IMPLEMENTATION OF "KOMBAR" IN RECEPTIVE AND EXPRESSIVE LANGUAGE SKILLSIN CHILDREN WITH AUTISM DISORDER

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Abstract

Pictorial Communication (KOMBAR) is an approach that can be used as an alternative method in training communication skills among children with special needs. This action research was conducted to investigate the effect of using KOMBAR approach in enhancing the development of receptive and expressive English language among children with special needs. Three students with autism disorder were selected for this study. The initial survey found that students with autism had difficulty communicating in English due to their limited vocabulary which prevented them from communicating in simple English. Observation methods are used when students perform activities using the KOMBAR approach. Meanwhile, pre and post tests were used to see changes in achievement in the methodology used for the receptive and expressive mastery of autism students in English.Data from the module given over 3 months were video recorded to see the effectiveness of the KOMBAR approach used in English teaching. The findings indicate that children with special needs showed an increase in vocabulary and were able to communicate using simple English after the "KOMBAR" approach was introduced and applied in the teaching process in the classroom. This research supports that "KOMBAR" is an alternative approach which helps students with special needs enrich their vocabulary and able to communication in simple English.
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Keywords: *pictorial communication; receptive languange; epressive language; autism*

INTRODUCTION

An autism spectrum disorder is a neurodevelopmental disorder that affects social interaction, communication and behavior. Generally, children with autism often exhibit clear intellectual, adaptive, and language disabilities due to unbalanced brain development (Fein et al. 2017). This situation not only affects social interaction but is one of the reasons why these children are not capable to master teaching and learning in the classroom.

In addition, late language development is a clear sign of autism in children. A meta-analysis study showed that 25% of children with autism were unable to develop functional speech during communication due to the lack of early exposure and effective communication training since childhood (Volkmar et al., 2004). The study of Flippin et al. (2010) reinforced this finding that the lack of focus on early childhood speech affects autismchildren's communication when they grow up. Thus, an effective approach needs to be identified and adapted to the learning of autism children from an early age so that later language development problems can be resolved from an early age.

The National Research Council (2001) found that about one-third to one-half of autism children do not use speech as the primary medium of communication. This is a worrying prognosis when children with autism age 5 and older use nonverbal mediums when communicating. This is a bad sign for the development of receptive and expressive language in children with autism. The study of Brady et al. (2015) found that receptive language skills, pre-linguistic communication, vocal and

verbal imitation, adaptive behavior and good consonant letter formation among autism children can be improved if early language intervention is implemented early.

The delay in acquiring a receptive language in children with autism has been identified as their main cause of significant delay in expressive language. The study of Ganz et al. (2012) found that children with autism experienced complex communication problems before the age of 3 due to poor expressive language proficiency. The lack of understanding of the receptive language causes the child to not be able to express expressive language properly. For many children, the process of language acquisition is a natural process, but some of them need to learn when interacting with humans and the environment.

Although communication is a major problem in children with autism, most researchers have found that poor language acquisition structures (semantics; morphology; syntax) is a major cause of late expressive language development in these children (Tager-Flusberg 2009; Boucher 2012 & Park et al. 2012).

Besides, the acquisition and mastery of different languages among autism children are also influenced by environmental, cultural, family and community factors. The study of Ganz et al. (2015) found that children with autism have difficulty hearing a speech due to their failure to hear and understand the language. The inability of children with autism to accept and understand language input has been a hindrance for these children to express their ideas, feelings, thoughts or opinions to others.

The deficit in language acquisition among autism children can also be overcome through augmentative and alternative communication. An augmentative and alternative communication method is an approach to enhance existing verbal communication skills by using a variety of techniques that replace spoken communication for individuals who are incapable or unable to master verbal language skills. Methods using facial expressions, body language, objects, macronutrients, symbols, pictures, and electronic touch devices have been identified to produce voice output to help improve the receptive and expressive language of autism children (Norburn et al. 2016).

