

LANGUAGE LEARNING BY AUTISM SPECTRUM DISORDER IN AN INCLUSIVE SCHOOL IN INDONESIA

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Abstract

The research aims at investigating and analyzing whether ASD students understand a simple instruction and commonly show impairment about comprehension, communication skill and the production of language and how the teacher could help to improve language development for ASD students with strategies facing in inclusive school. to investigate and analyze more deeply whether ASD students understand a simple instruction and commonly show impairment about comprehension, communication skill and the production of language. Some procedures have been undertaken: The classroom is set up as individual classroom for the autism spectrum disorder; conducting the series of pre-tests, treatment, and post-test to ensure the reliability of the instrument and preparing by self-drawings or photo, The results showed that the use of PECS could make students excited in learning English in class and helped them to communicate through pictures. The picture exchange communication system had proven to have a positive effect on them. This was a big improvement in students' ability to communicate their wants and needs.

Key words: ASD, PECS, inclusive schools, picture exchange communication system.

1. Introduction

The language ability is a vital part in children's development. Typically, other communication is a way to express wants, needs and emotions. Communicating with people in the environment surrounding children makes them apart of the community. Their community and its members play a key role in their language ability. Education has an important role in our society, therefore equality and equity in education need giving care and attention to all students with special needs. The treatment towards special need children which has been commonly segregated them from other students in regular school. The segregate condition of the special need students called Inclusive School and this type education is well accepted in our society. Inclusive School is the specialist school for students with learning difficulties which includes the students physically disable, behaviorally and emotionally disturbed. However, parents prefer to enroll the children at a regular school, because the children need to be educated in a regular classroom like other mainstream students. Considering that regular school room may bring better results. Autism Spectrum Disorder (ASD) students require special attention and care. Inclusive service will be offered to the students with disabilities.

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Educators need to have accepting and willing toward the instruction of all learners. honesty, The perspectives provided by Ainscow and Miles (2008) are underpinned by a number of intertwined values that are fundamental to inclusive education: equality; rights; participants; respect for diversity, (concern for) community, sustainability, non-violence, trust, courage, joy, compassion, love/care, optimism/hope, and beauty (in) gratuitous acts of kindness' (Booth 2011,310-313).In order to investigate and analyze more deeply, the researcher focuses on where ASD students understand a simple instruction and commonly show impairment about comprehension, communication skill and the production of language and the teacher can help to improve development language for ASD students with strategies facing in inclusive school.

2. Frame of Theories

Autism spectrum disorder includes social, language and behavioral functions. Autistic children have difficulty to communicate in the language, even in sign language or gesture. They are difficult to convey messages and to receive messages. Communication in language of autistic children is very different from most children in their ages. Ability to communicate and the language are important parts of everyday life. Communication is a prerequisite for the occurrence of an interaction. If communication is bad, then the interaction is also bad. According to the Diagnostic and Statistical Manual of Psychiatric Disorder (DSM-IV-TR: American Psychiatric Association, 2000) autistic disorder is defined on the basis of at least one qualitative impairment in the domain of communicative abilities.

Communication is perceived as a magical elixir, one that can ensure a happy long-term relationship and can guarantee organizational success. Clearly, popular culture holds paradoxical views about communication: it is easy to do yet powerful in its effects, simultaneously simple and magical. Physical or neurological impairment as well as psychiatric illness can call for alternative means to the usual patterns of communication to be adopted. Impairments in socialization, communication and imagination cohere (Wing & Gould 1979). The “theory of mind” explanation of autism suggests that autistic people lack this ability to think about thoughts, and so are specifically impaired in certain (but not all) social, communicative and imaginative skills.

