Development of Easy Match as a Teaching Aid for Students of the Integration Special Education Program (Learning Problems) in Form One Basic Cooking Subjects at SMK Telok Gadong, Klang

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ARTICLE INFO	ABSTRACT
  	Teaching Aids using the Word Wall website have their differences in that teaching aid can provide fun learning to students. Nowadays, learning using ICT and technology is a learning that needs to be taken seriously so that education in Malaysia is comparable to that of education in other developed countries. The purpose of this study was to develop a teaching aid for students with learning difficulties in Basic Cooking subjects. Basic Cooking Subject is a Vocational Skills Basic Document according to the Standard Curriculum of Sekolah Menengah Pendidikan Khas (KSSMPK) implemented at SMK Telok Gadong, Klang, Selangor. The development of Easy Match was developed to overcome the problems faced by students with special needs, especially for students with learning difficulties. This study used a qualitative study design using interview instruments by selecting three experts as respondents. As a result of the interview, it is analyzed using the content analysis method. The data findings showed that all respondents agreed that *Easy Match* is suitable as a Teaching aid as well as to solve some of the problems faced by the students. special needs (learning problems). However, there are also several suggestions for improvements to be made in order to make the development of Easy Match a product that can be used effectively in the future.

1. Introduction

The education sector in Malaysia is not only focused on normal students but students with disabilities or special needs are also given equal opportunities in the field of education. Education given to students with special needs uses different approaches and methods in the process of teaching and learning using special education terms. However, by creating a suitable and accurate learning style, they can also master knowledge and skills well. In the Theory of Multiple Intelligence introduced by Howard Gardner in 2000, each human being has his level of intelligence. Students

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with learning difficulties known as sluggish or other terms (*slow learners*) are one of the special categories of students and should be given different pedagogical attention and use [1] Students with learning difficulties can be detected as early as preschool. Special education in Malaysia was started around the 1920s initiated by individuals who voluntarily opened schools or educational institutions to students with physical or mental disabilities or special needs. Special education was started in 1926 in Melaka and the first school was St. Nicholas National Blind Primary School. Subsequently, in 1931, the school moved to Penang, and starting in 1978, a rehabilitation program for "sluggish" students, which were weak in mastering the skills of reading, writing, and counting at their age, was initiated. Special education is a program designed to meet the needs of students with special needs. Education for all introduced by the Ministry of Education Malaysia (MOE) provides an opportunity and right for all students to get an education regardless of their intellectual development or social background [2].

Students with special needs in special education programs in regular day secondary schools also learn basic skills in subjects such as the basic cooking. Students with special needs are not only exposed to managing their daily activities but are given the opportunity to increase their ability in basic skills to improve their quality of life and encourage them to become more independent individuals and able to compete with normal students. Following the desire of the Special Education Philosophy, it is a continuous effort to promote the optimal development of an individual as a skilled, direct, capable, believer, able to plan and manage life as well as realizing one's potential as a balanced and productive individual and member of society in line with the National Education Philosophy [3].

To encourage students with special needs to follow the teaching and learning process smoothly, the development of Teaching Aids needs to be planned by teachers to be used in the classroom. In line with the passage of time and the development of education, teaching patterns, and teaching aid should be modified and adapted to the context of teaching and learning. Therefore, in line with the development of 21st-century learning, the teaching methods and the use of teaching aid should go hand in hand so that more effective learning can be established [5]. The purpose of the study was to develop an Easy Match as a teaching aid of ICT in basic cooking subject for the form 1 students of the Integration Special Education Program.

2. Literature Review

Special education refers to education for extraordinary children, that is, children who, intellectually, physically, socially, or emotionally, do not achieve normal growth [6]. Special education was created to provide educational channels for children who have problems following the learning process like normal children. According to the Ministry of Education Malaysia (MOE), children with learning difficulties are children with low mental abilities and behavior modification. Low mental capacity can be defined as a low ability to learn or make a response while low behavior modification refers to the less effective level of a person carrying out activities in everyday life and making social obligations in society according to his age. Therefore, the use of teaching aid is necessary to stimulate students with special needs learning problems.

