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'LET'S PLAY THE ALPHABET' KIT INCREASE SPECIAL EDUCATIONS LITERACY SKILL IN BAHASA MELAYU

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ABSTRACT

Many students with special needs (MBK) have literacy problems, especially in the subject of Bahasa Melayu and cause them to fail to achieve Mastery Level 3 Classroom Management (PBD). The main objective of this study was to determine the effect of teaching aids Main Kit Game Language Book Alphabet of the performance of special needs students in the subject of Bahasa Melayu. This study uses the ADDIE Model and Delphi techniques. This study involved 10 MBK with learning difficulties and 10 specialist teachers. The methods used in this qualitative -based study are interview method, observation method and survey. The instruments selected in this study were checklists, questionnaires, student satisfaction level test and KVKVK syllable comprehension test. The validity for the creation of 'Let's Play the Alphabet' Language Game learning aids is between 0.8-1.0 while the Kappa (K) coefficient for the validity of the satisfaction level of MBK students who use the 'Let's Play the Alphabet' Language Game Kit is 0.9-1.0. Therefore, this study provides an added value to the formation of new learning aids. It can also attract MBK and improve performance in the subject of Bahasa Melayu and facilitate the teaching and learning of Bahasa Melayu. Teachers.

Keywords: ADDIE model, Delphi technique, Special Education students, Pre and Post test

INTRODUCTION

The national education system has now experienced a phenomenon of goal and curriculum adjustment in line with the development of information technology (Ministry of Education Malaysia-MOE 1999). In line with the generational change in the world of education, teaching methods must also change in line with current needs and future needs.

Traditionally literacy has been defined as the ability to read and write. UNESCO's definition of literacy refers to the ability to identify, understand, interpret, design, communicate, and learn to use printed and written materials relating to a variety of contexts. Literacy rate also is a key indicator for measuring human capital and the ability of nations to develop their human capital. In the education context in Malaysia, literacy proficiency is the foundation and most important goal of the national system of education.

The Education Development Master Plan (PIPP) had touched on several issues directly related to literacy of students in the education system. First, 7.7 percent of primary schools' pupils or a total of

115,000 in Phase I in 2004 have not mastered reading, writing and arithmetic (3Rs, or known in Malaysia as “3M”). Second, there were dropouts or students who leave the school system of MOE at 1.9 percent in urban and 1.2 percent in rural areas for cohort 1999 to 2004 at the primary level and 9.3 percent in urban and 16.7 percent in rural areas for cohort 2000 to 2004 at secondary level. It is clear that the issue of literacy is a fundamental issue that contributes to high dropout rates at primary and secondary schools and about the 3M at the primary level.

The issue of literacy also is a major challenge in achieving the aims of the MOE and provision of human capital as outlined in the PIPP 2006-2010 and the 9th Malaysia Plan. Thus, the needs to produce people who are literate through the education system also play an important issue in a country like Malaysia, especially among special education students.

Research Background

Conventional teaching methods used by teachers such as storytelling and lecture methods increase students' misunderstanding of the subject. Teachers tend to speak alone in front of the class and this also contributes to the declining interest of students to learn and internalize learning Malay.

Problem Statement

Reading is one of the most disliked activities by students. However, the problem of reading is at stake now, especially in Bahasa Melayu. Kamarudin (1990) stated that the weakness of students in reading and understanding the text read is indeed a big problem in the future. In addition, full school activities result in a tight teacher work schedule. According to Lachs (2006), dense extra-curricular activities cause teachers less time to plan the use of any technology in diversifying teaching methods of a subject. This statement is supported by the study of Iman M. Alghazo (2006), Zamri and NurAisyah (2011) who stated that teachers are also burdened with other tasks outside the classroom such as conducting programs that involve students.

The lack of teaching aids in schools is also among the problems faced by the Bahasa Melayu teachers. Lack of teaching aids is no longer an issue that plagues rural schools and rural schools, but this situation is also experienced in urban schools (Zuraidah, 2008). This statement is supported by Rozinah (2005), Zamri and Mohamed Amin (2008) that the lack of teaching aids in schools stifles the creativity of teachers to diversify teaching methods to encourage active learning in the classroom. Student interest is also one of the reasons why students are not interested in the subject of Bahasa Melayu. This is stated in a study conducted by Adam (2003) who found that students have a careless response and always assume that literary materials are a light and trivial work.

Research Objectives

Therefore, the objectives of this study that has been conducted are:

- i. To determine future expectations about the form of learning materials that can be used during the teaching and learning process.
- ii. To clarify the features of the ‘Let’s Play the Alphabet’ language game kit learning aids.
- iii. To identify the impact of the implementation of the teaching aids Kit language game 'Let’s Play the Alphabet' on the achievement of Bahasa Melayu subject.
- iv. To discover the impact in the implementation of the learning aids of the ‘Let’s Play the Alphabet’ language Game Kit that has been created on Special Education students on students' interests, performance and attitudes.

