CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter discusses about students with special needs, autism spectrum disorders, teaching English vocabulary, teaching English vocabulary for autism spectrum disorders, and previous study.

A. Students with Special Needs

1. Definition of Student with Special Needs

Students with special need are students who have special needs and require special education as well, so that their talents and interests can be developed. Another term for students with special needs is "extraordinary students", which indicates a special disorders (Hallahan et al., 2005). Students with disabilities need a special learning method. A varied pattern is expected to increase the potential of students in learning activities. Both to support the development of reasoning, physical, and socialization. (Smart, 2012: 33) argues that student with disabilities are students with special characteristics and are different from other student in general.

According to Saji (2018: 39), a member of the Sidoarjo District and East Java Province Inclusive Education Working Group, students with special needs is another term for disabilities in education. Student who need special treatment and attention, both from parents and educators, especially in terms of what is needed. Such as limitation,

advantages, disadvantages, talents interest, and potential. Saji (2018: 61) also explained that disability is a condition of obstacles in hearing, physical vision, intelligence, nerves or a mixture of some of these obstacles. This can have an impact on physical, emotional, and social development. Therefore, students with special needs are students who have different characteristics inside and out. Both in terms of physical, heath, sensory, thinking, adapting, emotional and social abilities. This affects their special needs in education.

The characteristics that characterized students with special needs can be explained through three different perspectives, namely biological, psychological, family, social, and cultural factors. Biological perspective is characterized by developmental barriers due to genetic and neurological factors (Widayanti, 2016). The psychological perspective is characterized by emotional barriers that are not successfully overcome so that maladaptive (abnormal) behavior appears. The family, social, and cultural perspective refers to barriers that are influenced by the family, social and cultural environment. some categories of students with special needs include slow learners, ADHD, intellectual disability, and autism. Students in slow learners' category show cognitive limitations cognitive limitations, low memory, easily distracted, and low concentration (Kusuma, 2006).

2. The General Classification of Students with Special Needs

The general classification of students with special needs is generally divided into two broad groups.

- 1. Temporary students with special needs are students with learning and developmental disabilities caused by external factors. For example, children who experience emotional disturbances due to trauma and so on. Learning and developmental barriers in these children can still be healed as long as parents and those closest to the child provided that parents and those closest to them are able to provide healing therapy that can restore their psychological condition to normal.
- 2. Permanent students with special needs are those with learning and developmental disabilities that are a direct result of the characteristics and learning needs of these children include blind, hearing impaired, quadriplegic, mentally disabled, slow learners, children with learning difficulties, such as children with communication disorders, tonality or emotional and behavioral disorders.

3. Types of Students with Special Needs

The types or categories of children with disabilities are set out in Permendiknas No. 70 of the Republic of Indonesia. 2009, on Inclusive Education for Learners with Disabilities and Special Potential and/or Talent. Article 3. Learners with disabilities, as

referred to, include 13 types, namely the visually impaired; deafness; speech impaired; mentally disabled; quadriplegic; tonality; learning difficulties; slow learners; autistic; have motoric disorders; are victims of abuse of drugs, illegal drugs, and other addictive substances; have other disorders; and are multiply disabled. Slightly different from the Permendiknas above, of the 13 categories, the East Java Governor Regulation No. 6 Year. 2011 concerning the Implementation of Inclusive Education in East Java Province Chapter III, Article 11 Paragraph (2), students with special needs have one more category, namely the 14th category, special intelligence and/or special talent.

1. Visually Impaired

In the world of special education, visual impairment is defined as a barrier to receiving information using the sense of sight, often referred to as blindness. A person is said to be visually impaired if their vision is less than 6/21. This means, based on the test, the person is only able to read letters at a distance of 6 meters, which should be able to be read at a distance of 21 meters by a sighted person (Somantri, 2012: 65-66). There are two types of visual impairment: blindness and low vision. Blindness is when the person is unable to receive light stimuli from the outside at all (visus 0). Low vision, on the other hand, is when a person is still able to receive light stimuli from outside, but the acuity is no more than 6/21 (Somantri, 2012: 66). On the other hand, Smart (2012: 36) classifies the visually impaired into three types. The

three include myopia, hyperopia, and astigmatism. Myopia means near vision (nearsightedness). Hyperopia means distance vision (farsightedness). While astigmatism means blurred or distorted vision due to problems with the cornea of the eye or other surfaces, on the cornea of the eye, so that the image of the object is not focused on the retina.