Inclusive Education

Inclusion is an on – going process, a never-ending quest, aiming to increase participation in education for everyone involved. Some define it as representing the participation and education of disabled pupils and special needs pupils in mainstream or general education (Departement of Education & Science, 2007; Rogers, 1993; Salend, 2010). This view focuses on special needs, as the prerequisite for inclusion, meaning that it is a part of special needs education. Those who adhere to this definition hold the world view that the difficulties pupils experience in school are a consequence of their impairments or shortages. Thereby they include the possibility that pupils' difficulties can be attributed to failure in relationship, to the fact that curriculum and approaches to teaching and learning are not responsive to diversity, or that difficulties can arise from the social pressures homes and communications bring into schools (Booth, 2010; Slee, 2011).

For other, including us, the development in defining inclusion comes from the notion of diversity, rather than disability (see Abels & Markic), and how schools respond to and value a diverse group of pupils. Diversity is a natural characteristic of a school community, mirroring the wider community, and it can be explained as the range of characteristics that result in a

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perception of difference among people. This perception of difference can elicit responses in others that can either be favourable or unfavourable to the individual in question (Lumby & Coleman, 2007). Inclusion is aimed at diverting attention towards inequalities presented in exclusion and discrimination against diversities such as social and ethnic circumstances, religion, gender, and ability of pupils and their families. Thus, we state that inclusive education is a movement against exclusion of any kind and a reaction to political segregation and social inequality (Petrou, Angelides, & Leigh, 2009).

The goal of inclusion is to work against inequality and nurture people's sense of belonging in school and society. Inclusive schools aim to find ways to educate all their pupils successfully, work against discrimination, and furthermore lead to an inclusive, just society where everyone is a valid participant (Booth, 2010; Slee, 2011; UNESCO, 1994, 2001). Inclusion is fundamentally grounded in the ideologies of social justice, democracy, human rights, and full participation of all (Ainscow & Kalpan, 2005; Florian, 2008; Guojonsdottir & Karlsdottir, 2009; Jonsson, 2011). In inclusive schools, pupil diversity is regarded as an "asset, an enduring source of uncertainty" (Skrtic, 2005, p.150), and from it derives the energy that derives and creates new thinking, new knowledge and progress. Inspiring teaching practice promote inclusion, honour, diversity, cultures and ethnic experiences, and build the learning environment on the different contributions and identities of each pupil.

Teachers in these practices understand the experiences and perspectives their pupils bring to the educational settings and respond to the diversity in the group as they design the curriculum, learning activities, classroom climate, instructional materials, teaching techniques and assessment procedures (Gay & Kirkland, 2003). For each of our participants their lives at school and beyond speak of the sustaining value of friends. Friendship does not exist without respect and care in knowing another person and like inclusion emphasizes equality and reciprocity in relationships. The perspective provided by Ainscow and Miles (2008) are underpinned by a number of intertwined values that are fundamental to inclusive education: equality, rights, participation, respect for diversity, concern for community, sustainability, non-violence, trust, honesty, joy, compassion, love/care, optimism/hope, and beauty in gratuitous acts of kindness (Booth 2011, 310-313). Inclusion can be described as the practice of including students with disabilities alongside with other students in a regular school classroom (Gilhool, 1989; Ford, 2013). Inclusive education recognizes that all students are learners who benefit from a challenging, meaningful, appropriate curriculum (Meynert, 2014).

Teaching English Language for Autism Spectrum Disorder

The Research develops teaching English Language for Autism Spectrum Disorder through picture exchange communication system. ASD students clearly require special attention and care. Autism is stated as having impairments in reciprocal social communication and social interaction, and the presence of restricted and repetitive behaviors, interest or activities. The students with ASD are less likely than their normal peers to initiate conversations, respond appropriately to the conversational turns and able to understand the intention and the illocutionary force of utterances. Strategies for handling students with learning disabilities by using PECS, where one teacher can function as the main teacher who is responsible for all instructions conducted in the classroom, who is assisted by another teacher who gives additional assistance.

The strategies PECS implemented are mediated by using teaching the room is set up so each student has their own Individual Teaching Area. Each ITA includes a desk, a roll away shelf

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which contain picture reinforcements such as chocolate, or students' favorite treat or toys. It also contains the communication notebook between school and home, the students PECS for those students who do not use language to communicate, and the students Trial picture. ASD students Trial picture is where the teacher and aides record the students' progress during Discrete Trial Teaching. The main teacher, who is a native speaker, as a teacher to teach students ASD by using PECS especially, teaching English Language.