Teaching Aids are some of the things that have received serious attention among educators, school administration, the District Education Office, the Department of Education, and subsequently the Ministry of Education Malaysia. Farhana Nadirah [7] stated that teaching aids and materials are an important platform for teaching and learning. This is acknowledged by students when they enjoy learning to use tools or teaching aids. According to Tee *et al.,* [8] the use of teaching aids among

teachers in schools has a positive effect on the academic excellence of students and the teaching methods themselves.

Based on past studies conducted by [9], the use of teaching aid in the process of teaching and learning can increase stimulation and indirectly achieve learning objectives. The use of teaching aid not only helps to facilitate the task of teachers but can have a more tangible effect on the speech alone.

The use of ICT several benefits and advantages in the creation of curriculum and pedagogy, particularly in the field of education [10]. ICT plays a role in assisting the teaching and learning process as it provides new ideas for teachers to use various ICT tools in teaching and learning activities in the classroom [11]. The Malaysian Ministry of Education (KPM) has adapted to this change by expanding the use of ICT in schools and higher education institutions [12].

Computer Aids to Teach Aid is now gaining the attention of all, especially in the field of education. In line with today's technology era, learning is no longer focused on traditional ways of learning, but technology facilities should be used to be in line with the interest of the students, especially among the latest generation. In Malaysia, various studies were also conducted to look at the impact of the use of ICT and technology on students' achievement in the teaching and learning process. Studies conducted by Buli and Yesuf [13] show that the use of technology in teaching can train students to think and generate ideas for solving a problem. In addition, the use of ICT and technology in learning also helps to diversify the teaching and learning process and not just focus on lecture techniques. The process of teaching and learning can be enhanced in quality and diversified delivery and acceptance through several techniques such as computer and software aided, network systems, software, and databases or information or through internet systems, software, and databases [9- 10] showed that the use of multimedia software is beneficial to students in education. Its use can overcome the weaknesses and problems faced in the process of teaching in a traditionally conducted classroom [14]. The use of teaching aids is said to increase interest as well as stimulate students' minds and has been considered and recognized as a catalyst for the teaching and learning process [15]. The use of ICT with the availability of images or pictures and sounds is more attractive to students [16-17].

3. Methodology

Researchers conducted a study at a national secondary school in Selangor Darul Ehsan, and three teachers were selected as respondents to gain legitimacy towards the development of Easy Match who are experts and have experience in the field of special education and teach in Form One (1) in Cooking Basic subjects. Based on Table 1, the profiles of respondents who have been selected and have different experiences and lengths of service.

The study used a qualitative approach using a semi-structured interview method and the researchers provided interview protocols [18]. The interviews are held when the researcher wants to find out what is in a person's mind. Through the interview method, data can be collected through feedback given from the studies conducted.

All the data obtained from the interview session will be typed and encoded to make it easier for the researcher to analyze the information from the interview results to obtain its authenticity. The analysis method used for this interview is content analysis or known as content analysis.

Table 1
Respondent profile

Position	Field	Experience
Senior Assistant Teacher	Special Education	22 Years
Teacher	Special Education	22 Years
Teacher	Special Education (Basic Cooking)	17 Years

3.1 Easy Match Development

Easy Match teaching aid is developed and accessed using the Word Wall website. This Easy Match can be accessed for free online. Researchers choose to use the app online because it is more accessible anywhere. Researchers chose the card-matching design as a teaching aid to introduce workspace cleaning tools. The way it is used is to press the same picture and tool name as mentioned and shown. This activity can stimulate the hearing as well as the attention of the student. In this use of Easy Match, researchers did not allocate time to introduce the tool and gave students the time needed to choose the same picture and tool name. This is because students with special needs have varying intellectual levels and stimulation powers.

