

CHAPTER I

INTRODUCTION

1.1 The Background of the Study

Most students with Autism Spectrum Disorder (ASD) are difficult to write. Even a simple writing assignment can trigger a major meltdown. The process of writing requires much more than ability to form a pretty letters. The writing process involves skills in language, organization, motor control and planning and sensory processing. Four areas that are problematic for many individuals with ASD. It is essential that parents and teachers consider how each of these areas may be affecting a student's reluctance to the writing process. Hopper (2009) stated that the sensory system takes information from the surrounding environment through touch, smell, sound, vision, taste, movement, and gravity.

Graham (1990) said that children with learning disabilities have a harder time writing than children without learning disabilities. Steve Graham states that children with learning disabilities have considerable difficulty generating context. For example, the papers of students with no diagnosed learning disabilities were twice as long as those of learning disabled students. In addition, learning disabled students are less likely than non-disabled students to develop text that adequately conforms to the purpose, conventions, and features of the genre under consideration.

It processes or interprets these sensations together to make sense of the environment. The process of sensory integration lays the foundation for the efficient operation of the nervous system and other parts of the body that respond to the signals sent by the nervous system. The child then responds to these sensory inputs and makes appropriate responses perform skills required. These difficulties put children with ASD at high risk for many

emotional, social, and educational problems, including the inability to make friends or be a part of a group, poor self-concept, academic failure, and being labelled clumsy, uncooperative, belligerent, disruptive, or out of control, anxiety, depression, aggression, or other behavior problems can follow. Parents may be blamed for their children's behavior by people who are unaware of the child's hidden handicap.

Teachers are always looking for new ways to teach students so the learning will benefit for the students. It cannot be denied that education plays an important role in the life of every individual, therefore equality and equity in education needs to be strengthened and supported to confirm the need of giving care and attention to all including the students with special needs. Having basic education is the right of every individual in Indonesia and the treatment toward special need student which has been commonly carried out to segregate them from other students who are in a regular classroom, and treat them differently from the mainstream students.

The segregation of the special needs students in regular school and also other places in Indonesia has been conducted by the government in a special government school for special need children called Sekolah Luar Biasa (SLB) and this type of education has been well accepted in society and so far been considered as the best treatment for the students. SLB is the specialist school for students who have learning difficulties which includes the students who are physically disabled and behaviorally and emotionally disturbed. However there have been an increasing number of parents who prefer to enroll their children at a regular school as they want their children to be educated in a regular classroom like other mainstream students. In spite of the preference of the parents, it cannot be denied that the segregation of the special need children may prove to be easier for the teacher because pedagogically the teacher might find it easier to handle the students having similar conditions in a classroom.

However experts and researchers who work in special education question the benefits of segregated special education and consider that integrating them in a regular classroom may bring better results. Rutte (2014) stated that integrating special need students in a regular classroom is rooted from several reasons. The special need teachers and students feel that they have been excluded and hidden away in their schools, even the best equipped school cannot replace the normal environment. Integrating students is also considered to be more attractive to parents. The development of character values like tolerance, empathy, and helpfulness is often not a priority in mainstream schools and a policy of integration could help improve this. Inclusion is also pertaining to equity and social justice which show acceptance, and practice respect, empathy, care and recognition (Frattura & Capper, 2007; Theoharries, 2009; and Ford, 2013).

There are four strategies that can be recommended for handling students with learning disabilities including ASD, they are co-teaching, differentiated instruction, and peer-mediated instruction and interventions (Ford, 2013). Vaughn, Schumm, & Arguelles (1997) describe co-teaching as a strategy of teaching 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 next type of model is parallel teaching where the two teachers plan and design the lessons together before the class is split into 2 groups each of which is handled by each teacher. The benefit of this model is that each group can get each other's expertise in addition to being able to have discussion and work in small groups. The other model of co-teaching is a model where one teacher is responsible to prepare the main teaching and to do re-teaching if it is needed to provide additional support for students with learning disabilities. Beside these models, the two teachers can be in the same classroom each of which can take turns to do instructions for the students, or each can assist students while the other gives instructions for other students. The strategies implemented are mediated by

the use of two languages (English and Bahasa Indonesia) to meet the mission of the school as a bilingual school. English is used fully by the main teacher to teach the core subjects in the classroom they are English, Science and Math, and if found confusing, the assistant teacher/ the shadow teacher can use Bahasa Indonesia to the student to clarify the meaning.