2. Deafness

Deafness can be interpreted as a condition of deficiency or even loss in terms of hearing (Somantri, 2012: 93). This causes a person to be unable to stimulate sound through the sense of hearing. In addition, Dwidjosumarto (in Somantri, 2012: 93) explains that deafness is divided into two, namely deaf, and low of hearing. A person is said to be deaf when his hearing is severely damaged. While a person with a deficiency hearing is when it is damaged, but can still function to hear. This hearing loss or deafness can also affect a person's speech. They may have difficulty speaking, given that speaking ability is also influenced by how often they listen to conversations (Smart, 2012: 34).

3. Speech Impaired

Speech impaired is a term used for people with speech impairment. People with this disorder can also receive education in schools that organize inclusive education (Kemendikbud, 2016: 38). In addition, according to Religiana (2016: 25), speech impaired is those who have

difficulty speaking, because of the lack / malfunction of the speech apparatus, it can also be the sense of hearing, nerve damage / muscle structure, or language development delays.

4. Mentally Disable

Mentally disable is a term for people with below-average intellectual or mental retardation. This disability can be characterized by limited intelligence of interaction skills. Based on intelligence measures using the Stanford Binet test and the Wechsler scale (WISC), the mentally retarded are classified into four classifications as follows (Smart, 2012: 49-52).

- a) Mild (Moron/Debil), has an IQ of 50 55 to 70.
- b) Moderate (Imbesil), usually has an IQ of 35 40 to 50 55.
- c) Severe, has an IQ of 20 25 to 35 45.
- d) Profound, according to the Binet scale IQ below 19, while the WISC test is below 24.

According to Smart (2012: 63), down syndrome is one part of mentally disable, which is an abnormality in the formation of chromosome. This abnormality occurs because of the failure of a pair of chromosomes to separate from each other during the division process. A person with this disease is also called mongoloid, because it is clearly seen from the physical aspect that resembles a Mongolian. Has a flat nose resembling Mongolian. In addition to Down syndrome, they also have a relatively short body and a head that seems smaller.

5. Quadriplegic

Quadriplegic or disability is a connotation for people with physical abnormalities, such as in the hands, feet or body shape. Another term for disability is physical disability. Any physical impairment related to motor skills and accompanying symptoms that inhibit activity (Smart, 2012: 44). In addition, according to Djaja Rahaja (in Smart, 2012: 45), the disabled are divided into two groups, namely pure and combined. Pure quadriplegics are those with mental or intelligence disorders, poliomyelitis and other orthopedic defects. Meanwhile, people with combined disabilities are still normal, but predominantly have mental disorders. On the other hand, there are others who classify the disabled into three groups. These are: 1) mild deaf blindness, which includes pure deaf blindness and mild combination deaf blindness (slight mental impairment and normal intelligence). 2) moderate level of disability, which is due to congenital defects, mild tuna mental, and mild polio. 3) Severe level of disability, which is the result of severe disability and infection (Smart, 2012: 45-46).

6. Tonality

Tonality is a term for people with barriers to emotional control and social control. It usually shows deviant behavior and is not in line with general norms (Smart, 2012:53). It is classified into two broad categories. The following is the development according to William (in Smart, 2012: 53-54):

- a) Difficulty adjusting to the social environment, including the semisocialized child (limited to a certain environment), children arrested at a primitive level of socialization (low level social), and children with minimum socialization capacity (no social ability).
- b) Emotional disorders, including neurotic behavior (having personal problems that cannot be resolved) and children with psychotic processes (lacking self-awareness).

7. Learning Difficulties

Learning difficulties are defined as impairments receptacle, conceptual, memory or expressive impairment in the process of learning process. Children in this category have disorganized mental and physical functioning that is disorganized. This can impede the normal flow of learning and cause delays in receptacle-motor or language skills (Somantri, 2012: 195).

8. Slow Learners

Slow learner is a term for a person/child who has an intellectual below normal average. Therefore, it results in inhibited/slow thinking, socializing, respond, and stimulate (Religiana, 2016: 26).

9. Autism

Autism is a condition carried from birth or toddlerhood. It causes a person to be unable to communicate in a social environment normally. Neurologically, autism is defined as a disorder of brain development, especially in the social, language, and fantasy parts (Smart, 2012: 56).

On the other hand, autism according to (Yuwono, 2012: 24) is a developmental disorder that affects a child's aspect of seeing the world and learning through his experiences. Meanwhile, according to (Maulana, 2012: 11), autism can occur in 5 out of every 10,000 births, where the number of male sufferers is four times greater than female sufferers. However, it is assumed that female sufferers are more severe than males. (Smart, 2012: 61) also formulates that the potential for autism is triggered by food. Precisely in research that suspect's modern food contains chemicals and causes cases of Attention-Deficit-Hyperactivity-Disorder (ADHD) to increase.