LITERATURE REVIEW

A special education teacher is a teacher accredited by the Malaysian Teacher Education Institution in the field of Special Education. There are also teachers from the mainstream who are also interested in

teaching Special Education students and then change direction from the mainstream to the Special Education stream.

According to Jamila (2005), special children differ in aspects of mental characteristics, sensory or sensory abilities, communication abilities, social behaviours and physical characteristics. Meanwhile, Mc Donnell et al (1995) reported the students with special needs are classify into mental retardation, behavioural disorders, autism, learning disabilities, sensory disabilities and other physical and health disabilities. Therefore, students with special needs are students who consist of visually impaired students, hearing impaired students, intelligent students and students with learning disabilities (Special Education Information 2003 in Sheila and & Shamsiah 2006) and they need different teaching and learning methods from other normal children.

Playing is also the best medium for learning. This is because through playing, there is two-way communication involved between children and their friends in order to learn and adapt the environment, do what they can and recognize time, distance and sound (Wong, 2000). In addition, children have the right to play because playing is their job. By doing playing activities, it also can support and improve the positive development of children in terms of gross motor, fine motor, emotional, cognitive and academic performance.

Omardin (1996) clarify that interest is an important factor as a motivator for students to be active in learning activities. Ismail (1992) supports this statement by expressing interest in a thing or activity will encourage a student to explore further. Lee (1991) found that interest and attitude play an important role in influencing student readiness and achievement. Abu Bakar (1994) stated that a person who is interested in what is learned will usually show seriousness and high achievement. According to the Hall Dictionary, achievement is synonymous with results or success. Thus, a student is said to achieve excellent results if the student gets good results in academics.

ADDIE Model

Rosset founded the ADDIE Model in 1987. The ADDIE model is often a reference to instructional design models. The ADDIE model has five main phases, namely the analysis phase, design phase, development phase, implementation phase and evaluation phase.

The theoretical/conceptual framework (Figure 1) used is to show an overview of the arrangement of the researcher's ideas from the beginning to the end of this study conducted by the language game kit 'Let's Play the Alphabet' derived from the use of the ADDIE Model.

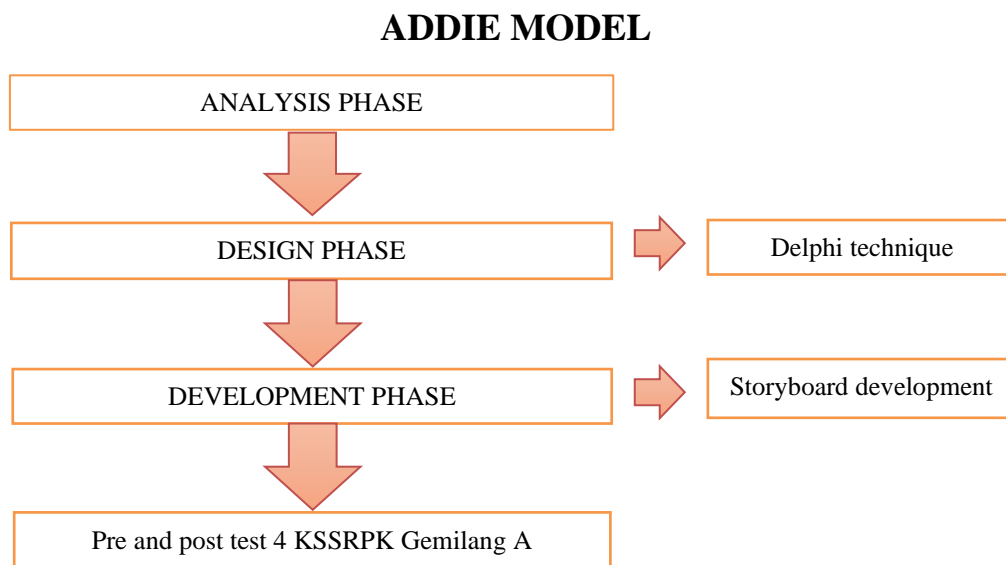


Figure 1: Theoretical/conceptual framework of the study of the 'Let's Play the Alphabet' Language Game Kit

METHODOLOGY

This chapter discusses the methodology used by the researchers to build and test the effectiveness of teaching aids Kit language game 'Let's Play the Alphabet' on pupils with special educational scintillating 4 KSSRPK Gemilang A in Bahasa Melayu.