3. Setting of the Research

In this study, the population is ASD students of the Inclusion School Bandar Lampung consisting of 15 students in primary class. Five students in the class are classified as having an Autism Spectrum Disorder. One student has a 1:1 aid work with ASD students specifically. Inclusive Schools is located in Bandar Lampung, Tunas Mekar School contains general education classroom and inclusion classroom as well as one self-contained ranging from kindergarten grade to twelve grade. The sample of this research is primary class students of Inclusive School four graders. Approximately 150 students attend in Inclusive Schools in the 2019-2020 school year, includes normal students and nineteen students abnormal started first grade until sixth grade. Because this is a big school the class sizes are medium, which creates a positive learning environment. Within the school there are 16 classrooms; 4 preschools, 6 first grade until sixth grade, three junior high school, three senior high schools. There is library, swimming pool, playground, laboratory, mosque, field and hall.

Subjects of Study

The subjects of this research were the second semester Grade Four students of Tunas Mekar School in Academic Year 2019/2020. The number of the students is ten students.

Research Procedures

In doing research, some procedures that been undertaken:

1. The classroom is set up as individual classroom for the autism spectrum disorder.
2. Conducting the series of pre-tests, treatment, and post-test to ensure the reliability of the instrument.
3. Preparing Symbol PECS can be made with self-drawings or photo, In each of these examples, the rate of response is controlled by the presentation of the antecedent stimulus.
4. Analyzing the data.

Research Schedule

There were some meetings as the treatment in the research which were divided into four sessions

Meeting 1:

English Proficiency Test was distributed to measure the general ability of the students and to find out how many students which have good understanding of English and students with low understanding of English as they will not join the treatment.

Meeting 2:

The students were taught to use adjusted materials which more concern on visual learning style. The activities were about displaying some videos to the students during the learning process. The reading materials were transferred into video form, picture, graph and chart. The video

was not only the text but it would be some additional pictures that have relation to the reading materials.

Meeting 3:

The students were taught to use adjusted materials which more concern on auditory learning style. The activities consisted of to listen some audio to the students during the learning process. Researcher asked the students to hear friends' explanation.

Meeting 4:

The students were taught using adjusted materials more concerned to kinesthetic learning style. The activities were about to do discussion and conversation to the students during the learning process, reading aloud and presenting the materials. After meeting 4 had been conducted, the students were given test concerned to kinesthetic learning style.

Meeting 5:

The students were taught using adjusted materials which more concern on tactile learning style. The activities were about writing activities, making list, doodling, and mind mapping. After meeting 5 has been conducted, a test was administered to find out the impact of adjusted material which concern on tactile learning style. Finally, reflective questionnaire was given to find out the students' perception toward adjusted materials.

Data Analysis

In analyzing the data the difficulty level and discrimination power were determined. According to Shohamy (1986: 78) the criteria of difficulty level are item falling between .15 to .85 are preferred items and too easy or difficult item should be discarded. He also states the criteria of discrimination power are as follow; if the value is positive, it has positive discrimination. If the value is zero, it means that there is no discrimination. If the value is negative, it means low level students got more item corrected. He concludes that the higher the discrimination index, the better fact it will be.

4. RESULTS OF THE STUDY

Aspects of communication skills of ASD; there are three aspects for communication skills of autism spectrum disorder; imitating verbal, expressing and responding desire, and introducing the situation expression. Which of the three aspects most significantly increase the use of PECS for autism spectrum disorder students.