10. Motoric Disorders

Difficulties in riding a bike, buttoning clothes, or using scissors are examples of children experiencing developmental coordination disorder (DCD). According to an alodokter article reviewed by Dr. Marianti (2017), motor nerve disease is a nerve disorder that results in a gradual loss of muscle strength gradually. DCD children usually also experience concentration problems and speech delays. Children with poor coordination function will have an impact on physical activity abilities and in the long term affect their weight (Dr. Jhon Cairney, in kompas.com, 2010).

11. Victims of Drug, Illicit Drug, and Addictive Substance Abuse

In addition to physical and mental disabilities, children who are victims of drug abuse also fall into the category of children with disabilities who can pursue inclusive education. However, there may be fewer of these children than the other categories (Kemendikbud, 2016: 53).

12. Other Disorders

Other disabilities refer to disabilities other than the thirteen other categories. In other references, there are several different terms or other children with disabilities who also require special or inclusive education.

13. Multiple Disorders

A person with multiple disorders is a person/child who has more than one type of disorder (Religiana, 2016: 26). Meanwhile, according to a book compiled by the Ministry of Education and Culture (2016: 65), multiple disabilities are people with a combination of disorders, which cause serious educational problems. So, it needs to be overcome and must be approached with a variety of educational programs according to the disorders they have.

14. Special Smart or Special Talented

Giftedness is formed from the interaction of three important clusters, according to Renzulli (in Somantri, 2012: 162), which include above-average ability, high commitment to tasks, and creativity. It is a combination of intellectual skills, academic achievement, creativity and talent, and social aspects.

Based on the explanation of types of students with special needs above, this research decides to investigate students with autism spectrum disorders. The reason is that student with autism spectrum disorders have unique learning styles, and there are still knowledge gaps that need to be filled in understanding how autistic students learn.

B. Autism Spectrum Disorders

The definition of Autism is provided by various experts. In the book "Effective Educational Practice for Students with Autism" (2007) by the Ontario Ministry of Education, it is noted that autism was first identified in 1943 by Leo Kanner, an American psychologist. Kanner (1943) observed distinct and shared characteristics in a subgroup of children who had originally been diagnosed with other mental disorders. He recognized that this subgroup had difficulty relating to other people and situations in the typical manner, and he termed this behavior as "extreme autistic aloneness" (Kanner, 1943). Consequently, the condition was referred to as autism for several decades. According to Geniofam (2010), "autism" is derived from the word "auto," which signifies being alone. Geniofam suggests that autistic children seem to live in their own world or are constantly engaged in their inner imaginative thoughts. Children diagnosed with autism may encounter challenges in comprehending visual and auditory information. As outlined by the British Columbia Ministry of Education in their publication "Teaching Students with Autism" (2000). Autism is a lifelong developmental disability that hinders individuals from understanding what they see, hear, and

otherwise perceive. This condition leads to significant difficulties in forming social relationships, communication, and behavior.

While individuals with autism share certain common features, there is considerable variability among them. The British Columbia Ministry of Education (2000) notes that autism symptoms can manifest in diverse combinations and may coexist with other disabilities. The level of intelligence in people with autism varies, with some having normal intelligence levels, while most have some degree of intellectual disability, ranging from mild to severe. This spectrum is often described as ranging from high-functioning autism to low-functioning autism. Expressive and receptive language, as well as communication, may present challenges, and it is estimated that up to 50% of individuals with autism do not develop functional speech. For those who do, speech may exhibit unusual qualities and have limited communicative functions. All individuals with ASD experience difficulties in social interaction and behavior, although the nature and extent of these challenges can vary. Some individuals may be very withdrawn, while others may display excessive activity and approach people in unconventional ways.

The exact causes or combination of factors contributing to autism remain not entirely understood. According to the Columbia Ministry of Education (2000), there is mounting evidence that autism has a genetic basis, likely involving multiple genes. The way these genes are transmitted appears intricate, and researchers are concentrating their efforts on identifying which genes are implicated and how they are influenced. Currently, it seems that

there is a genetic predisposition in at least a significant subset of individuals with autism, although the specific genes involved may vary from one family to another.