The development of *an* Easy Match teaching aid for students of special education integration in Basic Cooking subjects needs to go through several phases and needs to be analyzed and studied so that the development of this teaching aid is suitable and can be used for the learning process. In each development, methods and measures of work should be taken into account so that the production of a thing or system is more systematic and orderly. For the development of Easy Match, it was developed based on the ADDIE model as described in the previous chapter.

3.2 ADDIE Model Phase
3.2.1 Analysis phase

Analysis is the first process in the development process based on the ADDIE model [19]. It is also known as the basis for the planning process of the development of the next learning module. At this stage, the researcher needs to conduct an analysis and the main thing is to identify the problem and its means of solution. The purpose of this analysis process is to ensure that the design of the lessons to be developed meets and meets the real needs of the students. In short, an analysis is carried out to ensure that the real problem can be solved based on the analysis carried out.

3.2.2 Design phase

The design is the second phase in the ADDIE model and is upon completion of the analysis phase. This design phase is very important after analysis as it helps strategy planning in developing something as well as outlining how Easy Match is developed and implemented to achieve teaching goals. Therefore, in this design phase, the researchers stated how to achieve the teaching goals based on the analysis that was carried out in the initial phase.

3.2.3 Development phase

This phase provides details on the development of a project or product. This phase is carried out to ensure that the products are developed following all the information and data obtained from the

previous phases. In addition, this phase develops Easy Match using all elements, software, or applications according to the needs of the project to be developed and as planned and set.

3.2.4 Implementation phase

The implementation stage or phase is to refer to the actual delivery of the completed and tested projects to identify errors during the teaching aid development process. For any errors and flaws in the teaching aid, improvements will be made before they are left to the user for use.

3.2.5 Assessment phase

The evaluation phase is carried out after the implementation phase is done. This evaluation phase is done by obtaining feedback from respondents. Required feedback. Some various ways or methods that can be used to obtain feedback include questionnaires, observations, tests, and interviews that are compatible with this Easy Match.

3.3 Uses of Easy Match

Easy Match Teaching Aids are developed and accessed using the Word Wall website as presented in Figure 1. The Easy Match can be accessed for free online. Researchers choose to use the application online because it is more accessible anywhere. Researchers chose the card-matching design as a teaching aid to introduce workspace cleaning tools and materials. The way it is used is to press the same picture and tool name as mentioned and shown. This activity can stimulate the hearing as well as the attention of the student. In this use of Easy Match, researchers did not allocate time to introduce the tool and gave students the time needed to choose the same picture and tool name. This is because students with special needs have varying intellectual levels and stimulation powers.

Fig. 1. Easy Match developed

4. Results

The interview was conducted with three different respondents in terms of work experience in the field of special education and academic background. The researchers conducted interviews twice to identify the problem that answered the question of the first study and then the second interview to

get the validity of the relevant experts to develop the Easy Match. In the first interview to identify the problem, two questions were asked of the respondent. Among the questions are.

    i.   Can you state the special needs student category of learning problems available in this school?

    ii.   Can you tell what the problems faced by special need student with low functionality learning problems are in implementing the learning process in the classroom? Next, the interview questions posed by the researchers to the respondents to obtain expert validity on the development of Easy Match as a teaching aid are as follows.

    iii.   Can you explain your academic background and work experience in the field of special education?

    iv.   Is the use of Easy Match suitable as a teaching aid for special needs students with low functionality learning problems for the topic of Cleanliness of Tools and Materials?

    v.   Based on your opinion, what are the suggestions for improvements to be made to the Easy Match teaching aid?

Based on these questions, the respondent stated the answers, and subsequently, the researcher analyzed the responses given by each respondent using the method of content analysis and coding system to make it easier for the researcher to identify the important information needed in the implementation of the study. Based on Table 2, the code determination for the second question in the interview was conducted to identify the problem of low functionality special needs students in implementing the learning process in class. Next Table 3 and Table 4 show the code determination of the fourth and fifth questions to obtain validity from experts.