Pretest

There were three aspects communication skills; Imitating Verbal, Expressing and Responding Desire, and Introducing the Situation Expression. The result could be seen the table:

**Table 1 Pretest
Imitating Verbal**

No.	Shadow Name	Imitating Verbal	Total R1*10 = 100	Mean
1	PRA	8	80	85

2	DAN	7	70	70
3	ZAI	7	70	70
4	ADM	7	70	70
5	NRA	8	80	80
6	EAT	6	60	60
7	MBR	7	70	70
8	TWP	7	70	70
9	IND	9	90	90
10	WIL	6	60	60
Total				725

Note:

Rater 1 Pretest, verbal question; Imitating Verbal

There are 10 verbal question, for example number 1, name of the student PRA the correct answer was 8.

$$\text{Rater 1} = 8 \times 10 = 80$$

$$\text{Rater 2} = 9 \times 10 = 90$$

$$\begin{aligned} \text{Mean} &= \frac{80 + 90}{2} \\ &= 85 \end{aligned}$$

The mean score of rater 1 and rater 2 was 85

Based on the table 1 the higher score was IND 90, the lower score was EAT and WIL 60, and the mean of pretest Rater 1 from 10 students was 725.

Table 2 Pretest Responding and Expressing Desire

No.	Shadow Name	Responding and Expressing Desire	Total R1*10 = 100	Mean
1	PRA	9	90	90
2	DAN	7	70	70
3	ZAI	7	70	65
4	ADM	7	70	70
5	NRA	8	80	85
6	EAT	8	80	80
7	MBR	7	70	70
8	TWP	7	70	75
9	IND	7	70	80
10	WIL	7	70	65
Total				750

Note:

Rater 1 Pretest, verbal question; Expressing and Responding Desire

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Based on the table 4 the higher score was PRA 90, the lower score was two students got 65 (ZAI and WIL), and the mean of pretest Rater 1 from 10 students was 750.

Table 3 Pretest Introducing the Situation Expression

No.	Shadow Name	Introducing the Situation Expression	Total R1*20 = 100	Mean
1	PRA	5	100	100
2	DAN	3	60	70
3	ZAI	5	100	100
4	ADM	5	100	90
5	NRA	5	100	100
6	EAT	5	100	100
7	MBR	5	100	100
8	TWP	5	100	100
9	IND	5	100	100
10	WIL	5	100	90
Total				950

Note:

Rater 1 Pretest, verbal question; Introducing the Situation Expression

Based on the table 3 there are 7 students who got higher score 100, the lower score was DAN 70, and the mean of pretest Rater 1 from 10 students was 950.

Table 3 Pretest Imitating Verbal

No.	Shadow Name	Imitating Verbal	Total R2*10 = 100	Mean
1	PRA	9	90	85
2	DAN	7	70	70
3	ZAI	7	70	70
4	ADM	7	70	70
5	NRA	8	80	80
6	EAT	6	60	60
7	MBR	7	70	70
8	TWP	7	70	70
9	IND	9	90	90
10	WIL	6	60	60
Total				725

Note:

Rater 2 Pretest, verbal question; Imitating Verbal

Table 4 Pretest Responding and Expressing Desire

No.	Shadow Name	Responding and Expressing Desire	Total R2*10 = 100	Mean
1	PRA	9	90	90
2	DAN	7	70	70
3	ZAI	6	60	65
4	ADM	7	70	70
5	NRA	9	90	85
6	EAT	8	80	80
7	MBR	7	70	70
8	TWP	8	80	75
9	IND	9	90	80
10	WIL	6	60	65
Total				750

Note:

Rater 2 Pretest, verbal question; Expressing and Responding Desire

Table 5 Pretest Introducing the Situation Expression

No.	Shadow Name	Introducing the Situation Expression	Total R2*20 = 100	Mean
1	PRA	5	100	100
2	DAN	4	80	70
3	ZAI	5	100	100
4	ADM	4	80	90
5	NRA	5	100	100
6	EAT	5	100	100
7	MBR	5	100	100
8	TWP	5	100	100
9	IND	5	100	100
10	WIL	4	80	90
Total				950

Note:

Rater 2 Pretest, verbal question; Introducing the Situation Expression

Table 6 Post-test Imitating Verbal

No.	Shadow Name	Imitating Verbal	Total R1*10 100 =	Mean
1	PRA	9	90	95
2	DAN	8	80	80
3	ZAI	8	80	85
4	ADM	8	80	85
5	NRA	9	90	80
6	EAT	7	70	70
7	MBR	9	90	85
8	TWP	9	90	90
9	IND	9	90	90
10	WIL	8	80	75
Total				835

Note:

Rater 1 Post-test, verbal question; Imitating Verbal

Based on the table, 9 the higher score was PRA 95, the lower score was EAT 70, and the mean of post-test Rater 1 from 10 students was 83.