Research Location

The Delphi technique was implemented on 10 expert teachers around the North Kinta district while the Quasi-Experimental study was conducted in Class 4 KSSRPK Gemilang A located at PPKI SK Raja Chulan Ipoh to test the effectiveness of the 'Let's Play the Alphabet' language game kit. Students with Special Needs Learning Disabilities are tested there.

Qualitative Study

In the Delphi technique, the researcher had to interview 10 expert teachers from mainstream, preschool, linus, rehabilitation and special education. The 'Let's Play the Alphabet' Language Game Kit focuses on students with special needs learning problems such as retardation, dyslexia, moderate level ADHD, moderate level autism, down syndrome and cerebral palsy.

Research Instrument

In this study, researchers have used a questionnaire as an instrument to collect research data on behalf of expert teachers and students. Researchers used the Delphi technique to distribute questionnaires to 10 expert teachers. Each expert teacher will answer the questionnaire in 3 rounds without any pressure and alone. The questionnaire focuses on the characteristics of study aids that are suitable for the future. This study also used a set of 5 Likert scale questionnaires as the research instrument. To date, the Delphi technique is a way to get an accurate opinion with the support of a majority of expert groups. Whereas the researcher is using the Quasi-experimental method in distributing a set of questionnaires for students. This questionnaire consists of two parts, namely demographics and the Learning Aids Questionnaire before and after playing the 'Let's Play the Alphabet' Game. In this set of questionnaires, 5 of year 4 students of KSSRPK Gemilang A in the test group will be required to answer the questions of this questionnaire to determine their level of satisfaction before and after playing the language Game Kit 'Let's Play the Alphabet'. While 5 other students with special needs as a control group.

Study Sampling

The study sampling process is a process where the researcher needs to examine the needs of the study first before selecting the appropriate sample. For this study, the sampling used was non-random sampling. Two forms of non-random sampling used are expert sampling and purposive sampling (Azizi, Shahrin, Jamaludin, Yusof & Abdul Rahin, 2007).

Data Collection Procedures

The researcher has applied for permission from the Universiti Pendidikan Sultan Idris (UPSI), State Education Department, District Education Office and the school itself to conduct a field study. After applying for permission, the researcher gave a briefing to the respondents and then distributed the questionnaire to the study sample.

Instrument Validity and Reliability

Development of the 'Let's Play the Alphabet' Game instrument through a content validation process involved 10 expert teachers. They were appointed to evaluate the content features of the 'Let's Play the Alphabet' Language Game Kit product. The degree of agreement of product validity refers to the scale of agreement (Cohen Kappa, 1968). The researchers sent a questionnaire in which the questions will be used for 6 expert Bahasa Melayu teachers of North Kinta district to review grammar and sentence accordingly. While for the quasi -Experimental method, the first question is from the question set of KVKVK SK Raja Chulan Rehabilitation students and the second question is from the question set from the 5th edition of the 'Bacepat' book which is placed in the 'Let's Play the Alphabet' Game question box.

For the Quasi -Experimental, the researcher will conduct a pilot study on a PPKI school in North Kinta district before conducting the actual study on 3 PPKI schools in North Kinta district. Sets of questionnaires are distributed within a day in collaboration with the school. Before the set of questions was distributed to the respondents, a description of the purpose of the questionnaire was made so that the respondents understood clearly. An explanation of the purpose of the study was also explained to the respondents so that they cooperated well in answering the set of questions honestly, openly and sincerely. All information provided will be kept confidentially and is for research purposes only. Respondents were given 40 minutes to answer all the questions in the distributed set of questionnaires. The set of questionnaires is collected after it has been answered by the respondent.

Data Analysis Methods

Data obtained from the distributed set of questions were calculated using a calculator and analyzed using the Cohen Kappa Consent Scale Table.

