True	False	True	False	True	False	True	False
VERB	4	7	3	8	6	5	4	7
NOUN	10	5	6	9	9	6	7	8
ADJECTIVE	5	13	4	14	5	13	3	15

Figure 1: Pre-test Results of the Students

In given pre-test, the scores of the students are given above and post-test is below as the two different table. The proportions of their success also are the main points in our research. When compared two test, we can see the different results between pre-test and post- test and interval between this stages.

5.2 Post- Test Results

	RIZA		ALIHAN		SEVINC		İSMAİL	
	True	False	True	False	True	False	True	False
VERB	9	2	5	6	8	3	6	5
NOUN	13	2	8	7	9	6	10	5
ADJECTIVE	14	4	10	8	11	7	8	10

Figure 2: *Post-test Results of the Students*

Post- test: In our post-test there are 44 multiple choice questions with pictures in total. They are the given words. The table given below is the after-post test scores of the students.

6. Discussion

From my point of view, it was hard to work with autistic children in the beginning. We have information about autism, strengths and challenges of it beforehand but just in theory level not in practice. As far as I observe, these students are having difficulties in developing motivation to study areas not of their interest. As for a child that their peers are having difficulties in that area, for these children, this situation is going worse and worse. Moreover, they have difficulties in perceiving emotional states of other. They perceive unwritten rules via social interactions but they can learn them through direct instructions and commandments. We have use a lot of reinforce and commandments to get them do something while learning new things. While we are talking to them, we have warned them to make an eye contact with us.

In our research, we used many authentic and visual materials to teach better because visual materials trigger the peripheral learning and make easier to remember. These materials meet student’s need in learning new thing. They are like a bridge from known to unknown making connections between them. We used songs to make things easier to remember for autistic children. Children with autism may be successful in some abilities while weak in some parts. We observed that they can do well on the parts of the test that measure visual skills. As another aspect, obsessive behaviors of autistic children’s personality may lead to high levels of knowledge, memory, and skill. Such repetitive behaviors may be seen as strange patterns like flapping their arms or moving their fingers in front of their eyes. For example, İsmail often

insists on eating the same meals every day and obsessed with green pen. Sevinç focuses only the hour and minute hand of clock for a long time. When we try to diver their attention from this preoccupation, we find distresses autistic kid to be pulled away from their area of interest.

Because of this, Rıza is good with numbers, patterns, and science topics. But the same obsessions can lead their life worse. They have difficulties in adjusting to ordinary life, as well as, they force them to remain in their own egocentric worlds without having an ability to interact with others.

All in all, we may develop communication styles and make their leaning environment more visual and colorful to offer them a good life opportunity to learn better and easier. But as every autistic person is different, the approach to understanding their minds needs to be more along the lines of integrating them into society at large in their own unique ways. For example, take an example of step mother who grow a %97 percent autism level-children, with true communication way and right techniques. She lessened the autism level to %11-12 level. In teaching system, this can be also achieved when worked patiently.

7. Result

A Variety of instructional strategies to teach skills to young children with autism have been adapted by many researchers so far. Observation and imitation of a model have been used to facilitate the learning of a variety of skills by children with autism (Ledford, Gast, Luscre, & Ayres, 2008; McDuffiet al., 2007). Visuals and videos encourage children to acquire targeted skills through observational learning. In this strategy, we demonstrated of the desired topics to be learned by autistic children. First, pre-test was applied on four (4) autistic children (Alihan, Sevinç, Rıza, İsmail). They are in good level in learning and communication skills when compared their autistic peers. They got a pre English lesson from volunteered teachers in vocabulary and introduction level English. They remembered some of the vocabularies from last year. Every week we followed a lesson plan in accordance with their developmental degree. We had difficulty rephrasing when misunderstood occur and knowing how to use verbal and nonverbal signals to regulate their interaction with their friends. They have deficit in nonverbal communicative behaviors used for social interaction for example poorly integrated verbal and nonverbal communication, abnormal eye contact and body language or deficits in understanding and use of gestures. In this situation, a physical prompt may be implemented to produce the eye contact response as demonstrated in previous studies on this topic (Foxx, 1977; Greer & Ross, 2007; Lovaas, 1977; Lovaas, 1981). But, they are mainly lack of facial expressions and

nonverbal communication behaviors. They are unsuccessful in maintaining, understanding and making friends.

In pre-test given to students, Rıza is far more successful than other students compared with results. In pre-test, Rıza made nineteen (19) true from 44 multiple choice question. In post-test this increased to 36 with the best score in class. Alihan made thirteen (13) in pre-test and twenty three (23) in post-test. With 10 right answer more. The third student in class, Sevinç answered twenty (20) question. In post-test, this scale has risen up to twenty eight (28). The last student İsmail answered fourteen (14) question right and in post- test this has risen up to twenty four (24). From this point, we can see that visuals and videos while teaching make students more attentive and make easier to remember the vocabularies for them. From pre-test to post- test we can clearly see the results that visuals help students remember the words. When they first encounter with vocabulary they might be seem similar to them for remembering but after 8 weeks of teaching process, they have made progress in both communication in terms of seeing different faces in learning environment and remembering the vocabularies when they encounter with word or picture of them. We may use more visual and authentic materials in classroom environment to make abstract things more understandable and make them concrete for autistic children. They are 14-15 years old children and should differentiate abstract with concrete items. To make this process getting over easily, visuals and authentic things can be used.