Center for Disease Control (CDC) United States (2008) reported that the comparison of autistic children in 8 year old is diagnosed 1:80. According to World Health Organization (WHO), the prevalence of autistic children in Indonesia is getting higher extremely, that is from 1 per 1000 become 8 per 1000 population and beyond the world average that is 6 per population. In 2009 was reported that the autistic children are 150-200 thousands (Sari, 2009). United Nations Educational, Scientific and Cultural Organization (UNESCO), (2001) released the autistic people in the world are 35 million. In 2010, it was predicted the autistic people in Indonesia are 112 thousands from 5-19 year old. Kompas (2012) stated that the autism increased and autism is dominated in boys than girls (Kompas, 2014). In 2015, it was predicted the autistic people in Indonesia more than 12.800 and 134.000 are diagnosed Autism Spectrum Disorder (ASD) (klinikautisme.com). Badan Pusat Statistik (BPS) showed that the percentage of child between 0-14 years old is high risk for autism.

Provinsi	Tahun					
	2010	2015	2020	2025	2030	2035
(1)	(2)	(3)	(4)	(5)	(6)	(7)
11 Aceh	32,3	31,5	30,5	28,5	26,2	24,2
12 Sumatera Utara	32,9	32,0	30,8	28,8	26,6	24,9
13 Sumatera Barat	31,1	30,3	29,2	27,5	25,7	24,2
14 Riau	32,6	31,2	29,8	28,2	26,3	24,7
15 Jambi	30,2	28,2	26,1	24,2	22,4	20,8
16 Sumatera Selatan	29,9	28,9	27,6	25,9	23,9	22,3
17 Bengkulu	30,1	28,5	27,0	25,3	23,6	22,2
18 Lampung	29,0	28,2	27,1	25,2	22,8	21,0
19 Kep. Bangka Belitung	29,1	27,6	26,2	24,8	23,2	21,8
21 Kepulauan Riau	29,9	30,9	28,9	25,8	22,9	21,2
31 DKI Jakarta	24,2	24,8	24,7	23,2	20,2	17,7
32 Jawa Barat	28,8	27,2	25,7	24,3	22,6	21,1
33 Jawa Tengah	26,2	24,7	23,2	21,7	20,3	19,2
34 DI Yogyakarta	22,1	21,8	21,5	20,9	19,8	18,6
35 Jawa Timur	24,6	23,2	21,9	20,5	19,4	18,5
36 Banten	29,9	28,6	27,4	25,6	23,1	21,0
51 Bali	25,6	24,5	22,8	21,2	20,1	19,3
52 N T B	31,2	30,1	28,9	27,1	25,3	23,9
53 N T T	36,5	35,1	33,7	32,6	31,8	31,1
61 Kalimantan Barat	30,9	29,6	28,3	26,7	24,8	23,1
62 Kalimantan Tengah	30,6	28,6	26,7	24,9	23,1	21,5
63 Kalimantan Selatan	29,4	28,8	27,7	25,8	23,6	22,0
64 Kalimantan Timur	30,4	28,7	26,9	25,2	23,2	21,5
71 Sulawesi Utara	26,9	25,8	24,5	23,2	21,7	20,6
72 Sulawesi Tengah	30,2	29,0	28,0	26,9	25,3	23,9
73 Sulawesi Selatan	30,5	28,8	27,5	26,2	24,7	23,3
74 Sulawesi Tenggara	35,1	33,7	32,2	30,1	28,4	26,8
75 Gorontalo	30,6	28,4	27,1	26,1	24,9	23,6
76 Sulawesi Barat	33,6	31,8	30,8	29,8	28,6	27,4
81 Maluku	34,7	33,3	32,3	31,3	29,9	28,6
82 Maluku Utara	35,1	33,7	32,0	30,1	28,4	27,1
91 Papua Barat	33,1	31,2	29,4	27,8	26,3	24,8
94 Papua	33,5	30,7	28,5	26,8	25,2	23,8
Indonesia	28,6	27,3	26,1	24,6	22,9	21,5