Table 7 Post-test Responding and Expressing Desire

No.	Shadow Name	Responding and Expressing Desire	Total R1*10 100 =	Mean
1	PRA	10	100	95
2	DAN	8	80	80
3	ZAI	8	80	75
4	ADM	9	90	80
5	NRA	9	90	90
6	EAT	9	90	90
7	MBR	8	80	80
8	TWP	9	90	85
9	IND	9	90	90
10	WIL	9	90	85
Total				850

Note:

Rater 1 Post-Test, verbal question; Expressing and Responding Desire

Based on the table 7 the higher score was PRA 95, the lower score was ZAI 75, and the mean of post-test Rater 1 from 10 students was 850.

Table 8 Post-test Introducing the Situation Expression

No.	Shadow Name	Introducing the Situation Expression	Total R1*20 = 100	Mean
1	PRA	5	100	100
2	DAN	4	80	90
3	ZAI	5	100	100
4	ADM	5	100	100
5	NRA	5	100	100
6	EAT	5	100	100
7	MBR	5	100	100
8	TWP	5	100	100
9	IND	5	100	100
10	WIL	5	100	100
Total				990

Note:

Rater 1 Post-test, verbal question; Introducing the Situation Expression

Based on the table, 8 there are 9 students got higher score 100, the lower score was DAN 90, and the mean of pretest Rater 1 from 10 students was 990.

Table 9 Post-test Imitating Verbal

No.	Shadow Name	Imitating Verbal	Total R2*10 = 100	Mean
1	PRA	10	100	95
2	DAN	8	80	80
3	ZAI	9	90	85
4	ADM	9	90	85
5	NRA	7	70	80
6	EAT	7	70	70
7	MBR	8	80	85
8	TWP	9	90	90
9	IND	9	90	90
10	WIL	7	70	75
Total				835

Note:

Rater 2 Post-test, verbal question; Imitating Verbal

Table 10 Post-test Responding and Expressing Desire

No.	Shadow Name	Responding and Expressing Desire	Total R2*10 = 100	Mean
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1	PRA	9	90	95
2	DAN	8	80	80
3	ZAI	7	70	75
4	ADM	7	70	80
5	NRA	9	90	90
6	EAT	9	90	90
7	MBR	8	80	80
8	TWP	8	80	85
9	IND	9	90	90
10	WIL	8	80	85
Total				850

Note:

Rater 2 Post-test, verbal question; Expressing and Responding Desire

Table 11 Post-test Introducing the Situation Expression

No.	Shadow Name	Introducing the Situation Expression	Total R2*20 = 100	Mean
1	PRA	5	100	100
2	DAN	5	100	90
3	ZAI	5	100	100
4	ADM	5	100	100
5	NRA	5	100	100
6	EAT	5	100	100
7	MBR	5	100	100
8	TWP	5	100	100
9	IND	5	100	100
10	WIL	5	100	100
Total				990

Note:

Rater 2 Post-test, verbal question; Introducing the Situation Expression

Based on the pretest-post-test table; for pretest, the first aspect (imitating verbal) got an average score of 725 out of ten students and after being treated and to the post-test got an average score of 835. The second aspect for pretest (Expressing and Responding Desire) got an average score of 750 out of ten students with autism spectrum disorder. After having treatment and to the post-test, the average score becomes 850. The third aspect for pretest (Introducing the Situation Expression) got an average score of 950 and post-test got score of 990. From the above data, researcher concluded that there were three aspects that could improve

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communication skills of students with autism spectrum disorder, but the most increases occur in the first and second aspect.

