VOCABULARY MATERIALS BASED ON PICTURE MEDIA FOR AUTISTIC STUDENTS

Riryn Fatmawaty[1]
Universitas Islam Lamongan

Riya Risqi Setyaningrum[2]
Universitas Islam Lamongan

Fita Faridah[3]
Universitas Islam Lamongan

fatmawatyriryn@gmail.com[1]

ABSTRACT

This study aims to develop image-based vocabulary material for autistic students at MTs Sunan Drajat Sugio Lamongan. This research is a Research and Development (R&D) research. The subjects of this study were autistic students at MTs Sunan Drajat Sugio Lamongan. Researchers used three instruments to obtain data, namely interviews, questionnaires and observation checklists. The results showed that autistic students needed vocabulary material that contained many exciting pictures, varied activities, and attractive colors. The product of this research is vocabulary material entitled Picture Vocabulary Mastery for Autistic Students, which is suitable for the needs of autistic students. In conclusion, autistic students like vocabulary material and these products can help autistic students learn English, especially vocabulary.

Keywords: Autistic Students, Picture Media, Vocabulary

INTRODUCTION

A study of a language includes the four skills, namely listening, speaking, reading and writing. One can't master them without mastering vocabulary. Learning vocabulary is vital to support mastery of English skills as mentioned above. Therefore, it becomes a central part in English learning. Mansourzadeh (2014) says that learning a second/foreign language needs some skills and components to be mastered. Among those skills and elements, vocabulary is one of the most crucial ones in language learning without communication. It can be concluded that vocabulary is the total number of words and without vocabulary, nothing can be conveyed.

In communication, all students need vocabulary that can support them in producing and using meaningful sentences because speech provides the organ of the sentence. That way, vocabulary is essential to be mastered. However, there are student classes who experience difficulty in communication with the result that students experience limitedness in learning English, especially mastery vocabulary, for example, is the autistic student. Students with autism usually have difficulty using language and communication, even though every student has different languages (Mansur, 2016).

Communication with autistic children uses non-verbal communication more than verbal communication. That's why autistic children show their communication by shouting, crying. Communication difficulties are the most dominant disorder in autistic children, and most of these disorders affect adults. Developmental disorders that occur in autistic children are seen in delays in communication and social interaction and cognitive delays. Difficulties in communicating and social interaction are caused because autistic children have an extreme preoccupation with their thoughts and fantasies, so the response of autistic children is sometimes challenging to understand by the surrounding environment (Marhamah, 2019).

The teaching and learning process must be creative and innovative. For example, in the first step in teaching foreign languages, the teacher must recognize them by vocabulary. Asik & Humaerah (2016) found that in teaching vocabulary for students with autism, teachers should use more pictures, apply road-aloud, use temporary boards, and provide more examples of words. Meanwhile, according to Puspita et al., (2019), the learning media that teachers can use is to convey instructions to autistic students even though they do not understand perfectly.

Based on a survey at MTs Sunan Drajat Sugio Lamongan, two autistic students attend the public school. Automatically, many facts do not show synergy with their particular needs. As a result, autistic students lag behind other regular students in learning English, especially mastering vocabulary. This lag can occur because the vocabulary material taught refers to regular students' standards. The media for the subject matter is also limited so that the English teacher only applies one book, namely Student Worksheet (LKS), as the subject matter. English teachers also treat the conditions of their students the same regardless of the state of autistic students. As a result, the English teacher's material cannot make autistic students reach the KKM (Minimum Completeness Criteria). This may be solved if they have a new book on improving vocabulary skills to support their learning. In fact, there are no books relevant to their needs as autistic students and vocabulary materials in their schools.

Based on the problems described previously, the researcher tried to develop vocabulary material for students with autism in junior high school. The development of this material aims to make students have their books in learning vocabulary. They can study on their own at home.

LITERATUR REVIEW

The autistic student has a significant problem. That is communicating in language with the result that limits vocabulary acquisition. According to Marhamah (2019), developmental disorders in children that appear at an early age include language, cognitive, social, and adaptive function disorders. The longer the child will be left behind in development compared to children their age. The child has a delayed development (abnormal) when interacting and using language. Developmental disorders in children with autism are not only cognitive, affective, verbal and nonverbal communication, but also include imagination, interest, attention, and flexibility.

In the field of communication, the speech of autistic children tends to be challenging to develop. This difficulty can occur because the child is not too interested in balancing contact with other people or if the autistic child can/can talk. Therefore, the speech is not used to communicate with other people, but with himself even they often use strange language or words that not understood and repeated (Boham, 2013).