Therefore, early intervention should be given to autism children so that they do not miss out on social and academic skills. The study of Anderson et al. (2014) found that increased levels of community awareness, early childhood autism awareness, and diagnostic services could help autistic children gain adaptive and academic skills to function well in school. This does not only affect academic achievement but it also improves the child's self-esteem to communicate more confidently when theyfinished schooling.

PROBLEM STATEMENTS

Throughout experience teaching the English language for students with special needs, the researcher founds that the students had difficulty to speak and communicate in English even for a few words. Usually, the researcher will explain the vocabulary individually to the students so that they can understand what is being taught. Most of the students in the classroom are quiet and unable to interact with their teachers or friends during English classes because they do not know how to communicate in English. More worryingly, when the Special Education Secondary School Curriculum (KSSMPK) was implemented in 2017. This English for Communication curriculum requires students to master basic English language communication skills. This curriculum is not only a burden to students but also a challenge for researchers to find a method that will help them to master English well and consistently.

One-way teaching since the researcher called special education teacher was successfully solved as the learning practices of special needs students in the classroom were improved by finding an alternative method that could help them communicate in English. While English subjects emphasize communication as a key element, the augmentative and alternative communication methods found in the PECS (Picture Exchange Communication System) are used as a resource to increase English proficiency among the students. Thus the adaptation of the PECS approach to the visual communication (KOMBAR) approach increases the level of English language communication among the special needs students.

Furthermore, failure to follow KSSMPK to understand simple vocabulary such as home, school, animals, etc. while providing verbal and written responses contributed to the creation of KOMBAR

intervention.They can only answer pictorial questions that do not require them to read, understand or think to answer correctly. Weakness in answering the English for Communication exam questions prompted researchers to think of an innovative approach to helpthis student master this subject with ease and fun. In this endeavor, researchers use student interest in pictorial dictionaries as a positive reinforcement to overcome their weaknesses in English and further develop their interest in English subjects. Finally, there was an intervention called "KOMBAR" in assisting special needs students with the problem of receptive and expressive language communication in English.

In addition to students' interest in mastering receptive and expressive language communication in English, the "KOMBAR" approach also emphasizes easy, engaging and fun visual teaching and learning through tablets. The 21st Century Teaching Approach (PAK-21) that requires students to explore teaching on their makes "KOMBAR" an educational innovation that meets 21st-century educational criteria that helps and facilitates special need studentsto master English communication effectively and enjoyably.

Visual Communication (KOMBAR) is a new and adapted approach from PECS therapy to help students with special needs master effective and expressive language communication in English effectively and enjoyably. The rationale for choosing this "KOMBAR" approach is based on special needs students' interest in hands-on activities, communications, and pictorial dictionaries. This approach is a two-pronged approach that introduces the operation of reading and communicating over some time. The "KOMBAR" approach that focuses on the interests and tendencies of the special need students indirectly helps them to master communication in English more easily, effectively and efficiently

OBJECTIVES

This study aimed to examine the level of proficiency in children with autism in English before and after the KOMBAR approach applied.
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The objectives of this study are to:

      i.   increase the vocabulary level of English among special needs students.
      ii.   improve the level of ability to communicate simple sentences of special needs students in English.
      iii.   improve self-practice in the teaching and learning process of English to make lessons easy and fun and achievethe 21st-century learning criteria.

METHODOLOGY

This action research study is to find a solution to solve the problems of teaching and learning English among special needs students. The sample used in this study consisted of 3 autism students who attended KSSMPK at SMK Serdang Baru. The sample consisted of autism studentswho were able to accept the teaching and learning delivered by teachers in the classroom.

Three data collection methods were used in this study, namely, observation, document analysis (modules) and evaluation (pre and post-tests) to ensure that the data obtained could support this study more strongly. Observation methods are used when students perform activities using the KOMBAR approach. Meanwhile, pre and post-tests were used to see changes in achievement in the methodology used for the receptive and expressive mastery of autism students in English.