Research Design Framework

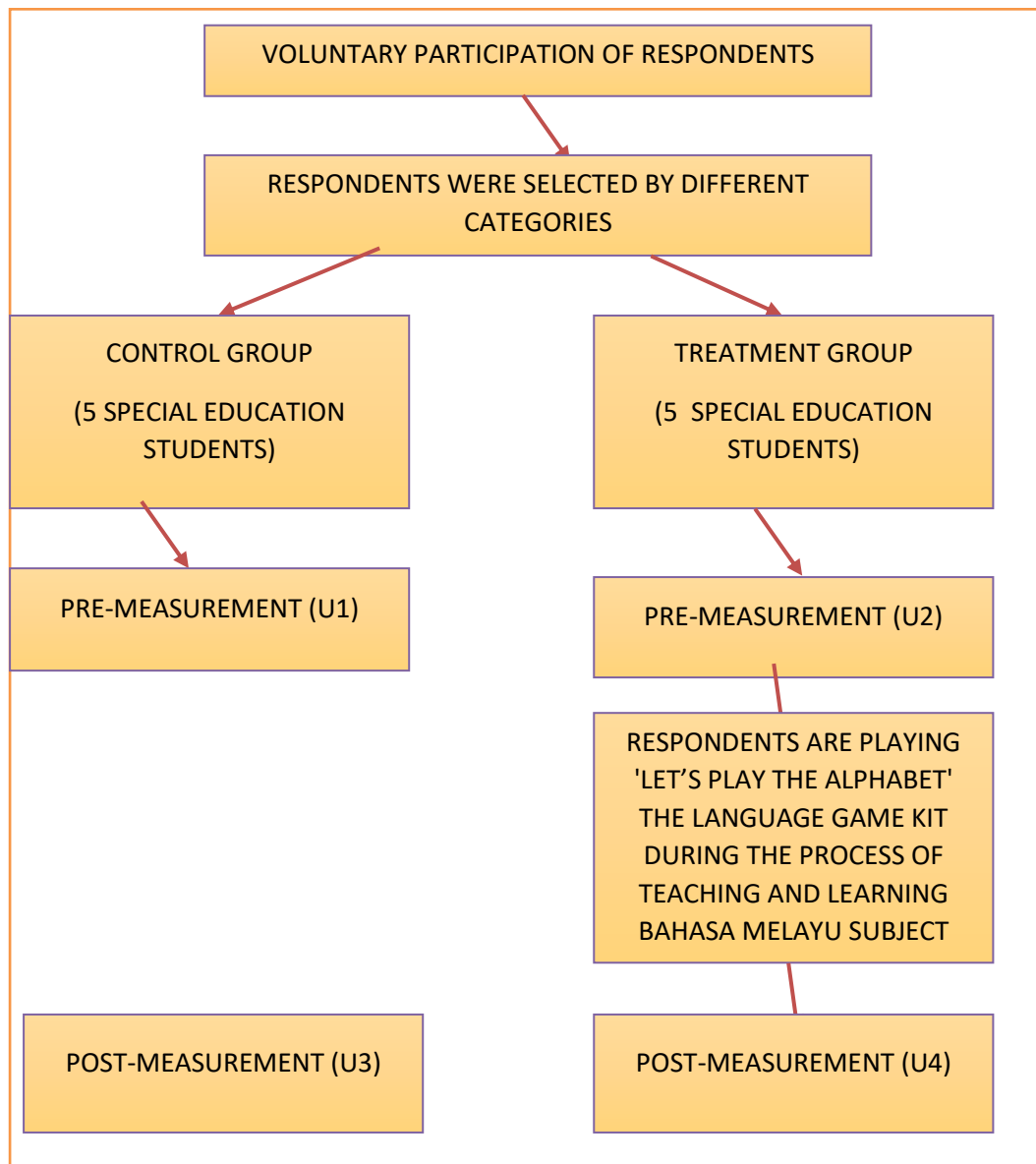


Figure 2: Design of a quasi-experimental study for the pre-post test for the ‘Let’s Play the Alphabet’ Language Game Kit.

