



# Instructional Teaching Media to Promote Autistic Student's Learning Engagement

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## ABSTRACT

*The demand for students with disabilities to get English lesson underlies the use of instructional media to help teachers to convey instructions as well as students in understanding English. Related to this case, this study aims to describe the types of instructional media used by teacher in SLB Negeri 2 Singaraja to teach an autistic student. The research data were gathered through observation, interviews, and document study. Based on the data obtained, it was found that the teacher used four types of instructional media namely videos, pictures, matching exercise, and real objects. As an implication, instructional media used by the teacher can convey instructions to autistic student even though they did not perfectly understand. Autistic student also understood English lesson better through these media than just listening to the teacher's speech.*

## **1. Introduction**

Education has an important role in human's lives. Education is a process of transmitting values and knowledge of society to students (Moumoni et al., 2019). It prepares a person to be a knowledgeable human-being and to be a part of society. It is the right of every individual to get education. UNESCO (2019) believes that education is a human right for all throughout life. As education becomes human right, it should be provided to every student regardless of their conditions. It can be assumed that student with disabilities also has the right to receive education.

Students with learning disabilities are the students who have trouble in learning and using new information or skills though they can see, hear, and understand things differently (Kemp et al., 2019). They are not enrolled at school unless if the school had the capacity in terms of knowledge, skills and equipment to respond their needs (Global Partnership for Education, 2016). As they are disabled in learning, they face barriers in the process of learning something. They require special education packaged with professional teacher, equipment, and environment that meet their needs.

One of the types of learning disability is Autism Spectrum Disorder (ASD). ASD is a neurobehavioral disorder that affects a person's social communication and behaviors (Slavin, 2006). Students with ASD often have tendency to not look or listen to people, have difficulty with back and forth of conversation, have unusual tone of voice, and have trouble in understanding other people's point of view. In terms of behavior, these students often repeat certain behaviors or show unusual behaviors and often get upset by slight changes in a routine (National Institute of Mental Health, 2018). Thus, the autistic students could be identified if they show trouble in communication and repetitive or unusual behaviors.

In spite of the challenges faced by the autistic students in learning, these students have also learning strengths. One of the highlighting learning strength is their visual thinking. They are a strong visual learner (National Institute of Mental Health, 2018). They tend to show improved response to information presented visually (McCorkle, 2012; Padmadewi & Artini, 2017). They can enjoy looking at picture, books, watching television or video, and tend to look carefully at objects (Edelson, 2019). The visual information can last longer and is more concrete than spoken and heard information (Rao & Gagie, 2006). In short, although these students face problems in communication and have stereotyped behaviors, they are able to receive information visually.

New curriculum applied to students with learning disabilities, including the students with ASD in Indonesia, demands these students to learn four competencies as same as normal students. Those competencies are spiritual, social, knowledge, and skills competencies. In addition, the general lessons such as Math, Bahasa Indonesia, English, and others are also complementary lessons for them to learn. Thus, it is an obligatory for teacher to teach those lessons and these students are expected to show competencies in knowledge and skills on those lessons.

Autistic students face problems in communication and behaviors affecting them to have difficulty in learning. They are required to learn general lessons. Aside from those facts, they are able to learn information presented visually. In other words, they use visual learning style. Visual learning style is a learning style in which learner mostly learns through visual media such as pictures, charts, maps, diagrams, and videos (Ferriman, 2013). Thus, the use of visual media could help the teacher to present instructions to these students in teaching general lessons, especially English. Based on preliminary observation result, a teacher teaches English to an autistic student with visual media in SLB Negeri 2 Singaraja. Therefore, this research aims to determine the instructional media used in teaching English to an autistic student in SLB Negeri 2 Singaraja Bali.

## **2. Methods**

This research was descriptive qualitative in form of case study. A descriptive qualitative research offers a detailed overview about the facts of the phenomenon happening in life (Sugiyono, 2015). Case study is defined as a way of organizing social data for the purpose of viewing social reality (Best, 1998). The subjects of this study were a teacher and an autistic student in SLB Negeri 2 Singaraja. Observation, interview, and document study were employed to collect data. The observation process was undergone in six meetings. The teaching and learning process happened during observation recorded using camera. Lesson plans prepared by teacher were also analyzed after each observation finished. Finally, short interviews were conducted to get reliable data supporting observation data. The instruments used were observation sheet, camera, interview checklist, and notebook.