The researchers tested the effectiveness of the teaching aids each time the English for Communication class was conducted using the KOMBAR approach. The researcher then tests the students' understanding of the module after teaching. Data are measured and analyzed based on module scores. Data analysis is reported using visual graphs. The observation period is an hour, 4 times a week and runs for 3 months from February 1, 2019, to May 1, 2019.

This action study also involves the cooperation of parents and other special education teachers to guide these autism students to master receptive and expressive language skills in English. The carryover activity is designed so that the method applied can help the students to master the communication in English well and enjoyably. Students' data were video recorded and the findings from the module given over 3 months were recorded to see the effectiveness of the KOMBAR approach used in English teaching. The pre-test and post-test results obtained are translated into data to show the effectiveness of the approach used. The data is also reinforced with interview data from parents, teachers and student management assistants.

Triangulation is also used to verify the qualitative results of research findings and results. The purpose of triangulation is to increase the validity and reliability of qualitative data by obtaining data from different sources. There are three methods of data collection. The first is to use observation with video recording. Second, using document analysis, which is an assessment, is based on student work (modules) given each English class. Thirdly, to use the examination marks through pre and post examinations. The use of these three instruments is to further strengthen the findings of this study.Figure 1 shows the 4 phases used in the KOMBAR approach to look at the development of receptive and expressive language among students with autism.
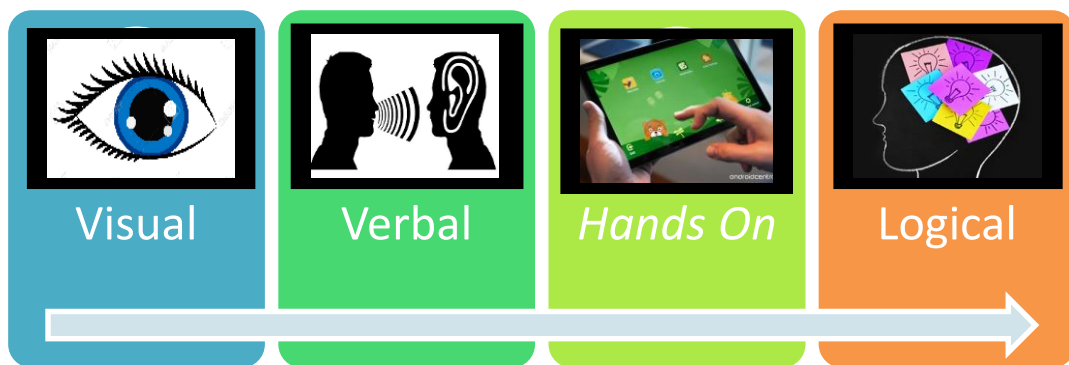

Figure 1: *Four-Phase of KOMBAR Approach*

In the first phase (visual), teaching is done using visual teaching materials. A picture card is used to give students an idea of what to teach in English. During this phase, students are exposed to a concept in English. The teacher will show you a picture card and will say it in English. Students will follow the teacher to say the words on the picture card. Figure 2 shows the first phase (visual) used by teachers to autism students to improve English language communication.

Figure 2: *Visual Phase*

In the second (verbal) phase, the teaching is done as the student mentions and writes the picture card on the communication board. This method of speaking and writing is used to expand the vocabulary of autism students. In this phase, students will mention the picture card they are holding and rewrite the word on a given communication board. Figure 3 shows the verbal processes performed on the autism students.
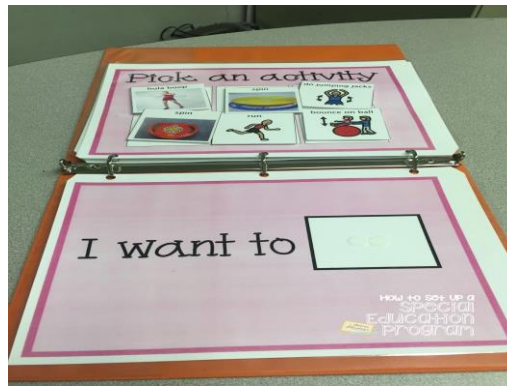

Figure 3: *Verbal Phase*

In the third phase (hands-on), students are involved in activities that require them to select their needs on the items on the tablet, speaking and rewriting on the board without the help of a teacher. Figure 4 below shows the third phase (hands-on) use of tablets to interest autism students in mastering simple communication in English.