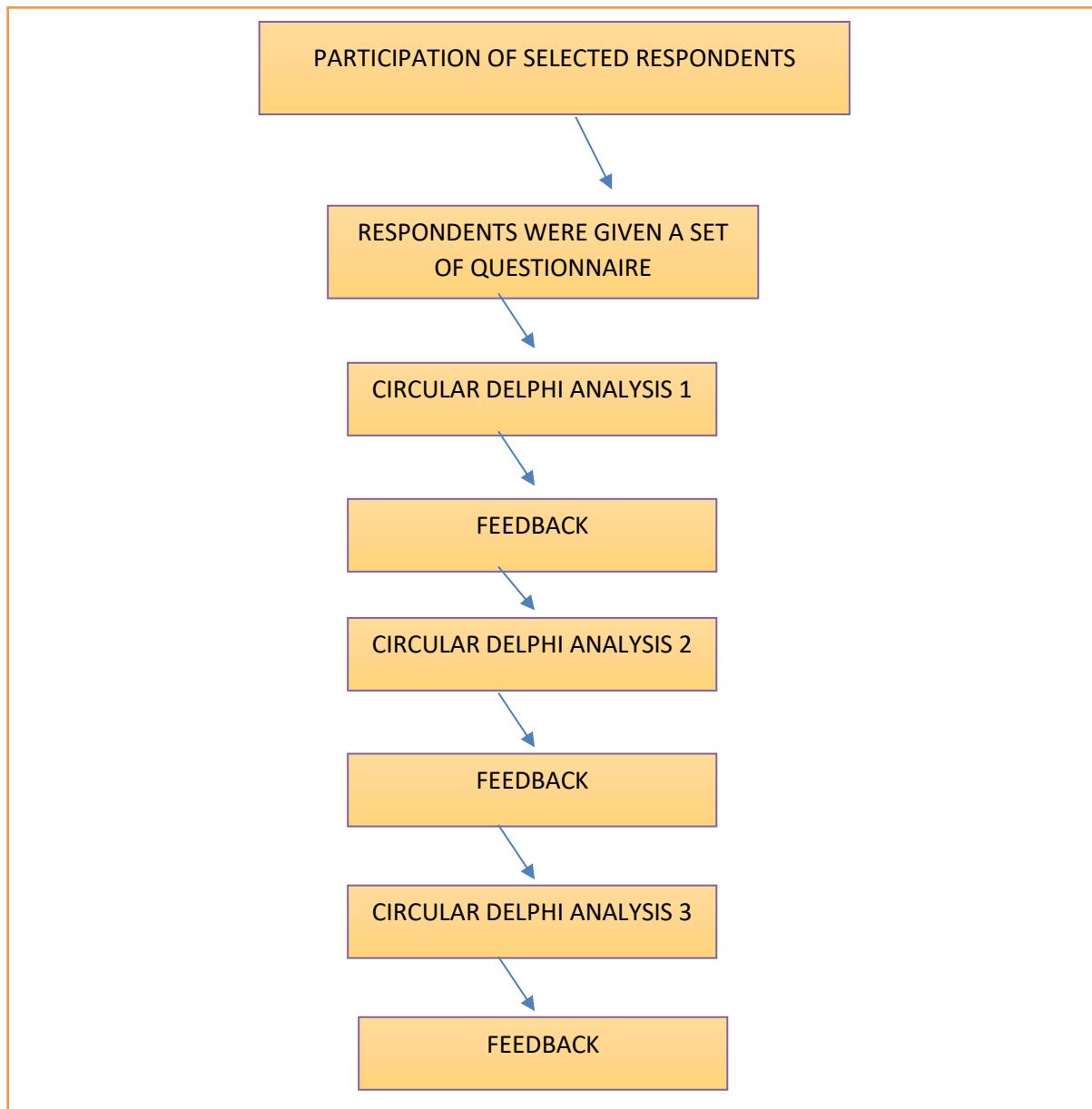


Figure 3: Study design using Delphi Techniques to build a ‘Let’s Play the Alphabet’ Language Game Kit

FINDINGS

This chapter discusses the use of the ADDIE model and two studies conducted by researchers to build effective learning aids to be used during the teaching and learning process as well as another study to evaluate the effectiveness of learning aids that have been created that is the Language Game Kit 'Let's Play the Alphabet' form in terms of students' interests, performance and attitudes towards the subjects studied. Therefore, the findings should be recorded descriptively and numerically.

ADDIE Model

In this study, the ADDIE Model was chosen by the researcher and used as a platform to build learning aids called Language Game Kit 'Let's Play the Alphabet'. Through this model, the researcher has gone through five phases of development of learning aids, namely:

- i. Analysis Phase
- ii. Design Phase
- iii. Development Phase
- iv. Implementation Phase
- v. Evaluation Phase

Analysis Phase

This Analysis phase aims to identify the objectives of a 'courseware' introduced. This phase also emphasizes some branches that need to be considered before a 'courseware' is created such as logistics, content suitability, internet access or CD or DVD and so on.

Design Phase

Design means to determine and design the instructional methods to be used. In this phase, the researchers have designed a new learning aid based on the features suggested by the expert teachers. The recommendations of expert teachers were taken using the Delphi technique.

Delphi Technique Study

The Delphi technique is used as a group communication process with the aim of discussing something in detail and specifically planned for the future. In this study, researchers have selected 10 experts consisting of specialist teachers from special education, rehabilitation, preschool and mainstream. Each division is represented by two expert teachers who have served more than 10 years in the school. All these expert teachers underwent 3 rounds of answering research questions. The consensus gathered by these expert teachers will help researchers create suitable learning aids for future use.

Table 1: Delphi Techniques Research Findings on new learning aids.