The Answer of Research Question

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test IV	14.50	10	1.958	.619
	Post-Test IV	16.70	10	1.494	.473
Pair 2	Pre-Test PRE	15.00	10	1.700	.537
	Post-Test PRE	17.00	10	1.247	.394
Pair 3	Pre-Test ISE	9.50	10	.972	.307
	Post-Test ISE	9.90	10	.316	.100

This output showed a summary of the paired samples statistics results from three sample aspects studied namely imitating verbal, expressing and responding desire, and introducing the situation expression. For pretest-post-test, the first aspect (imitating verbal) had a score of 14.50-16.70 the second aspect (expressing and responding desire) had a score of 15.00-17.00 then the last aspect (introducing the situation expression) had a score of 9.50-9.90. The sample of this research was as many as ten students. Thus, descriptively there was a difference in the average learning outcomes between pretest and post-test results.

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-Test IV & Post-Test IV	10	.741	.014
Pair 2	Pre-Test PRE & Post-Test PRE	10	.891	.001
Pair 3	Pre-Test ISE & Post-Test ISE	10	.904	.000

The above output showed the result of the correlation test of pretest – post-test variables. It was known that the correlation value was 0.741 with a sig value of 0.014 for the first aspect, 0.891 with a sig value of 0.001 for the second aspect, and 0.904 with a sig value of 0.000 for the third aspect. Because the sig value was $0.014 < 0.05$, means there was a correlation between pretest and post-test variables after treatment.

See sig value in this table:

Paired Samples Test

		Paired Differences						
					95% Confidence Interval of the Difference			
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	T	Df
Pair 1	Pre-Test IV - Post-Test IV	-2.200	1.317	.416	-3.142	-1.258	-5.284	9
Pair 2	Pre-Test PRE - Post-Test PRE	-2.000	.816	.258	-2.584	-1.416	-7.746	9
Pair 3	Pre-Test ISE - Post-Test ISE	-.400	.699	.221	-.900	.100	-1.809	9

According to the above table, there were three aspects of communication skills that could improve students' skill significantly, according to the Autism Spectrum Disorder using PECS, namely imitating verbal, expressing and responding desire and introducing the situation expression. The first aspect showed sig value after pretest-posttest with 2 tailed less than 0.05, showed that there was a correlation among connected variables. In other hand, for the first aspect (imitating verbal), based on the sig value of $0.01 < 0.05$, means the first aspect improved the communication skills for students with Autism Spectrum Disorder. The second aspect (expressing and responding desire) also showed that there was an improvement in the communication skills of the students with a sig value of $0.000 < 0.05$. The last aspect had a sig value greater than > 0.05 because all students could answer the questions about introduction of the situation.

Based on the table of Paired Samples Test, to answer the second research question, a descriptive analysis was completed by using the Statistical Package for the Social Sciences (SPSS) v.22.0 Software, **“What aspects of communication skills improve significantly according to the Autism Spectrum Disorder using PECS?”** There were three verbal questions given to students; Imitating Verbal, Expressing and Responding Desire, and Introducing the Situation Expression. The descriptive results shown in Table of Paired Sample Test, including means (M), standard deviations (SD), Standard Error Mean, Lower, Upper and Significance of pretest, post-test for total scores on verbal questions of 10 participants with Autism Spectrum Disorder by using PECS.

The sig value from pretest-post-test for Imitating verbal got 0.001, Expressing and Responding Desire got 0.000 and Introducing the Situation Expression got 0.104. There were two aspects increasing in the communication skills students with Autism Spectrum Disorder with significance value < 0.05 . The last aspect was greater than > 0.05 . If the sig. (2-tailed) < 0.05 , it could be concluded that based on the result of the pretest-post-test, there were mean differences, which means there was an effect of PECS on communication skills of autism spectrum disorder. (Santoso, 2014).