Figure 1:1 Proyeksi anak usia 0-14 tahun, sumber : BPS

There are some previous studies had discussed about the writing development of autistic student. Padmadewi (2017) concluded that the tendency of ASD student to be visual learners has been accommodated by the decision of using visual media as the main media for

instructions. The use of visual media in differentiated instruction in the form IEP has been observed to have important and beneficial impact on the motivation and success of the ASD student in learning English language. This impact was strengthened by the use of co-teaching strategy in inclusive classroom, visual support, and buddy program (for a model on how to behave and act especially in matters pertaining to non-academic activities). Presenting the message through visual supports or media helps the student establish and maintain attention. It also gives information in a form that the student can quickly repeat. The visual supports also clarify verbal information and provide a concrete way of internalizing concepts like time concept, sequence or cause/effect. The stability of the visual information allows the element of time necessary for the student to disengage, shift and re-engage attention. As a result, the student seems to understand better what he sees than what he hears and has visual interpretation skill that appear far superior to his auditory performance.

Andreevski (2013) stated that to be successful within the population of students with ASD. In the future, these particular participants will continue to work on compositions with the use of digital pictures. If increased time was available, additional stories would have been added to the study; hence the results would have been stronger. Limitations within the study include; the length of the study, the sample size, research method, and the number of teachers used in the study. The length of the study was five weeks. In order to reinforce the program and writing improvement, the study would need to be longer. If given an entire school-year for the study, the students would be able to become very familiar with the program and the required writing guidelines, thus the writing skills of students with disabilities would further improve. Also only one teacher was involved in the current study. If more teachers participated to implement the computer-assisted program, they would collect more data to compare the results of the writing improvement of students with ASD.

Saddler, Knox, Meredith, Akhmedjanova (2015) stated that students who began the study already writing at the sentence level appeared to make greater gains than those with lower writing ability. Student who wrote only scribbles at pre-test and post-test, was unable to work independently during the intervention (though he was able to select a picture and write one unintelligible word with prompting). One possible explanation may be that the intervention period was quite short, and although the lessons seemed to benefit the students, interaction with the interventions for a longer period of time may have results in greater improvements in quality. Another benefit of the technology was that, as in other studies, it increased students' independence and decreased their dependence on the teacher and paraprofessionals (Kagohara et al., 2012). For example, students with word prediction software did not need to wait for an adult to help them spell words.

From some of previous studies above, the researcher is interested to develop the writing of autistic student through the picture books. Picture book is a book with a lot of pictures and not much writings. Many picture books are intended for children. The picture book began to be taken seriously as an object of academic study during the latter years of the twentieth century. The first major works in English to address the form and its nature was done by Schwartz in *Ways of the Illustrator* and Nodelmann in *Words About Pictures* which were published in the 1980s. Since then there has been a steady increase in the flow of articles, conference papers and book chapters dedicated to the study, criticism and analysis of the picture book. The unique character of picture books as an art form is based on the combination of two levels of communication, the visual and the verbal. Picture books can be seen "as a kind of miniature ecosystem" (Lewis, 2001: 46) which suggests that "the words and the pictures in picture books act upon each other reciprocally, each one becoming the environment within which the other lives and thrives" (Lewis 2001: 48, 54).

According to Nikolajeva & Scott (2006), picture books give the impression of being an exciting, stimulating and vibrant branch of students' literature. During the last years they have found that there has been a vast increase in the quantity of high quality picture books published for children. Yet, it seems like our understanding of the interaction of word and image in picture books, how readers negotiate meaning and how to choose adequate picture books which leads to an increased reading comprehension is limited.

Nodleman (1988) portray the picture book as:

Picture books are clearly recognizable as children's books simply because they do speak to us of childlike qualities, of youthful simplicity and youthful exuberance; yet paradoxically, they do so in terms that imply a vast sophistication in regard to both visual and verbal codes. Indeed, it is part of the charm of many of the most interesting picture books that they so strangely combine the childlike and the sophisticated – that the viewer they imply is both very learned and very ingenuous (Nodleman, 1988: 2).

The pictures in picture books are complex iconic signs, and words in picture books are complex conventional signs. However, the basic relationship between the two levels is the same. The function of pictures, the iconic signs, is to describe and represent while the function of words, the conventional signs, is primarily to narrate. The conventional signs are often linear, while iconic signs are nonlinear and do not give the reader direct instruction about how to read them. The tension between the two functions creates unlimited possibilities for interaction between word and image in a picture book. Pictures may also interpret the text and then translate the information into a more comprehensible form. They could transform the text into a representation which is more memorable, perhaps by using pictorial metaphors. These pictures could motivate emotional responses like enjoyment, emotions and attitudes, and support cognition by stimulating or facilitating comprehension and retention and by supplementing information (Levie & Lentz 1982).