Bil	Part / Expert	A	B	C	D	E	F	G	H	I	J
1	Creativity and Innovation	1.0	0.96	0.80	1.0	0.73	0.92	0.20	0.76	1.0	0.96
2	Innovation design	0.80	0.96	0.96	1.0	0.76	0.88	0.20	0.68	0.84	0.68
3	Teacher Teaching Effectiveness	0.64	0.84	0.88	1.0	0.61	0.96	0.20	0.36	0.88	0.72
4	Student Learning Effectiveness	0.79	0.92	0.96	1.0	0.76	0.96	0.20	0.56	0.80	0.80
5	Potential for innovation to be disseminated	0.89	0.96	0.96	1.0	0.76	1.0	0.20	0.88	0.76	0.68
6	Cost effectiveness	1.0	0.88	0.32	0.51	0.32	0.40	1.0	0.08	(0.12)	0.28
7	Content	0.09	0.80	0.24	0.76	0.39	(0.04)	(0.16)	(0.24)	0.36	0.32

Based on Table 1, it shows that the 10 expert teachers selected by the majority agreed at least 70% on the criteria of creativity and innovation. The teachers agreed that good learning aids need to have creative and innovative features. Meanwhile, the criteria of the form of innovation also play a role in the creation of new learning aids. A form of learning aids that are easy to carry anywhere and easy to use anywhere finds a place in the hearts of expert teachers who choose the 'good' agreement scale in Copen Kappa's (1968) table.

Storyboard

Researchers have designed this 'Let's Play the Alphabet' Language Game Kit storyboard as illustrated in Figure 4-6. The storyboard of the 'Let's Play the Alphabet' Language Game Kit includes the initial materials used to form the 'Let's Play the Alphabet' Language Game Kit to the implementation of the 'Let's Play the Alphabet' Language Game Kit with the target users of this learning aid. Two-Dimensional (2-D) visuals have been created to form the storyboard of this 'Let's Play the Alphabet' Language Game kit. After the production of this 'Let's Play the Alphabet' Language Game Kit storyboard, the researcher has developed a prototype of this teaching aid based on visual design.

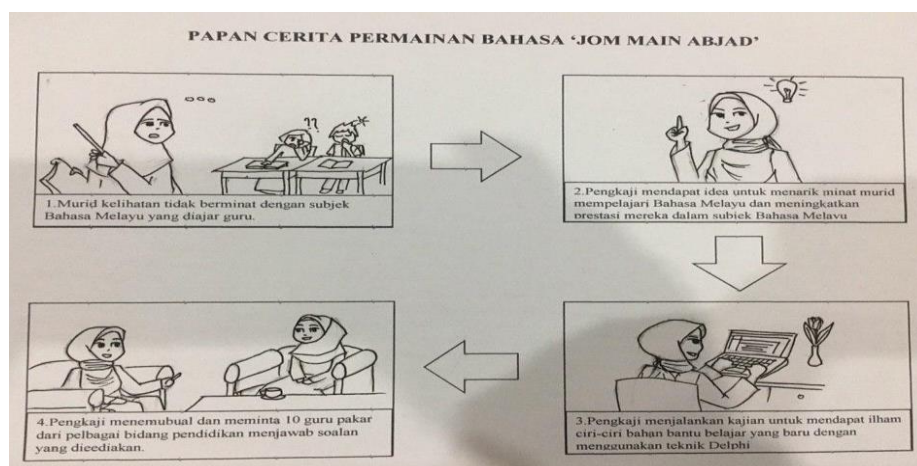


Figure 4: Story board 1

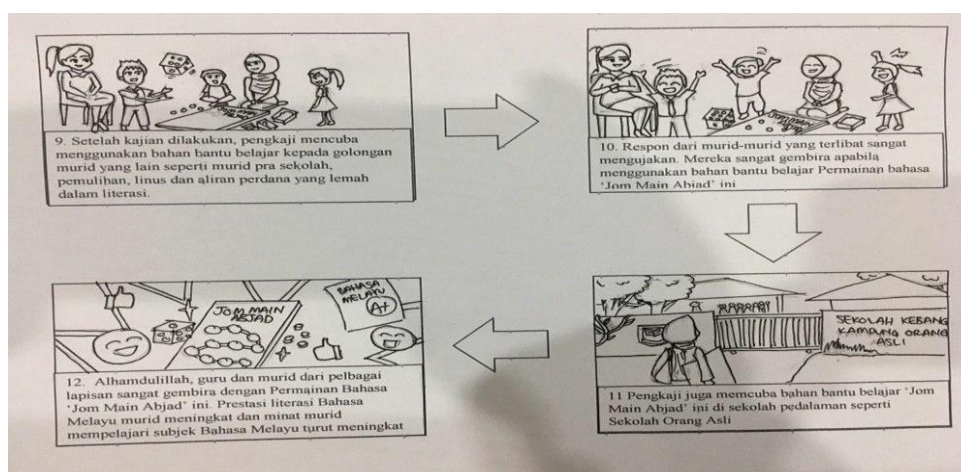
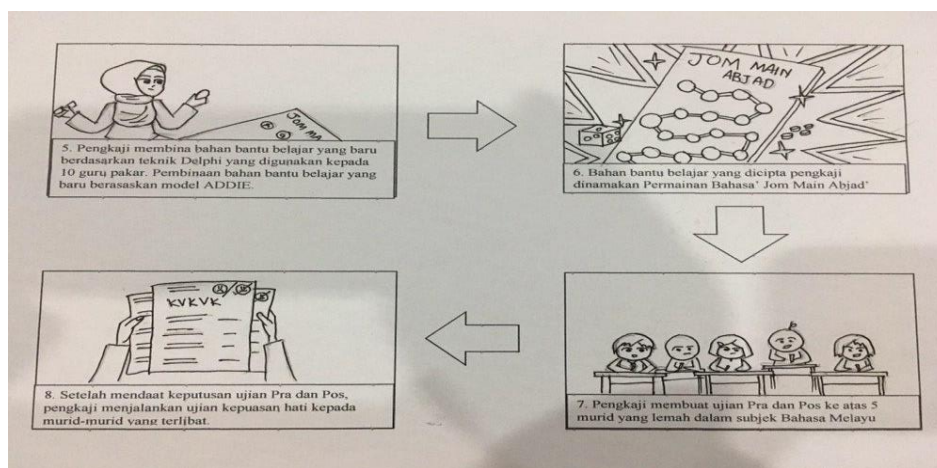