The first aspect was Imitating verbal. Based on the data, the sig value of this aspect was $0.001 < 0.05$. It could be concluded that based on the result of post-test, the treatment gave impact for children with autism spectrum disorder, where they were more likely to learn verbal imitation through picture exchange communication skills, focused on the objects, colourful picture, increased attention. Finally, all children indicated improvements in communication skills, and making a simple sentence.

The second aspect was Expressing and responding desire. Based on the data, the sig value of this aspect was $0.000 < 0.05$. It could be concluded that based on the result of post-test, the treatment gave increased impact for them after three times treatment. They could learn to use the cards to ask for what they need, make comments and answer other people's questions. Reduces negative or challenging behaviours caused by frustration, increases opportunities for interaction and learning, improves spoken English skills, to express their needs and desire.

In the last aspect; Introduction the Situation Expression of ASD, students are very easy to understand about communication skills with the theme of introducing the situation of the expression because they always use this expression every day, such as when they came to school, they always greet the teacher, “Good Morning” and when they go home they say “Good Afternoon, Mis” and so on. So, from these three aspects, the first and second aspects, namely

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Imitating verbal and Expressing and responding desire improve the communication skills to Autism of Spectrum Disorder. Those aspects use communication skills to control other people's behaviour, to ask for something, direct other people's attention to an object, enrich their vocabulary, or even for social reasons. The data taken on these several days also showed a direct correlation between students with autism spectrum disorder' communication skills and their behaviour.

Special note from the research, the researcher treated others based on previous theories. Impairments in socialization, communication and imagination cohere (Wing&Gould 1979). Before starting the introduction of PECS, student's behaviour and communication were recorded for several days. When they were unable to communicate their needed, they became physically upset. Each time the students was given the PECS, they will have one or two pieces of the food each time they were asked to make them remain calm and relaxed.

These few days proved that students with autism spectrum disorder had enough experimentation and practice with PECS to fully understand that they were communicating and their needs were met. Like choosing the one that students wanted, placed PECS with sentences strips, initiated communication by saying the words "I want" (desired item). It showed that the students with autism spectrum disorder could now initiate communication and meet their needs during snack time. In Autism spectrum disorder, the idea of limited interest referred to the development of special interest that was unusual in their intensity and focus. It also referred to inflexibility in thinking or behaviour, for example, rigid thinking patterns, routine, and consistency. Repetitive behaviour may include stereotyped motor mannerisms (eg; flapping hand or finger, repetitive speech or other rituals).

Based on DSM-IV-TR: American Psychiatric Association, 2000 autism spectrum disorder is defined on the basis of at least one qualitative disorder in the domain of communication skills with picture exchange communication system that greatly helps autism in communicating. By using PECS, many variants of pictures, fun pictures, thus students with Autism Spectrum Disorder are very enthusiastic about learning English as a communication skill.

Educator who seeks a broader understanding of how nutrition affects children's cognitive functions and their ability to learn in class for example food nutrition; chocolate, flour, milk, sugar and etc. It was very important for educators to understand how certain foods, food additives, and nutrient deficiencies contribute to behavioral problems, hyperactivity, lack of attention, and poor classroom performance. Nutritional interventions could help children with autism benefit from their special education service and should be considered in the educational system (Strickland, 2009).

5. Conclusion and suggestion

The use of PECS could make students excited in learning English in class and helped them to communicate through pictures. The picture exchange communication system had proven to have a positive effect on them. This was a big improvement in students' ability to communicate their wants and needs. In this study, there were two aspects that gave impacts; Imitating verbal and Expressing and Responding Desire. Students with Autism Spectrum Disorder used

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communication skills to control other people's behaviour, to ask for something, other people's attention to an object, enrich their vocabulary, memorize pictures, or even for social reasons.

1. It is suggested that parents use PECS as the communication strategy as a learning strategy even for other subjects.
2. Parents must accept the condition of the children. They should had education in accordance with their conditions.
3. Parents must support facilities for learning communication skills, pay attention to childrens's condition, and accompany them when doing therapy.

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