Figure 4: *Hands On Phase*

Finally, in the fourth (logical) phase, teachers will emphasize the use of picture cards and tablets used to practice easy English language communication among students throughout the school day. Students will be given easy exercises to see how they understand the lessons being taught.
In the logical phase, students need to complete simple sentences on the worksheet, read and explain to the teacher and use that simple communication with friends and teachers at school. Figure 5 introduces a logical phase in which teachers assess students' level of mastery and understanding through the school's day-to-day worksheets and communications.

Figure5*: Logical Phase*

ACTION PLANNING AND IMPLEMENTATION

Action Planning

Learning strategies that have been applied to address the problems inherent in special needs students are visual learning methods. KOMBARstage 1 focuses on helping students with special needs to state the requirements and opinions in simple sentences. Before conducting visual learning, the researcher will provide a lesson plan related to the topic taught by the model Stephen Kemmis (1988).

Objectives have been set as the direction for the teacher to convey the content. According to Rosniah Mustaffa (2007), visual learners are those who enjoy learning through visual or graphic teaching. This visual approach allows them to visualize what they have read or seen before. Besides, visual learning was also found to promote the level of memory and understanding of students in the teaching delivered by teachers in the classroom. Therefore, it can be concluded that interesting and interactive visual learning through the KOMBAR approach can help accelerate special need students' communication in English.

Action Execution

The implementation of the action that has been applied in this study is based on the Stephen Kemmis Model (1988). This approach is made up of four steps namely planning, acting, observing and reflecting. In this study, the researcher followed the steps provided in the Model Stephen Kemmis to conduct the study in the school. Initially, the researcher had made a careful plan to begin this study. After that, the researcher acts as planned. The researcher observes and reflects on the actions taken. Figure 6 shows the cycle of Kemmis & Mc Tanggart (1988).
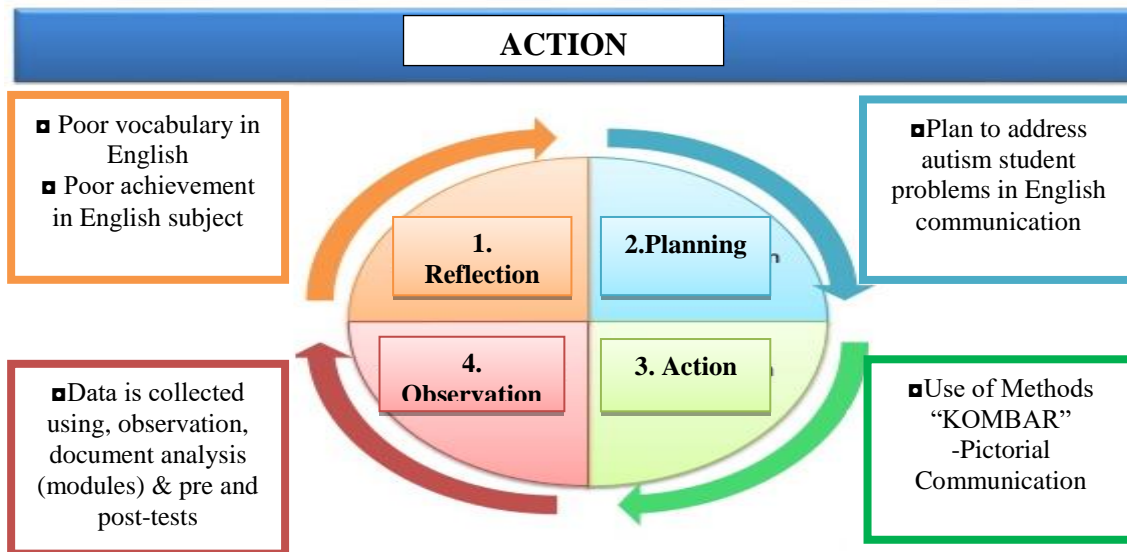
Figure 6 - Kemmis&McTaggart Model (1988)