Table 2
Code determination for second question what are the problems faced by special needs students with low functional learning problems in implementing the learning process in the classroom?

Num.	Things	R1	R2	R3
1	Difficult to read	1	1	
2	Difficult to write	1		
3	It's hard to pronounce	1		
4	Slow to receive a lesson	1		1

In this interview, the respondent stated that special need student faced learning difficulties following the learning process in the classroom. Among the problems faced during the teaching and learning process are that they have difficulty reading, writing and even saying a word and are slow to receive a lesson. According to Cortiella *et al.,* [20] which states learning problems as a condition in which a person faces difficulties in understanding and storing information that increases the risk of experiencing dropouts in the development of reading, writing, and counting skills.

Based on the fourth question, the respondents agreed that the Easy Match is suitable as a teaching aid in the basic cooking subjects for the topic of Cleanliness of Tools and Materials. Easy Match, developed using the Word Wall website, is also suitable as training material as the concept is based on simple games according to special needs students' ability to learn functionality low. It is indirect that Easy Match is positively accepted as a teaching aid in schools. In addition, the Easy Match was developed with visual pictures of tools and audio, which provides sound to say the words of the tools and materials. This is thus indirectly using their senses such as hearing, and vision and

can use a tactile approach. According to Ikhsan and Norila [6], learning to use the senses is more effective.

Table 3
Code determination for fourth question is the use of easy match appropriate as a teaching aid against special need students with low functional learning problems for topic cleanliness of tools and materials

No.	Things	R1	R2	R3
1	Suitable for teaching aid	1	1	1
2	Not suitable to be made teaching aid			
3	Can be used as an exercise	1	1	1
4	Not suitable as exercise			

Next, the fifth question is about the proposed improvement of teaching aid, Easy Match should be improved so that it can be used in the future and be more interesting and interactive. As seen in Table 4, the pronunciation of such sounds should be improved when there is a mispronunciation in introducing tools. For example, the sound of "span" sound uses English pronunciation. It can confuse students or users, according to respondents. In addition, improvements in terms of picture usage, writing size, and the number of items should be added by referencing other reference materials as well as making this Easy Match more interactive using other mediums in the future.

Table 4
Code determination for third question based on your opinion, what proposed improvements to make against easy match

Num.	Things	R1	R2	R3
1	Sound	1	1	1
2	Pictures		1	
3	Writing size	1		
4	Interactive			1
5	Number of items and content	1	1	

Further, after the code determination is completed, the researcher begins to analyze the interview by showing it using a bar chart. For the first question in the analysis phase the need to identify the problem which is what is the category of special need student in the school, and the respondent answered the question by stating that three categories of functionality are low, medium, and high functionality. Next, the researcher analyzes the second question of the interview after the code determination is produced. Figure 2 shows the analysis of the respondent code for the second question.