In short, autistic students need some teaching media that can help them learn English easier and make the learning process more interesting for autistic students. By using media, the teacher can make the teaching-learning process run well, get the goal of teaching and make the learning process effective and efficient. Therefore, it is better to have visual aids or supports as teaching media for autistic students. Hayes et al., (2010) define that visual supports are those things people see that enhance the communication process and can be an excellent aid for children learning about the world around them.

According to Ulumudin (2019), visual learning aids are practical to use. Many autistic students learn better with visual aids because most of them have difficulty understanding verbal instructions. Therefore, visual aids can help autistic students. Through the picture, it is expected that the teacher can attract their attention to learn so that the autistic students can learn like other standard students. Therefore, to bridge those problems, the researcher develops vocabulary materials based on picture media that agree with autistics' needs and the existence of English materials.

RESEARCH METHOD

The research design used by the researcher is classified into Educational Research and Education (R & R&D), principally designed to develop English vocabulary materials based on picture media for autistic students of MTs Sunan Drajat Sugio Lamongan. The final result of this research is the vocabulary materials for autistic students, which were developed based on the need analysis. Hence, the materials are expected to match students' needs and uses. The researcher modifies the stages. The scheme of the steps is listed below;
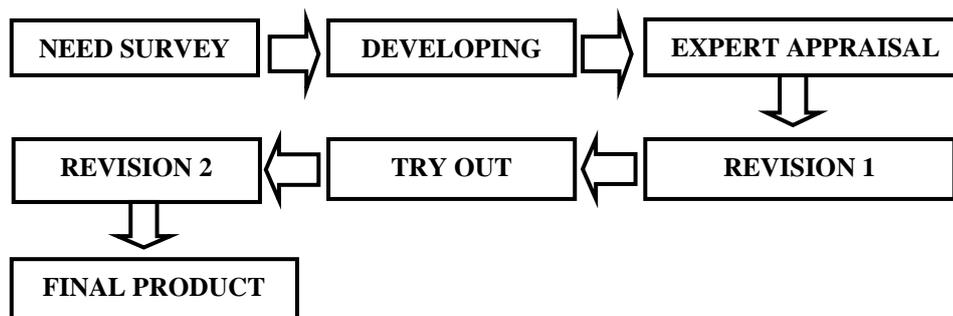

Figure 1. The Modification Research Procedure

FINDING

The need analysis is conducted on March-May 2016 at MTs Sunan Drajat Sugio Lamongan. The school is located at Jl. Mastrip No. 73 Lamongan. The researcher conducted the need analysis by distributing questionnaires, observing, and having an interview with autistic students and the English teacher.

The next step is developing vocabulary materials. The result of the need survey is used as the basis of the development product. In this stage, the researcher is following the five ways of adapting materials subject to Hylands' model. They are adding, deleting, modifying, simplifying and reordering. The development of vocabulary materials for autistic students consisted of topics based on the syllabus and vocabulary materials in their school. The product consists of vocabulary materials based on picture media, which suitable for autistic student needs. The name of the product is "Picture Vocabulary Mastery for Autistic Student". The topics of the product are presented in table 1.

Table 1. Division of Book Units

Unit	Title	Materials Focus
1	The Basic	Alphabet, Number and Colors under the Sea
2	Our Environment	Vegetables Party, Fruits in Gym, Animals and The Weather
3	People	Part of Body, Place, My Family Album and Profession
4	Time	What's the time?, Days and date and The Year
5	Words	Verb, Adjectives, Opposites and Synonyms

After the trial of the topic of vocabulary, materials was created. It was then reviewed and evaluated in terms of content, language, layout and presentation of the product by three experts using questionnaires. The first expert is Mrs. Dian Lutfiaty, M.Pd. She is a lecturer of the Islamic University of Lamongan (UNISLA). She teaches Morphology and Reading 2 and the second expert is Miss. Tiara Retno Haryani, M.Pd. She is also a lecturer of the Islamic University of Lamongan (UNISLA). She teaches Speaking, Structure and Error Analysis. The third expert is Mr. Tri Joko Mulyono. He is a teacher of autistic students in SDLB Banjar Mendalan Lamongan. By looking at the experience and expertise of the evaluators, their suggestions are considered to be valid. Any corrections and suggestions from the expert and the teacher were revised.

Next step, the product was tried out to the appropriate subjects and setting. It was conducted to the autistic students of MTs Sunan Drajat Sugio Lamongan. The researcher will gather the autistic students in one room or flexible place. Before trying out the developed materials, the researcher tells them the goals of the lessons that will be learned. Then, the researcher provides the equipment of the materials. They are the prototype and pictures card which relevant with the materials. While doing this activity, the researcher is able to observe how the developed materials work. The researcher will also have a field note when this activity is running. There will be no stratification of the students in trying – out the developed materials since the goals of materials are only to create a fun and joyful atmosphere in teaching English vocabulary and practice their vocabulary skills for autistic students.