Visual-guided learning has been conducted to test the effectiveness of the learning and teaching process among special needs students' level of understanding. Researchers have provided visual learning and teaching based on the Stephen Kemmis Model based on six phases namely planning, set induction, idea gathering, idea reorganization, idea application, and closing.
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Phase 1 – Planning

Before conducting visual and visual learning with the pictures, the researcher provided an appropriate teaching slot based on the theme set during the week. Teaching and learning objectives are set to test the effectiveness of the lesson plan that has been prepared. The set objectives can serve as a direction to the teacher while teaching.

Phase 2 - Induction Set

In the induction set section, the researcher used the "poison box" game approach in the teaching process to keep students from getting bored. For example, when a song stops students need to take a picture card from a poisoned box and try to say it in English. This method not only interests the autism students but also indirectly guided them to speak in English.

Phase 3 - Gathering of Idea

In this section, the idea of autism students is developed through a thematic teaching approach to teach them the use of English in everyday life. For example, teachers show picture cards representing places in the school such as canteens, offices, toilets, fields, prayer rooms and book shops. Students are required to respond verbally throughout the pictures. The rationale for doing so is to stimulate autism students'communication skills in English.

Phase 4 - Reorganization of Ideas

In the idea restructuring section, the researcher uses a hands-on approach by providing a communication book that requires the students to match the pictures provided to express the intention and to express it in one simple sentence. For example "I want to go to the toilet".

Phase 5 - Application of Ideas

To promote the use of English in everyday life, researchers use a gadget application (tablet) tostimulate autism students' communication in English. Image-based interactive tablets are a communication mode framed within autism students based on their interest and use of gadgets.

Phase 6 – Closing

At the end of the lesson, the researcher will ask the student what they have learned. The researcher will guide and train them to communicate in English. The rationale for repetition concepts in the teaching and learning process is to improve autism students' ability to communicate   well   in   English.

RESULTS

The KOMBAR approach is an alternative intervention used to improve receptive and expressive language skills among autism students. This approach uses the communication constraints of autism students as a strength to develop a fun English teaching technique in promoting English communication. The KOMBAR approach was applied to 3 autism students to see its effects on the development of receptive and expressive language.

This study was performed on 3 autism students with each student through 3 phases, before, during and after the intervention. The results showed that the receptive and expressive language support of pupil 1 increased after the intervention. The level of students' ability to master receptive and expressive language gradually increased after the KOMBAR intervention. Although the process of studying this action through difficult phases, the researchers are grateful that this study helped autism students to master at least a few simple sentences to communicate in class.