There is evidence that pictures can have these effects. They can be effective cues for identifying words and illustrating the meaning of new words in specific contexts. They can

affect attitudes and have emotional impact. They can also help to develop an organized understanding of the meaning of the text (Samuels 1970 and Coldstein & Geoffrey Underwood 1981). Coldstein and Underwood (1981) point out that pictures can distract and lead the reader astray. Such is the power of pictures that they seem able to subvert reading instruction by making the reading of words redundant.

Writing is one of the hardest skills for a student to master because it requires multiple steps and multiple skills. A student must organize his thoughts, keep track of what he wants to say, remember how to spell each word, and keep track of grammar (capitalization, commas, periods, correct verb tense, etc.). As student get older, teachers often expect more and more writing – not just for language arts and spelling, but for social studies, science, and other subjects. Students are often asked to express their thoughts and ideas in writing and answer questions that require a sentence, paragraph, or even an essay to show what they have learned. Homework and worksheets also require writing. In the more advanced grades, it is expected that students will be able to take notes. Clearly, difficulties with written expression can impact a student in all subjects in school.

For example, how autistic student (Mf) takes note to help him remember about their holiday with his big family to Japan.

Going to Japan,

I go Japan with my mommy and my daddy

We sleep in hotel. We go to swimming pool. We go with Garuda Airlines.

We eat nice food with chicken. We go home to Medan again.

During explaining his holiday, he could not retell the story in sequence. He said that they slept in a hotel and they went to the swimming pool after arriving in Japan, but after that,

there was a sentence saying that they went to Japan by Garuda airline. It showed that he was not focus on one topic discussion. He could not sort the event based on its sequence. Even, He did not try to remember the sequence itself. It is very difficult for him to memorize one event he did in his life. So, he needed someone to guide and remind him everything in his life like mother or even shadow teacher. The student with ASD is less likely than his normal peers to initiate conversations, respond appropriately to the conversational turns and be able to understand the intention and the illocutionary force of utterances. Autistic students shows poor understanding towards the emotional states of others and struggle in particular to use facial expressions to show his emotions (Cummings, 2014). Mf often ignored his classmates who wanted to help him in completing his assignment and he rejected them by going away from them. The students with autism struggle with comprehension (Williamson, et al., 2014; Accardo, 2015). Besides that, students with disabilities often have problem with managing their cognitions in order to understand what they read (Cain et al, 2004; Duff & Clarke, 2015). Students with ASD may show ability in decoding any information but often have problem in comprehending what they read, and have difficulties in making inferences from texts (Nation et.al, 2006; Finnegan & Mazin, 2015; Ricketts, 2011; Accardo, 2015). However blending normal, mildly and severely challenged students in the same class is not an easy job because the students who are severely challenged could experience a sense of failure if they are expected to follow the curriculum for normal children because they are unable to cope. For example,

Bacharuddin Jusuf Habibii.

Lahir di Pare-Pare, Sulawesi Selatan, pada tanggal 25 Juni 1936.

Dikenal sebagai orang paling cerdas di Indonesia.

Pernah menjadi presiden ketiga republik Indonesia.

He was asked to search the information about one of the president of Indonesia. His group decided to choose the third president of Indonesia, he is Bacharuddin Jusuf Habib. He searched the information from the internet while his group member discussed the topic, he went away from them and he was busy with material in the classroom. He was instructed to paraphrase the sentence above using his own words, but he was not able to do it because he got difficulties in comprehending what he wrote, even he did not understand what he wrote about because he just copied the sentence from the computer.

Writing is an important skill used as effective communication with others in daily lives. Written composition is to demonstrate conceptual knowledge and express one's thoughts, beliefs, and feelings (a primary communication medium) (Graham, 1990). Writing skills are developed through a long process of learning experiences in one's education and life (Diercks-Gransee, Wright, Johnson, & Christensen, 2009). In school, writing is embedded in different academic subject areas. For example, writing is required in learning English, Math, History, and Science, and it is also a required area listed in nationwide achievement standards. Students diagnosed with Autism Spectrum Disorder (ASD) typically display great difficulties in social and communication skills. They exhibit deficiencies in verbal and nonverbal communication. Their difficulties with communication skills can impede their social interactions with both peers and adults. Thus, an important intervention for students with ASD is to improve communication skills (Myles & Simpson, 2001). For example, his teacher divided the students into some groups and asked them to write the name of some fruits with the characteristics of fruit themselves. But, this students wrote the name of the fruits without involving himself to discuss with his group discussion.