Figure 6: Storyboard 3

Development Phase

Development is the process of producing courseware that has been designed in the second step. Here, the researcher needs a graphic designer to produce a learning aid called the 'Let's Play the Alphabet' Language Game Kit. Various computer hardware and technologies are used to produce the 'Let's Play the Alphabet' Language Game Kit.

'Let's Play the Alphabet' Language Game Kit

The 'Let's Play the Alphabet' Language Game Kit consists of an alphabet board containing uppercase and lowercase letters A-Z, a large dice, 7 turns, a set of questionnaires, a set of penalties, a small tray, a reward book, a notebook and beach sand as shown in Figure 7. Cooperative and collaborative learning is also adapted when students use the 'Let's Play the Alphabet' Language Game Kit where smart students will help less intelligent students while playing this 'Let's Play the Alphabet' Language Game Kit.



Figure 7: 'Let's Play the Alphabet' Language Game Kit

OBJECTIVE

The objectives of the 'Let's Play the Alphabet' Language Game Kit Innovation are:

- Improving the level of reading literacy among students with learning disabilities
- Increase the interest and motivation of students to learn Bahasa Melayu or English
- Creating a fun, interactive, cooperative, collaborative learning environment while playing the 'Let's Play the Alphabet' Language Game Kit.

Potential User

Beside special education students, The 'Let's Play the Alphabet' Language Game Kit can be used by:

- Level 1 mainstream student with literacy problems
- Pre -school students
- Remedial education students
- Disciple of Linus
- Pupils mainstream weak literacy Bahasa Melayu
- Inland students are like native students
- The idea of the 'Let's Play the Alphabet' Language Game Kit can be modified into other subjects such as mathematics, music and Arabic language

Implementation Phase

In this implementation phase, the researcher had carried out a pilot test.

Pre and Post test

In order to find out the effectiveness of this ‘Let’s Play the Alphabet’ Language Game Kit, researchers have used pre and post tests. These students undergo 10 sessions of game ‘Let’s Play The Alphabet’ during English class. Here are the scores for the post KVKVK writing test for the 5 students involved as shown in Table 2.

Table 2: KVKVK Pre and Post Test Results before and after using the ‘Let’s Play the Alphabet’ Language Game Kit

No	Student name	Category	Pre KVKVK test scores Before playing %	Pre KVKVK Test Questions answered by students X/179	KVKVK Post Test Score After playing %	KVKVK Post Test Questions answered by students Y/202	Enhancement %
1	B	Dyslexia	70	125/179	85	171/202	15.0%
2	F	Autism	60	108/179	73	147/202	13.0%
3	G	Slow learner	59	107/179	92	186/202	33.0%
4	I	Autism	74	133/179	93	187/202	19.0%
5	J	Slow learner	60	108/179	76	153/202	16.0%

There is an increase of 15-33 % after MBK students who are weak in reading in KVKVK use the ‘Let’s Play the Alphabet’ Language Game Kit. This improvement in student performance is supported by Nur Azmidy, Imam and Che Ku Nuraini (2020) who conducted a study ‘Creating Applications (Speedline the Game) where the gamification of ‘Speedline’ can improve the Skills of Adding and Subtracting for Special Education Students up to a million by 5 -95% in the Pre and Post Test results of the study. The study not only proves that games in the form of applications can help students with special needs in mastering the operation of addition and subtraction but it also supports this study where by using the ‘Let’s Play the Alphabet’ Language Game Kit can increase literacy and interest among students with special needs in Bahasa Melayu subject.