### 3. Result And Discussion

Gagne (1992) defines media are physical tools used to send messages to the students in the purpose of encouraging them to learn. Instructional media is the tool to deliver all the materials and used as a form of instruction and facilitator for learners to reach instructional objectives.

Throughout the observation, document study, and interview process, it can be stated that the teacher used four different instructional media such as videos, pictures, matching exercises, and *real objects*. These instructional media were used to help teacher in delivering instructions about the teaching materials that was describing things, fruits, and animals using adjectives. In addition, the teacher used these media for different purposes.

The teacher used videos as visual media in teaching autistic student. According to McCorkle (2012), video is an instructional media presenting student learning materials and specific positive behaviors. The videos were presented to introduce the teaching materials to the student. The teacher had decided to use video in introducing materials because videos could cover many materials and present them in attractive and interesting way by featuring them with audio, subtitle, or music. Canning-Wilson (2000) claims that the use of videos as visual medium of delivering instructions could help student to see the immediate meaning in language in order to clarify messages. Video also benefits students as it shows how general meaning and moods of language are conveyed through expressions, gestures, and other visual clues (Harmer, 2007). There were eight adjectives introduced through videos such as thick, thin, long, short, big, small, heavy, and light adjectives. The teacher used videos to introduce materials in all meetings, except the fifth meeting. Teacher often played video in the beginning of lesson for two to three times in order to make student memorize and understand the content of videos.



Picture 1. Video playing

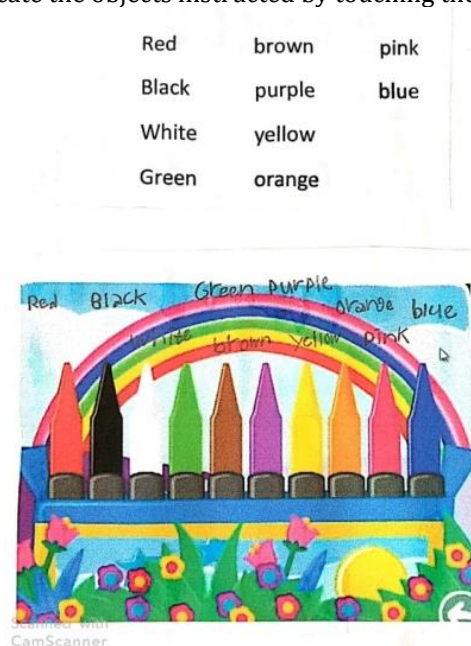
There were four videos used by teacher, some of them were effective, some were not. It was found that the videos were effective if the language in delivery was not complicated, interesting, accompanied with sounds or music, visually easy and understandable, and contained familiar objects. Videos also could be effective if followed by verbal teaching and tasks. Harmer (2007) states that students increase their level of interest if they are given chance to understand and if videos are coupled with interesting tasks. In addition, the time provided for student to process the materials also influenced his visual memory. Thus, teacher repeated video for many times to make student remember the visual information. However, the autistic student could not learn the information presented in video if it presented him complex language expressions such as conversations containing utterances. 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., 2016; Finnegan & Mazin, 2015; Ricketts, 2011; Accardo, 2015; Padmadewi & Artini, 2017).

The use of video was followed by pictures. Harmer (2007) defined pictures as non-photographic and two dimensional materials used to present and check meaning. Picture is used for several purposes such as drilling, communication, understanding, ornamentation, predicting, and discussing (Aini, 2013). The pictures as instructional media were used for three purposes such as clarifying the content of videos, introducing colors' names, and facilitating writing and matching tasks. Pictures were used in all meetings. They presented eight adjectives and colors' names. The adjectives were thick, thin, long, short, big, small, heavy, and light. In addition, there were ten different colors such as red, black, white, green, brown, orange, yellow, blue, pink, and purple which were presented through picture.