Teacher : *Ok class, regarding to our topic discussion today, I'm going to ask you to discuss with your group member to write down the name of some fruits with its characteristics.*

Student 1 : I find the fruit from letter A to J

Student 2 : I find the fruit with red.

Student 3 : I find the yellow fruit. What about Mf?

Student Mf : _____(he stared at his friends and he did not say

Anything. But he moved to the reading center and took a book about fruits and wrote some examples of fruits)

After he looked at the pictures of some fruits in the book, he wrote some name of fruit as below:

Fruits :

- *Strawberry*
- *Kiwi*
- *Orange*
- *Peach*
- *Watermelon*
- *Pineapple*
- *Grape*
- *Pear*
- *Papaya*
- *Guava*
- *Blueberry*

From the example above, it shows that autistic student is difficult to communicate with peers and adults. He ignored the instruction from the teacher and his friends. But at last, he did the assignment given even though the assignment has not completed yet. From this experience, the researcher is going to help him to develop his writing ability using picture book. According to Grandin (2012) there were some ways the teacher must do to adjust to make a comfortable environment for autistic students, such as any autistic students are able to learn better visually. It might be easier to teach children using pictures instead of just language. Grandin explains that he was better able to learn nouns because he could picture them in his head. When teaching the children words such as right or left, the teachers should demonstrate them to the children.

According to Landa & Goldberg (2005), students with ASD have deficits in abstract processing skills, misinterpreting literal information, and lacking the appropriate problem solving skills needed to obtain a goal, such as completing a writing task. They are

developmentally delayed in verbal communication and social interactions with others, which hinders their understanding of meaning in conversation (Landa & Goldberg, 2005). A lack of communication will result in problems with pragmatics, leading to discrepancies in thinking literally, in turn prohibiting them to imagine scenarios that are to be represented in writing (Bishop, 2010). Also, these students lack organizational skills, disabling them from synthesizing their thoughts to be conveyed in written form that leads to compositions that do not make sense. Furthermore, these students have trouble exaggerating their thoughts which limits their ideas and ability to write extensively (Asaro-Saddler & Saddler, 2010). The barrier between verbal communication and understanding prevents students with ASD from writing successfully (Landa & Goldberg, 2005).

Writing involves a complex process, for example, steps in: planning, drafting, self-monitoring, and revising (Delano, 2007). Students with ASD have difficulty to successfully complete the writing process (Asaro-Saddler & Saddler, 2010). They typically exude distractibility and diminished attention towards a task to a greater extent than those with a general learning disability (Bieberich & Morgan, 2004). Thus, intervention strategies to help these children become more productive writers seem important. Referring to the information above, the purpose of this study is helping the autistic student to develop his writing development through the picture books. Through this research, the researcher accommodates the autistic student as visual learner to develop his writing through picture books. Picture books will facilitate his in comprehending the pictures and also creating a lot of new vocabularies regarding to the pictures themselves. Because this research is a case study of a student Of 7 years old therefore, the research problem is specifically on the subjects.

1.2. The Problems of the Study

Based on the background of the research previously stated, the problems of the study are formulated as follows:

1. What stages of writing are developed by a 7 year old student with ASD?
2. How are the writings developed by a 7 year old student with ASD?
3. In what component are the writings developed?

1.3. The Objective of the Study

The objective of the study can be described as follows:

1. To analyze the stages of writing are developed by 7 year autistic student.
2. To describe the student's writing developed.
3. To elaborate in what component the writings develop by the autistic student.

1.4. The Scope of the Study

The scope of this study is limited to the writing of an autistic student. During 25 weeks of research, the researcher focuses on his writings written in the classroom. The researcher analyzes the writings of the student and explains the reason of the writing developed.

1.5. The Significance of the Study

The findings of this study have two general significances, namely theoretical and practical significance:

1. Theoretically, this study enriches the theory of autism especially in the writing skill.
2. Practically, the findings of this study could be used for further research and sort of guidelines for the teachers and parents who directly involve in this area, in order to be able to guide autistic students to create good writing through picture book in their daily life.