Evaluation Phase

In this phase, the researcher chooses the method of observation, checklist and satisfaction level test to determine the level of effectiveness of the learning aids called ‘Let’s Play the Alphabet’ Language Game Kit. Observation is a simple and real method of observing student behaviour. Meanwhile, the checklist helps the researcher to record the reading behaviour activities of the target audience of MBK. Based on the observation while the students were playing with the ‘Let’s Play the Alphabet’ Language Game Kit, the teacher detected that the students performance in reading the word KVKVK was quite weak to pronounce the two syllables KVKVK. Teachers found that there are 2 main reasons why students find it difficult to pronounce the word KVKVK, the first is because students do not know the letters and the second is the poor memory of students compared to other typical students.

Based on Figure 8, it shows that the students with learning disabilities were felt pleasantly and well acknowledged the ‘Let’s Play the Alphabet’ Language Game Kit. Data achievement exceeded the good category in the Cohen Kappa (1968) agreement table scale. This shows that children are very enjoyable and playful while learning process took place. By using the ‘Let’s Play the Alphabet’

Language Game Kit, the target pupils can enjoy the benefits of the multisensory method used by the 'Let's Play the Alphabet' Language Game Kit.

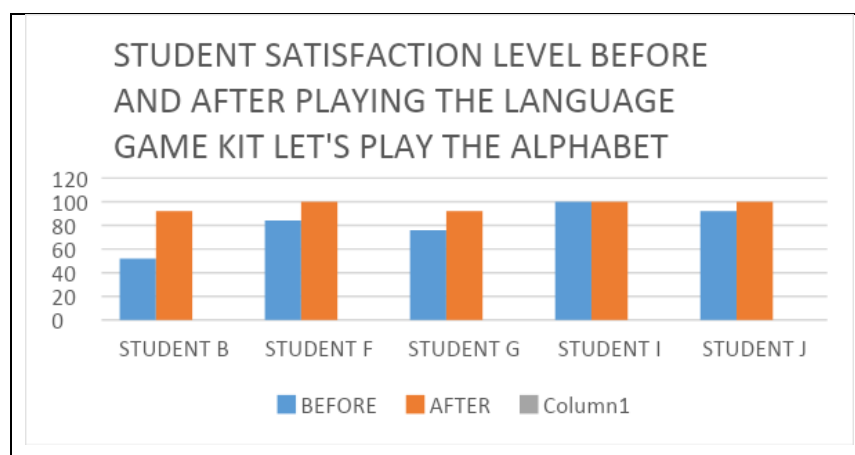


Figure 8: The level of student satisfaction before and after playing the 'Let's Play the Alphabet' Language Game Kit.

DISCUSSION

The implications of this construction kit called 'Let's Play the Alphabet' Language Game Kit not only can improve literacy skills in Bahasa Melayu among pupils of special education but it also can increase student motivation and interest in learning the Bahasa Melayu subject. Pupils' memory also increases due to the production of the chemical serotonin which results from pupils' joyful while playing. Pupils also have more fun learning than using conventional methods.

Due to the weaknesses and limitations of the 'Let's Play the Alphabet' Language Game Kit study, the researcher suggested:

- i) Find a supplier of learning aids who are interested and have the ability to publish the 'Let's Play the Alphabet Language Game Kit'. Therefore, the researcher only supplied the idea to build the 'Let's Play the Alphabet' Language Game Kit while the supplier only spent capital to produce the 'Let's Play the Alphabet' Language Game Kit in bulk.
- ii) Therefore, the cost of producing the 'Let's Play the Alphabet' Language Game Kit will be low because the supplier can bear the cost of producing the 'Let's Play the Alphabet' Language Game Kit involved.
- iii) Researchers plan to create a new innovation, namely the 'Let's Play the Alphabet' Language Game Application in the future after the 'Let's Play the Alphabet' Language Game Kit has been widely distributed around the world.
- iv) Increasing the limitations of the study in this study revolves around study aids to other coursework as well.
- v) The researcher intends to expand the study of the construction of the Let's Play the Alphabet Game Kit to a wider area covering several schools to obtain more accurate data.

CONCLUSION

In conclusion, the objectives of this study have been achieved. This innovation construction kit called 'Let's Play the Alphabet' Language Game Kit is in line with the Ministry of Education where he hoped to increase student interest and achievement in the creation of effective learning in Bahasa Melayu. This study is also expected to contribute to the reform of the teaching and learning process in the classroom. On the other hand, the language game kit called 'Let's Play Mode' that uses student-centered teaching methods and oriented play therapy can also help increase the interest and motivation of students with special needs in learning Bahasa Melayu subject with more interesting and effective

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