Next, having developed Easy Match, the researcher needs to obtain validity from the specialist by interviewing the respondent. The interview questions continued with the third question which is related to academic background and teaching experience in the field of special education. Based on the answers from the respondents, all respondents have more than ten (10) years of experience in this field. Therefore, every answer given by the respondent is good towards the Easy Match developed. Further, referencing Figure 3 and Figure 4 show the respondent code analysis of the fourth and fifth questions using the bar chart.
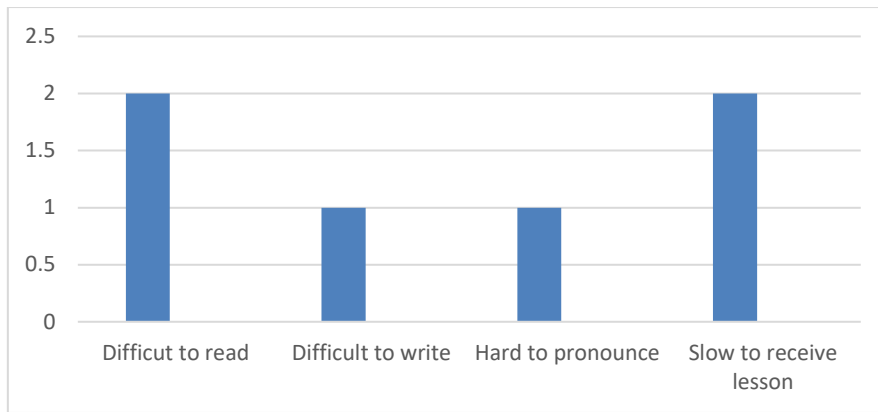
Fig. 2. Respondent code analysis second question what are the problems faced by special need students with low functional learning problems in implementing the learning process in the classroom?
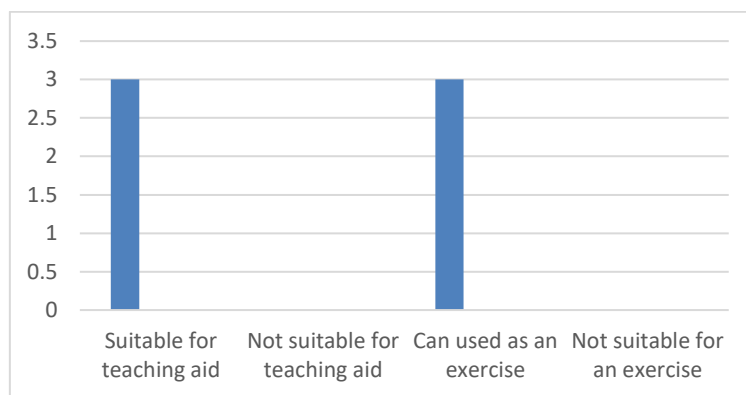

Fig. 3. Analysis of the respondent code second question is the use of easy match appropriate as a teaching aid against MBK low functional learning problems for topic cleanliness of tools and materials
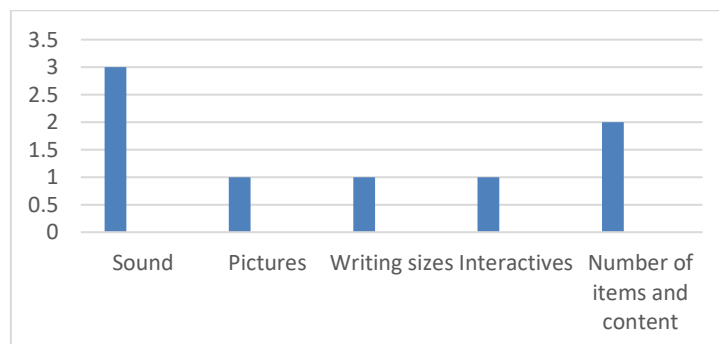

Fig. 4. Analysis of the respondent code fifth question based on madam's opinion, what suggestions can be made towards easy match

5. Conclusions

Teaching Aid should be complete and clear so that teachers can use the material during the teaching and learning process. Through this Easy Match, students can easily recognize the tools and materials to clean up with visual and audio aids. This study was carried out to assess the need in developing a teaching aid of Easy Match for the topic Cleanliness of Tools and Materials in Form One

(1) Cooking Basics subject. Based on the results of the analysis, this Easy Match is appropriate and adopted in schools as a teaching aid by making some improvements to the identified weaknesses. Next, if such a study is carried out, researchers have provided suggestions to improve by using software, applications, or other more interactive websites as well can always be updated in the future. For the recommendations of further research studies, researchers have given suggestions to use more than one data collection method such as implementing observation methods so that the findings study is better. Overall, the findings of the research and discussions conducted by Easy Match are suitable to be used as a teaching aid in the process of teaching and learning.

Acknowledgement

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