After trying out the materials, the researcher will distribute the questionnaires again to the students. The questionnaires are used to know how the students' responses toward the developed vocabulary materials in the book. The result of the observation and questionnaires will be used as the basis of the second revision. The final edit is conducted before the final product is constructed.

The data from the autistic students, English teachers and expert validation were analyzed quantitatively and qualitatively. First, the researcher gave questionnaires to two autistic students. Then, the researcher divided the results of the questionnaires into some points. They were the importance of English, the importance of vocabulary ability, the autistic students' responses toward vocabulary activity, the autistic students' perceptions of the picture in vocabulary class and the student's point of view about learning vocabulary by using the image. The questionnaires indicated that two autistic students need a new vocabulary book suitable for their needs and ability.

Considering the autistic students' interview that they liked learning English, especially vocabulary, and they liked pictures, the researcher found that autistic students needed more materials to make them interested and easy to

understand. It can be concluded that autistic students need English vocabulary materials based on picture media.

Based on the English teachers' interview, it can be concluded that the picture was appropriate in teaching vocabulary for autistic students. The teachers also needed to acknowledge images to the autistic students by designing vocabulary materials based on picture media. The researcher also found the teachers admitted that pictures had a lot of benefits for the autistic students to build their vocabulary. The conclusion is the autistic students need English vocabulary learning materials as their supplementary books.

Based on the result of the expert validation, the items of the questionnaires were adapted from the Standard of Course Book Assessment (BSNP) and consist of four aspects. They are content appropriateness, language appropriateness, presentation appropriateness and layout appropriateness. Those aspects are organized comprehensively through Likert-scale questionnaires that were distributed to the materials evaluators (experts).

In terms of contents, the suggestions given by the experts are the content should be more relevant materials and exercise in the course. It is also suggested that font size must bigger so the autistic students will understand the materials more accessible. The result of expert validation for the appropriateness of the content as follows:

Table 2. The Appropriateness of the Content

No	Criteria	Score
1	The developed materials are following the indicators of materials	4
2	The indicator of materials are understandable for teacher	4
3	The developed materials are relevant to autistic students' daily life	4
4	Materials (course, picture, and activity) are relevant to the topic being discussed	4
5	Instructional activities	5
6	The developed materials accordance with the autistic students' ability	3
7	The developed materials are understandable by autistic students' ability	4
8	The content is consist of materials learning support	4
9	Accuracy of the materials	3
10	The type of text of developed materials is appropriate	4

The mean value of the appropriateness of the content of advanced materials is 3.9. This value is the range of 3.1 – 4, which falls into the category of "Very Good". In terms of language, the experts suggest some changes in the language of instruction, since most of the instructions are not effective, despite its meaningfulness. The experts also recommend some grammatical and punctuation

revisions. The result of expert validation for the appropriateness of the language as follows:

Table 3. The Appropriateness of the Languages

No	Criteria	Score
1	Grammar in Use	3
2	Punctuation	3
3	Spelling Principle	4
4	Diction or Word Choice	4
5	Comprehension of The Sentences	3
6	Communicative (Easy to Understand)	4
7	Language Coherent	4

The mean value of the appropriateness of the language of developed materials is 3.5. This value is the range of 3.1 – 4 which make this developed material, in term of the appropriateness of the language, falls into the category of "Very Good". In terms of presentation, there is one suggestion given by the experts. The experts suggest that the picture and the sentences should be more significant. In another statement, the experts have agreed that the activities are very well organized. The result of expert validation for the appropriateness of the presentation as follows:

Table 4. The Appropriateness of the Presentation

No	Criteria	Score
1	The developed activities are well organized and systematically grade	3
2	There is good balance of picture and sentence	4
3	The developed activities encourage autistic students to perform written effectively	4
4	The developed activities contain guided activities	4
5	The developed materials contain vocabulary that is related to the topic of the unit	4

The mean value of the appropriateness of the presentation of developed materials is 3.8. This value is the range of 3.1 – 4, which falls into the category of "Very Good". In terms of layout, there are two suggestions made by the experts. First, the font size must be consistent and readable. Second, adding a subtitle for each unit. Finally, the experts have agreed that the layout of Units 1and 2 is well developed. The result of expert validation for the appropriateness of the form can be seen in table 5.

Table 5. The Appropriateness of the Layout

No	Criteria	Score
1	The overall design of developed materials is visually interesting	4
2	The illustration in developed materials are appropriate	4
3	The character size in developed materials are appropriate	3
4	The layout is logical and consistent	4
5	The developed materials use consistency of spacing, title, subtitle and with the book typing	4
6	The clarity of using page number in the book	4
7	The cover is appropriateness and attractiveness	4
8	The book size is precision	4
9	The picture and content are the appropriateness	4
10	Text organization	4
11	The effectiveness use of subheadings	5
12	Appropriateness of variation of fonts	3
13	The layout of developed materials is proportional	3
14	Appropriateness of supporting materials are provided	3

The mean value of the appropriateness of the layout of developed materials is 3.7. This value is the range of 3.1 – 4, which falls into "Very Good". The average of the evaluation from the expert validation is described in table 6.