8. Conclusion

As I mentioned before, I am positively predisposed to learn with association of ideas, learning with visual materials and connections of similarities- implementing. This is particularly true at Special Education Center which provides learning materials to autistic learners. All these researches and data cover this question in a way that used systems in learning environment with visual and videos helped learning. The similarities and connections have been built as connector in learning process. Through the implementation of an action research approach, I have reflected the stages of teaching in implemented teaching system and I am committed to address them in future class offerings.

From this action research, we can conclude that, Children with autism demonstrate qualitative differences in social interaction, and often have difficulty establishing and maintaining relationships. They may have limited social interactions or a rigid way of interacting with others. These difficulties are not a lack of interest or unwillingness to interact with others but rather an inability to maintain social interaction and use appropriate communication skills to respond. Children with autism spectrum disorders also have educational profiles that are

characterized by patterns of their development. In addition, there may be deficits in complex abilities, yet simpler abilities in the same area may be seen. We have observed that many students with autism experience language and communication difficulties, although there are considerable differences in language ability among them. Some students are nonverbal while others have extensive language with deficits in the social use of language. This is not an intentional action but rather an inability to communicate. That's why autistic people often have delayed and impaired language development, due to their neurological disorder.

References

- Bosseler, A., & Massaro, D. W. (2003). Development and evaluation of a computer-animated tutor for vocabulary and language learning in children with autism. *Journal of autism and developmental disorders*, 33(6), 653-672.
<https://doi.org/10.1023/B:JADD.0000006002.82367.4f>
- Carbone, V. J., O'Brien, L., Sweeney-Kerwin, E. J., & Albert, K. M. (2013). Teaching eye contact to children with autism: A conceptual analysis and single case study. *Education and Treatment of Children*, 36(2), 139-159.
<https://doi.org/10.1353/etc.2013.0013>
- Jung, S., & Sainato, D. M. (2013). Teaching play skills to young children with autism. *Journal of Intellectual and Developmental Disability*, 38(1), 74-90.
<https://doi.org/10.3109/13668250.2012.732220>
- Martin, G., & Pear, J. J. (2015). *Behavior modification: What it is and how to do it*. Psychology Press. <https://doi.org/10.4324/9781315663340>
- McEachin, J. J., Smith, T., & Ivar Lovaas, O. (1993). Long-term outcome for children with autism who received early intensive behavioral treatment. *American journal of mental retardation*, 97, 359-359.
- National Research Council. (2001). *Educating children with autism*. National Academies Press.
- Plavnick, J. B., & Ferreri, S. J. (2012). Collateral effects of mand training for children with autism. *Research in Autism Spectrum Disorders*, 6, 1366-1376.
<https://doi.org/10.1016/j.rasd.2012.05.008>
- Podrouzek, W., & Furrow, D. (1988). Preschoolers' use of eye contact while speaking: The influence of sex, age, and conversational partner. *Journal of Psycholinguistic Research*, 17, 89-98. <https://doi.org/10.1007/BF01067066>

- Rollins, P. R. (1999). Early pragmatic accomplishments and vocabulary development in preschool children with autism. *American Journal of Speech-Language Pathology*, 8, 181–190. <https://doi.org/10.1044/1058-0360.0802.181>
- Seibert, J. M., & Oller, D. K. (1981). Linguistic pragmatics and language intervention strategies. *Journal of Autism and Developmental Disorders*, 11, 75-88. Doi: 10.1007/BF015313422
- Skinner, B. F. (1957). *Verbal behavior*, action. MA: copley Publishing group.–1957.–478 p. <https://doi.org/10.1037/11256-000>
- Staats, A. W. (1981). Paradigmatic behaviorism, unified theory, unified theory construction methods, and the Zeitgeist of separatism. *American Psychologist*, 36(3), 239. <https://doi.org/10.1037/0003-066X.36.3.239>
- Staats, A. W. (1994). Psychological behaviorism and behaviorizing psychology. *The Behavior Analyst*, 17, 93-114. <https://doi.org/10.1007/BF03392655>
- Stern, D. (1985). *The interpersonal world of the infant*. New York, NY: Basic Books.
- Sundberg, M. L., & Michael, J. (2001). The benefits of Skinner’s analysis of verbal behavior for children with autism. *Behavior modification*, 25(5), 698-724. <https://doi.org/10.1177/0145445501255003>
- Tager-Flusberg, H. (1989). A psycholinguistic perspective on language development in the autistic child. In G. Dawson (Ed.), *Autism: Nature, diagnosis, and treatment* (pp. 92-115). New York, NY, US: Guilford Press.