Picture 2. Pictures to clarify the content of videos

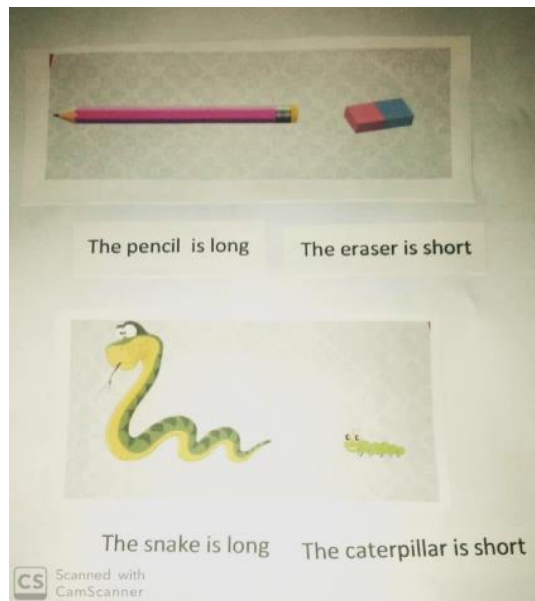
Pictures, which were used for clarifying the content of videos, were screenshot from the videos. According to Walmawa and Walmawa (in Padmadewi & Artini, 2017) the use of visual methods in teaching and learning can create longer lasting experiences and connect it to other sensory experiences. The teacher chose to screenshot the video because the autistic student could easily remember visual information if it was presented in same form by other visual media. When video ended, teacher showed objects appeared in video through pictures and taught student verbally. The pictures presented after video because teacher assumed that video was more concrete than pictures that video contained movement while picture was static. The pictures were found effective in clarifying the videos as the autistic student was able to point and name some objects presented in pictures. Lal and Bali (2008) stated that autistic student learns to indicate the objects instructed by touching the objects in pictures.



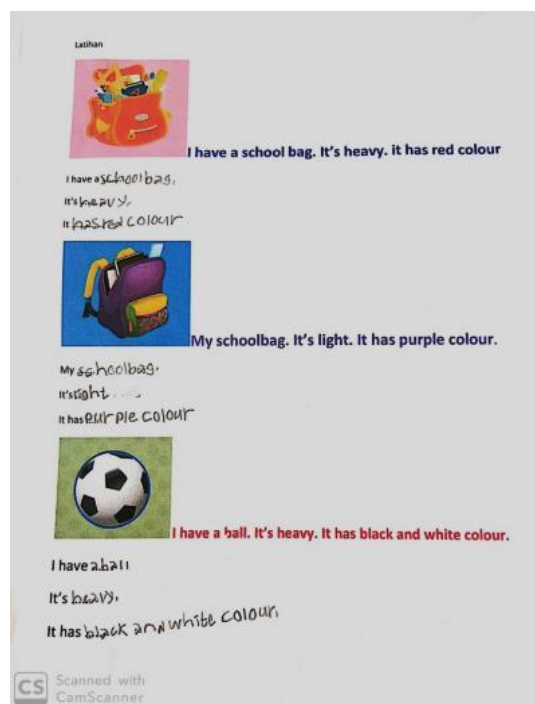
Picture 3. Picture to introduce colors' names

Pictures were also used to introduce colors' names to the student. According to Webber (1978) pictures are effective visual aids because nouns associated with pictures can be recalled better than only nouns and other translation words. Paivio in (Webber, 1978) claims that pictures has greater concreteness and imagery arousal properties than words. However, she thought video could be more interesting in teach colors' names. As she did not find appropriate video for student, she decided to use picture. Thus, the teacher assumed that picture could be interesting to teach colors' names. The teacher named the colors together with the student for two times. Then, she asked the student to connect the names with colors in pictures for two times. The use of picture in introducing the colors' names was found

not very effective because there were too many colors should be learned by autistic student in short time. Thus, the student was only able to remember strongly the black, red, and white colors.