Table 6. The Appropriateness of the Developed Materials

No	Aspect	Mean
1	The Appropriateness of the Content	3.9
2	The Appropriateness of the Language	3.5
3	The Appropriateness of the Presentation	3.8
4	The Appropriateness of the Layout	3.7
	Total	14.9
	Average	3.7

The mean value of the appropriateness of the developed materials is 3.7. Finally, this value is the range of 3.1 – 4, which falls into the category of "Very Good".

The expert also suggested that the instruction needed to be revised in term of the content, the language, the presentation and the layout use so that the autistic students would not find any difficulties in understanding what the materials developer wanted to do. Then, as the revision had been made, the materials were considered as the final draft. The revision was done based on the data obtained from the experts' validation and the small-group try-out. Those revisions became the basis of the final product development.

DISCUSSION

As mentioned in the introduction, this research aims to develop vocabulary materials based on picture media for autistic students of MTs Sunan Drajat Sugio Lamongan. It was designed based on the syllabus, the existence of vocabulary materials and autistic student needs. During the try-out, most of the autistic students enjoyed and were interested in the product. A hundred percent of the autistic students were also very enthusiastic and happy in learning it.

This study indicates that mastery of vocabulary through pictures for autistic students can be an effective medium or book to increase the motivation of autistic students and make learning fun, so that autistic students do not feel lazy or have difficulty learning English, especially vocabulary skills. This is in line with Ulumudin (2019) findings that autistic children can be taught abstract words and ideas through visual concepts, like pictures and objects. She said that individuals with autism think visually because the part of the brain associated with visual tasks is more active. Therefore, through the picture, it is expected that the autistic student can study English like other standard students.

From the explanation above, it can be seen that Pictures are helpful to focus the students' attention to imagine what the text says. Pictures are not ambiguous; an image should contain what the word means. Using photographs is also an effort to help students to understand and comprehend something clearly and easily. Substantial success using visual supports such as concept maps and visualizing word meanings and processes allows chunking, categorizing, and organizing words to determine patterns and relationships (Antonius, 2014). However, teaching using pictures has an important role in understanding. Using images can be a good technique in teaching English vocabulary to children, including autistic students.

Learning picture vocabulary mastery indicates that the materials and the activities in the Picture Vocabulary Mastery book can increase their motivation and very effective in learning English, particularly vocabulary, and make it easier to comprehend the materials. Moreover, the strength of this book is autistic students can study vocabulary not only in class but also at home wherever their place, with the result that parents of autistic students can help their children to learn vocabulary with this supporting book. Finally, this book is so flexible.

According to Arifin (2014), one alternative that can improve the speaking ability of autistic children is the ABA (applied behavior analysis) method. The ABA method is a method of approaching and delivering material to children with autism that is carried out firmly, without violence, prompts and appreciation of children with effective rewards. The steps for implementing the ABA method are (a) the educator gives a stimulus or stimulus in the form of an instruction to the child to pay attention to the educator or the task at hand, (b) this stimulus may be

followed by a prompt to elicit the intended response, (c) the child responds right/right, or wrong/incorrect, or not responding (considered wrong), (d) Educators respond by giving rewards for the child's response, namely giving gifts if correct and saying "no" if wrong, and (e) there is free time or a short interval before starting the trial next. Thus, the generous teacher should be able to make the teaching-learning process cooperative.

There are some suggestions addressed to English teachers of autistic students and other material developers. For English teachers of autistic students, he/she develops his/her materials for the students based on the needs analysis. The process of needs analysis can be done through classroom observation during his/her teaching and learning process or an informal conversation with autistic students to reveal their needs, lacks and wants. The teacher does not need to develop several units once. He/she may establish a team for a specific topic and then analyzes the result. If the materials are helpful for autistic students, the teacher may develop other units. It is also suggested that the teacher evaluate the developed materials (expert validation) by proposing the developed materials to the materials expert. However, if the teacher does not have sufficient time to develop the materials, he/she may serve authentic materials for specific topics of discussion by adapting or adopting them.

CONCLUSION

Autistic students really like vocabulary material and these products can help autistic students learn English, especially vocabulary. Vocabulary mastery through pictures for autistic students can be an effective medium or book to increase autistic students' motivation and make learning fun. So that autistic students do not feel lazy or have difficulty learning English, especially vocabulary skills.

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