Figure 7 shows the difference in module outcomes performed on 3 autism students over 12 weeks. Through the scores of modules before the KOMBAR approach, the scores obtained by autism students are between 1-4. When the approach was introduced, the students showed a modest improvement in the modular performance of between 4 and 6. After two months of the KOMBAR approach, the range of scores obtained by the students ranged from 6-13. These results show an increase in autism students' scores in modules given each week for 3 months after KOMBAR's approach. The KOMBAR approach adopted in the teaching and facilitating process along with multimedia presentations and interactive teaching aids (tablets) has proven to help improve special needs students receptive and expressive language in English.
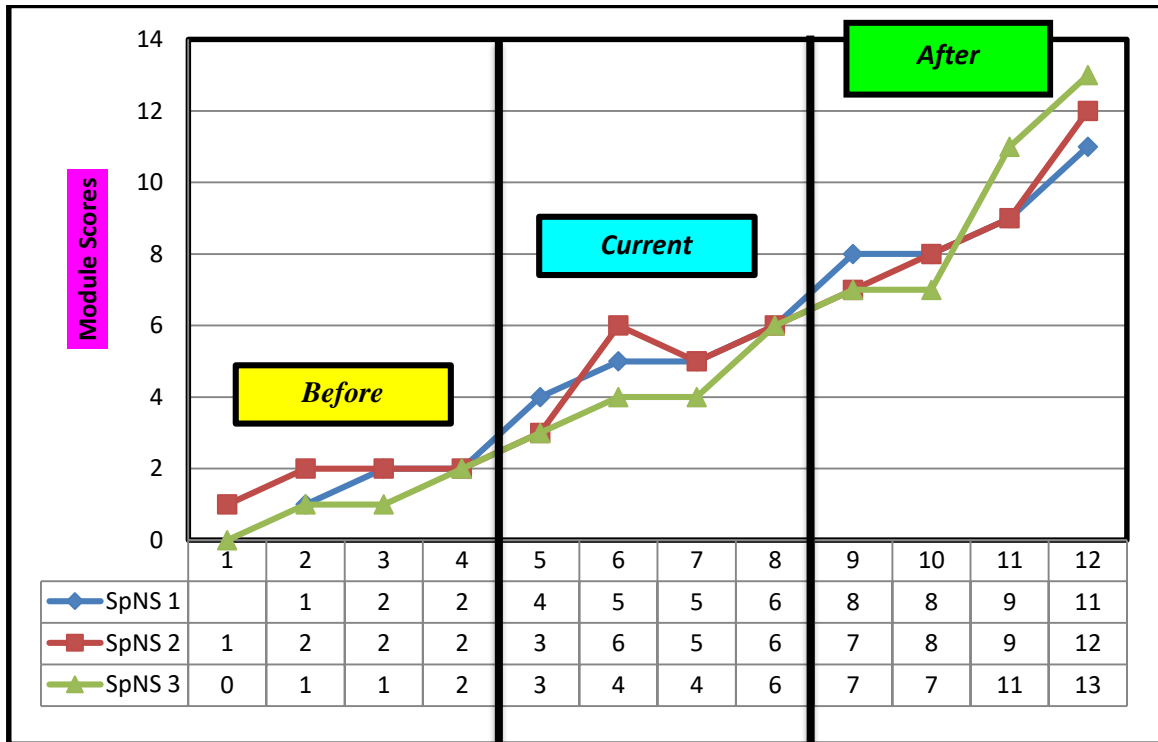
Figure 7 *Improvement of Module Scores Before, During and After KOMBAR Approach Apply*

Furthermore, Figure 8 shows the difference between the pre and post-test achievement of autism students before and after the intervention. Based on post-test scores, it appears that autism students can respond well to English questions after the KOMBAR intervention is applied to them rather than before the intervention. Although these students did not show excellent achievement, they did show improvement when the KOMBAR approach was applied in the English teaching process.
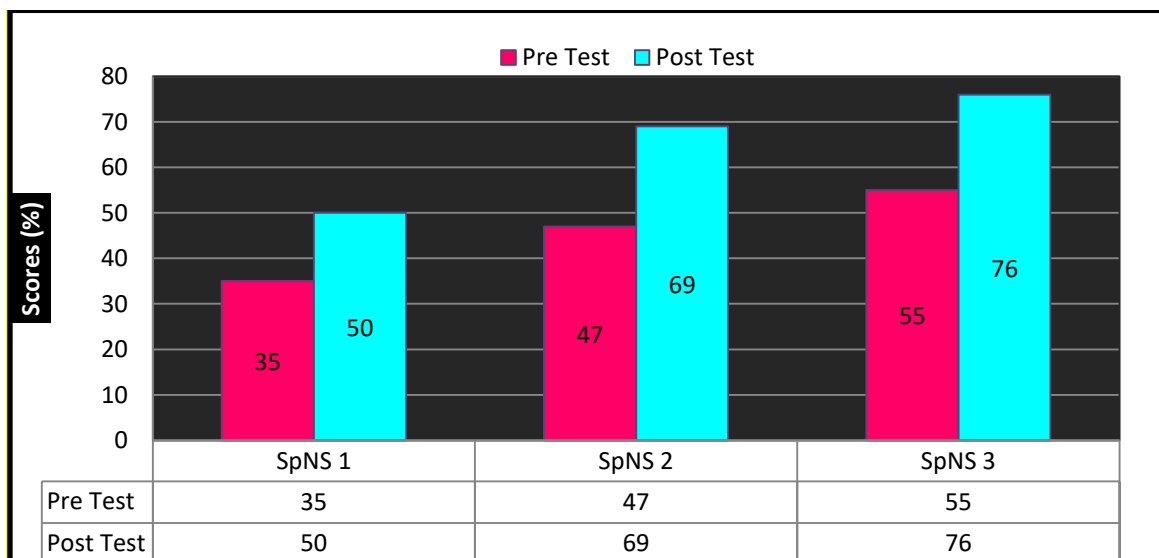