Furthermore, there is also evidence suggesting a higher occurrence of early-life issues during pregnancy, at birth, or shortly after birth among children with autism compared to those without the condition. Early life events and environmental factors may interact with the child's genetic susceptibility in significant ways. Recent investigations, including imaging studies, electroencephalographic studies, analyses of autopsy material, and studies of neuronal chemistry, have further strengthened the case for a biological basis of autism. The brains of individuals with autism exhibit structural and functional variances compared to those of the general population, including abnormalities in the brain stem and cranial nerves. Ongoing research aims to identify the specific genes and other factors that contribute to the development of autism.

From the given definition, it can be inferred that ASD involves atypical or impaired development in social interaction and communication, manifesting in childhood. Autism is a persistent developmental disability that hinders individuals from comprehending visual, auditory, and sensory information. It is noteworthy that some children with autism may demonstrate unique abilities distinct from other autistic children, suggesting that while they share certain common feature, there is considerable variation among individuals with autism.

C. Teaching Strategy

1. Definition of Teaching Strategy

In its broadest meaning, teaching is the process through which a teacher leads a student or a group of students to a greater level of knowledge or skill (Nilsen and Albertalli, 2002). Teaching is defined as engaging learners to help them comprehend and apply their information, concepts, and procedures. Design, content selection, delivery, assessment, and reflection are all part of this process. Teaching entails involving students in the learning process, and thus involving students in the active creation of knowledge. A teacher must understand not only the subject matter but also how pupils learn and how to turn them into active participants. Therefore, good teaching necessitates a dedication to systematically understanding learning. Teaching's goal is to change students from passive recipients of other people's knowledge into active creators of their own and other people's knowledge.

While a strategy is described as a technique, plan, or sequence that is specially planned, it is a plan that involves a series of activities that are designed in such a manner that they are a common means to attain educational goals. Thus, it is stated that the strategy is designed to make a learning process more active through teaching and learning activities. It is proven that the strategy is a system that is interrelated with teaching and learning activities. Teachers, students, and facilities are among the components of this system. In the teaching and learning process, each

component plays a specific role. The teacher has created the lesson plan; now it is the responsibility of the teacher to prepare tricks for efficient and effective teaching and learning activities. The process is known as a teaching strategy (Dafid, 2011).

2. Types of Teaching Strategy

In the process of teaching a language, a variety of teaching tactics can be used. According to Wehrli (2003), the following are the teaching strategies:

a. Brainstorming

According to Al-Khatib (2012), brainstorming is a collaborative creativity venue for general ideas. He also emphasizes the importance of brainstorming for students, such as assisting students in solving problems, assisting students in benefiting from the ideas of others through development and building on them, and assisting students in cohesion and building relationships among them, as well as assessing the viewpoints of others.

b. Case-based discussion in small groups

A small group of 5-10 students addresses case-based problems, exchanges points of view, and works through a problem-solving process in this teaching style. The group focuses on creative problem solving with some advanced preparation in this teaching method process.

c. Demonstration

The demonstration is an activity in which learners are asked to present their ideas in front of their peers so that they may see how it is done and help them translate theory to practice. Furthermore, the demonstration technique entails the teacher demonstrating a skill to students (Adekoya and Olatoye, 2011).

d. Games

As a motivator and chance for the application of principles, games are utilized to introduce competitions, participation, drills, and feedback into the learning experience. The game can motivate learners to participate in activities, enhance team learning and collaboration skills, and create a joyful learning atmosphere.

D. Strategies of Teaching English Vocabulary

Every language has its own vocabulary, especially in English. However, when someone wants to master a language, vocabulary is the basis. Wallace (1987:2) states that learning a foreign language is basically learning its vocabulary. It is simple to understand the concept of language in communication. Strategies for teaching vocabulary are needed before teachers start teaching in the class. The use of the appropriate method might help teachers and students make teaching and learning activities easier. There have been many techniques and strategies for teaching vocabulary that have been developed by experts. Schmitt (2000) states that vocabulary

learning strategies can empower learners and attract learners' attention in learning language in a way that will improve the learners' vocabulary development. The guarantee of mastering vocabulary is the ease of mastering language skill; listening, speaking, reading, and writing. In part of strategies is used Schmitt (2000) theory. He argued that teaching and learning vocabulary includes five strategies, namely determination, memory, social, cognitive, and metacognitive.

a. Determination Strategies

Determination strategies include guessing the word based on knowledge, asking the teacher / other people, and using dictionary. An example of determining strategies is using a textbook to teaching material.

b. Social Strategies

A social strategy aims to help students understand the definition and meaning of a word with help from other people such as teachers, friends, parents, etc. Example of social strategies is interacting with a native speaker, study group, and asking a teacher/classmate.

c. Memory Strategies

Memory strategies are strategies that require students to use their memory abilities (remember). Example of memory strategies is remembering the vocabulary list, word grouping, etc.

d. Cognitive Strategies

Cognitive strategies concentrate on using repetition for interpreting vocabulary. Example of cognitive strategies is a word list, flash cards, repetition, etc.

e. Metacognitive Strategies

Metacognitive strategies are strategies carried out by students independently. An example of metacognitive strategies is using media such as picture, music, video, movies, newspapers, etc.