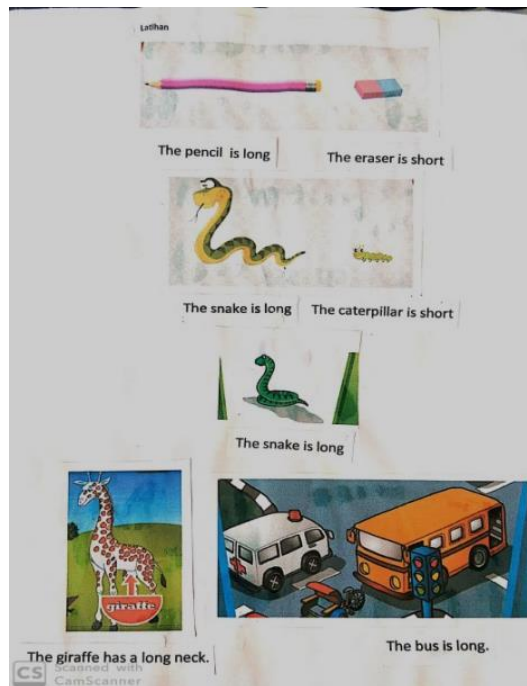
Picture 4. Picture to facilitate matching task



Picture 5. Picture to facilitate writing task

Finally, the teacher also used pictures to facilitate writing and matching tasks. Autistic student should be presented with same form objects in activities to simplify him decoding the information. According to Kellems (2017) the pictures are effective visual stimuli that act as facilitator for student to complete an entire task. The teacher used pictures in facilitating matching and writing tasks to simplify him in completing the tasks. To make the student complete tasks, the teacher gave examples through both verbal and non-verbal instruction and asked student to do the same by himself. Throughout the observation, it was found out that pictures were effective in facilitating student to complete tasks and learn something by the process. It was because pictures greatly helped student to recall his visual

memory. In short, pictures were effective for the autistic student because they were taken from videos and used for many purposes including to support student finishing tasks. However, it was not effective if it presented student with heavy materials in short time.



Picture 6. Matching exercise

The third instructional media used by teacher was matching exercise. It is defined as media requiring student to match more than two or three items, usually vocabulary words with their correct definition and/or with an illustration (ESLOnline, 2018). The matching exercises which were prepared by teacher were about matching words or sentences to objects or pictures. It was given from second meeting until sixth meeting. The teacher aimed at practicing student's understanding of the videos or pictures he already saw. Matching is purposed to improve student's ability to match things having same aspects (Padmadewi & Artini, 2017). The matching exercises were impactful on student's memory and thinking speed. Student was able to complete matching tasks correctly and learned them fast. However, instead of understanding information presented through matching exercises, he decoded the guidance by teacher. The autistic student often has problem with managing their cognitions in order to understand what he or she reads (Padmadewi & Artini, 2017). Thus, he did not understand the concept by the process, he was recalling what he already saw and learned from videos and teacher's verbal teaching.



Picture 7. Real objects

Real object is as unmodified real things inside or outside the classroom used for teaching and learning process (Harmer, 2007). The real objects were used to clarify very abstract adjectives to concrete version. The real objects of thin and thick books were compared by teacher until student got the point. The teacher used real objects only in the first meeting, to differentiate thick and thin books and heavy and light schoolbags. It was because student could not understand clearly the videos and teacher's verbal teaching. It was found out that student could understand materials clearer through the real objects.

Overall, all media used by teacher generally were found effective in engaging an autistic student to learn English. However, from the four instructional media used by teacher, the most effective and frequently used medium was pictures. It was used for more than one purpose. In addition, it helped the effectiveness of videos and matching exercises.

#### 4. Conclusion

This study aims to describe the instructional used by teacher in teaching English to an autistic student in SLB Negeri 2 Singaraja. The English teacher in SLB Negeri 2 Singaraja used four kinds of instructional media such as videos, pictures, matching exercises, and real objects. All media served different purposes and were effective for student to learn English. Student was able to learn several words in English through the use of those media. By learning several words through the use of visual media, it was proven that visual media were could make abstract concept became more concrete to student. Therefore, the visual media could communicate the things that could not be otherwise understood by student (Tissot & Evans, 2010). The visual media were also found to be more effective than teacher's talk. It conveyed many instructions clearer to the student with autism.

In leading teacher for further improvement in teaching student with autism spectrum disorder, this research suggests that teacher should focus on teaching simple units of language before teaching more complex ones. Besides that, the materials are better taught in several meetings repeatedly to last the information longer in student's memory. Finally, teacher should carefully select the instructional media for teaching autistic student because the autistic student has neurodevelopmental disorder though this student is a visual learner.

For further excellence in teaching and knowledge of autism spectrum disorder, further researchers are encouraged to extend knowledge by conducting deeper study of instructional media and autism spectrum disorder.

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