	SpNS 1	SpNS 2	SpNS 3
Pre Test	35	47	55
Post Test	50	69	76

Figure 8 *Pre and Post Test Results Before and After KOMBAR Approach Applied*

DISCUSSION

After using this KOMBAR approach, researchers have found that much of the new knowledge can be explored through the 21st- century learning and teaching process using gadgets as an educational intermediary. The selection of tablets in this KOMBAR action study helped to highlight special needs students' interest in English subjects indirectly. The interest and tendency of special needs students on gadgets are used as a positive reinforcement in indirectly enhancing spoken English communication.

The experience of teaching special needs stud ents for English lessons over a long period urges the researcher to devise an interesting interactive method of enhancing students' ability and understanding of simple English communication. The limited concentration of special needs students and the boringteaching methods cause students to lose interest in the teaching delivered by the teacher. Therefore, the researcher devised KOMBAR's approach in English teaching and learning process to interest the students and improve on their abilities to communicate easily in English.

KOMBAR approach makes it easy for autism students to master the simple communication of English in everyday life. Visual and interactive teaching process using tablets indirectly helped to build autism students' self-esteem to easily communicate in English. The KOMBAR innovation study is expected to enhance the autism students' English vocabulary to better communicate in English in the future.

IMPLICATION OF FINDINGS

Evaluation of the KOMBAR action study was found to be of interest to the special needs students in trying to master easy communication in English. The KOMBAR approach was found to have encouragedthe oral communication of the autism students in English with students and teachers at the school spontaneously. Combining a visual approach through hands-on and tablet-interactive approaches help autism students to better understand what teachers are teaching in the classroom.

This study found that the main objective to develop English language communication skills among special needs students is achieved. Besides, the application of the KOMBAR approach has also been found in helping to increase the level of English vocabulary among the students. Thus, it can be concluded that KOMBAR is an innovation to improve the self-sufficiency of the special needs students English in the teaching and learning process which is simple, fun and meets the 21st-century learning criteria.

The target of the researchers in the next action study is to focus on special needs students who are involved inKurikulum Standard Sekolah Menengah Pendidikan Khas (KSSMPK). Researchers will work to develop an attractive interactive software to facilitate special need students in mastering the KSSMPK syllabus.

Researchers also determined to improve this study by designing an interactive game show that can improve students' role in making some conversation among their friends and family members. They do not need to wait for someone to provide the right prompt to initiate the first interaction to respond. They can indicate their desire or protest the idea direct to someone without any prompt.

Also, this KOMBAR action study will be improved and refined more efficiently and comprehensively to make it more informative, enjoyable and in line with special needs students' capabilities. During the research conducted in this study, it is found that this method is applicable in all subjects in special education classes. As such, researchers plan to share this exciting software with other special education teacher partners to build an attractive learning module for all special education subjects. This effort is an active pro step in manifesting the 21st-century learning environment in special education classes as intended by the Ministry of Education.

CONCLUSION

Overall, KOMBAR's approach combines the visual and interactive approach to help special needs students master the simple communication of English. This approach not only allows the opportunity to improve their ability to master English but also enhances their e-commerce system to communicate in English. Even more interesting is KOMBAR's approach in using a tablet to help special need students access instruction anywhere without any hindrance. Therefore, it is concluded that the KOMBAR approach could improve the level of special needs students the ability to better communicate in English.

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