E. Strategies of Teaching English Vocabulary to Autism Spectrum Disorders

In most instances, a positive diagnosis of autism doesn't occur until children conspicuously exhibit a delay in developing typical language skills (Bee & Boyd, 2007). Accordingly, the most evident hallmark of autism is the presence of communication and language difficulties. Individuals with autism encounter phonological communication and language challenges such as: (1) displaying unusual tone, pitch, rate, and rhythm in their speech (Halgin & Whitbourne, 2007); (2) exhibiting a lack of appropriate stress in their speech (Carroll, 1985); and (3) demonstrating abnormal intonation in their speech (Bee & Boyd, 2007). Given these phonological communication and language hurdles faced by individuals with autism, the teaching of pronunciation, important vocabulary aspect, necessitates an the implementation of suitable strategies. Some recommended strategies by experts include engaging in "instructional" read-aloud activities (Pikulski & Templeton, 2004), encouraging learners to repeat word pronunciations, and providing the stress patterns of words (Nation, 2008) as crucial elements in pronunciation instruction for students with autism.

Apart from phonological communication and language difficulties, individuals with autism also contend with semantic challenges, particularly in terms of their ability to grasp the meanings of individual words (Carroll, 1985). This pertains to another crucial vocabulary aspect, namely, word meanings. Among the strategies endorsed by experts, the use of realia (Harmer, 1991), pictures (Harmer, 1991), and mime, action, and gesture (Harmer, 1991) must be reinforced to teach word meanings to students with autism. Of these strategies, pictures are recognized as the most effective means of fostering vocabulary acquisition in autistic students. Furthermore, (Garsid., et al 2000) emphasize that individuals with autism often struggle with comprehending verbal information, following verbal instructions, and retaining a sequence of instructions. This presents a challenge for English teachers when teaching spelling and word usage to students with autism. To address this concern, writing words on the board and pointing out their spelling (Nation, 2008) and employing a discovery technique (Harmer, 1991), such as a simplified form of word matching or encouraging the use of bilingual dictionaries or glossaries, are recommended approaches for teaching spelling to students with autism. Meanwhile, practice activities (Harmer, 1991) that involve writing words like 'bring,' 'take,' and 'put' in sentences on the whiteboard and then having students put them into action by creating

engaging classroom activities should be emphasized when teaching word usage to students with autism.

F. Previous Research

The first research was done by Sulaiman (2019). The research studied a set of English teaching and learning materials that are suitable for autism students. This research is a qualitative research using research and development with a focus on developing English language materials to be more practical and more interesting to follow for students with autism. The results of this research indicate that the involvement and concentration of autism students in interacting with the various subjects matter are presented from the multimedia teaching materials that made by the researcher containing physical and group activities. And also students can convey ideas in groups when given an assignment and naturally do more active physical activities.

The second research conducted by Padmadewi (2017). The focused of this research was to look into the best way to teach English to students with autism spectrum disorders in regular classroom setting. This research is a case study that carried out in the North Bali Bilingual School. The findings suggest that using visual media in the Individual Education Plan (IEP) through coteaching, differentiated instruction, and a "buddy program" is effective in helping students learn English as a foreign language.

The third research was done by Charpentier (2021). This research focused how to know the help these students in their process of acquiring

English as a foreign language especially in the listening and speaking skills. The method of this research is qualitative based on a case study. The results showed that when the students used the advised tactics, he or she performed better in English.

The fourth research was conducted by Sadewa (2016). The focused of this research is to know the strategies used by the teacher in step of teaching English for autistic students. This research uses qualitative case study and the result of this research showed the teacher's strategies used by teacher in teaching and learning process.

The fifth research was done by Mifta (2021). This research focused on investigating the realization of English language teaching strategies for autism spectrum disorders students. This research applied a descriptive qualitative method to reveal the data. The results showed that the teacher used three strategies in teaching children with autism through the PECS method. The difference between the previous researches lies in the research objectives and research method used.

Based on the previous researches that use strategy teaching English to autism spectrum disorders, the research gap of the research is the research investigate the strategies of teaching English vocabulary to students with autism spectrum disorders, while the other mostly only strategy teaching English in general not in the specific skills.