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EFFECTIVENESS OF BANKNOTES BIG BOOK TOWARDS LEARNING MATHEMATICS FOR STUDENTS IN SPECIAL EDUCATION PROGRAM

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ABSTRACT

It is found that a large number of students in special education program in Malaysia struggled in recognising and using money in their daily life. Medical issues such as cerebral palsy, ADHD and others have a large impact to the educational development of these children. The researchers as teachers have found out that children are more responsive to colour, shapes and games. Hence, Big Book - Wang Kertas Malaysia is a teaching aid produced by the researchers to overcome the issue of unable to identify and use money from the value of MYR1 to MYR100 for students in special education program at Sekolah Kebangsaan Bukit Beruntung, Rawang, Selangor. This study was conducted quantitatively to collect the required data through worksheets, pre-tests and post-tests. The researcher conducted a survey involving a total of 30 students from special education class who study Mathematics using traditional learning strategies such as textbooks and exercise sheets in the topic of Money. After that, the same learning topic was taught with the addition of Big Book – Malaysian Banknotes. Before the intervention using the Big Book, these students are slow in learning and unable to pick up the lessons taught to them. However, after the inclusion of Big Book in their learning program, the findings of the study showed that 70% of Special Education students with Learning Disabilities are able to master the skills taught. They are also able to apply the concepts of Mathematics in daily life. The use of teaching aids Big Book - Malaysian Banknotes is expected to benefit students with special learning needs.

Keywords: Malaysian banknotes, teaching aids, mathematics, special education, money

1. Introduction

1.1 Background of Study

Effective Learning and Facilitation (PdPc) requires a teacher to use his or her creativity and build effective strategies to deliver a lesson. The use of teaching aids in PdPc is a method that can channel information related to the subjects taught more clearly and effectively. Similarly, in conveying mathematical ideas and information, teachers can use a variety of approaches. One method is to use teaching aids.

Generally, a pupil with special educational needs (SEN) means a child certified by a medical practitioner, optician, audiologist or psychologist as a pupil with visual impairment, hearing impairment, speech disabilities, physical disabilities and learning disabilities or any

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combination of disabilities and problems mentioned (Educational Regulations (Special Education), 2013). Students with special educational needs differ from normal pupils in terms of mental, sensory, communication, social behaviour, or physical (Jamila, 2005). This difference results in a modified form of education given to these students so that they can develop their abilities. Appropriate teaching aids are needed by students with SEN, especially in helping them understand certain concepts. The construction of teaching aids that are accurate and the proper way to use them is expected to improve the achievement of students with SEN in mastering a subject skill (Siti Fatimah & Mustafa, 2018).

1.2 Problem Statement

Basic knowledge of Malaysian banknotes in Malaysian Ringgit (MYR) is vital for special education needs (SEN) students with learning difficulties because they will use money eventually in their daily activities. These students have trouble recognising banknotes and their value as well as proper ways to use them. This is crucial, especially when they buy something regardless of in the school or outside the school.

According to the survey done earlier in this study, these children with special educational needs are unable to associate the colour of the banknotes with their values. Thus, making it hard for them to engage in trading activities. Some of them only recognise one or two banknotes since they are familiar with it. For example, MYR 1, 5 and 10 are quite easy for several of them to recognise; since these banknotes are familiar to children. For MYR 50 and 100 however, would be quite an arduous task for them to comprehend as these banknotes are almost alien to them. They are not accustomed to holding a piece of MYR 50 or 100 freely in their hands.

A number of the students are aware that money is used for buying items. However, they do not know that money is something that must be saved for future usage. As we all familiar with the saying, “money does not grow on trees”; these children however, do not understand the concept of frugality and saving. Hence, they do not know the proper way to save money. Saving money for future use is vital as we do not know what lies in front of us. Having a piggy bank or savings would be a great benefit in times of need.

To overcome this problem, teaching aids are used in learning and facilitation (PdPC). Teaching aids are not a new thing or method in education. Hence, teachers need to wisely choose the most appropriate teaching method for their students because it helps the teacher provide meaningful and interesting teaching materials and develop the talents and potential of students in achieving the objectives of the National Education Philosophy (Ee Ah Meng, 1997). Thus, as a teacher, it is necessary to take a paradigm shift in teaching methods other than relying solely on writing and explanation only as it is uninteresting and dull for these students. Pupils can do various activities provided in the teaching aids created and help understanding and meaningful learning.

1.3 Research Objective

This study aims to improve the skills of recognising and using MYR 1 to MYR 100 banknotes. In particular, the objectives of this study are to:

a. Improve the skills of recognising and naming MYR 1 to MYR 100 banknotes.
b. State the value of MYR 1 to MYR 100 correctly and accurately.
c. Solve problems involving addition and subtraction operations without or with regrouping.
d. Apply the skills of using banknotes in daily life.

1.4 Scope of the Study

This study will focus on the effectiveness of using Big Book – Malaysian banknotes towards learning Mathematics for students in Special Education program. This research will focus mainly on the topic of Money in Mathematics subject. The reason for this is because a large number of these children are not familiar with Malaysian banknotes and how to properly use them in trading activities.

1.5 Significance of the Study

This study will benefit two major parties, namely the students with special educational needs and the teachers who teach these students.

1.5.1 Special Educational Needs Students

It is undeniable that when these students reached a certain age, they will need to face the real world and be able to interact with the society just like any other individuals. However, it is detected that some of these students lack the ability the differentiate money and banknotes. It is a great relief that the teachers realised these issues in its beginning stage, while they are still young. Therefore, this Big Book will serve as a vital learning material so that they can be kept on track and being on the same level with other children.

1.5.2 Special Educational Needs Teachers

For teachers, getting a student to understand a concept at an early age is vital in order to get them move on to next learning materials. If the students are unable to understand the concept of numbers, it will be difficult for the teachers to move on to another topics involving numbers such as addition or subtraction. Therefore, the Big Book – Malaysian Banknotes is there to ease the burden of the teachers in educating these young minds. The concept of understanding money will be much easier using this learning aid. The fun learning incorporated in this Big Book will make the teaching of the topic Money exciting and joyful.

1.6 Teaching Aid: Big Book - Malaysian Banknotes

Teaching aid: Big Book - Malaysian Banknotes was produced by the researcher to facilitate the teaching and learning of Mathematics for special education needs students with learning difficulties. This initiative is created using discarded materials such as boxes, gift wrappers, coloured papers and fancy paper from scrapbooks that are no longer used, as well as purchased materials. The cost of producing the Big Book - Malaysian Banknotes is only MYR 60.

The Big Book - Malaysian Banknote has two parts. The first part is a note in the form of a pop-up and coloured images that attract students' attention. The second part is exercise. The exercise is in the form of pop-ups that are gradual and progressive. The exercise given is on the elements of recognising, naming, addition and subtraction operations, as well as problem-solving.

Figure 1: Cover page of the Big Book – Malaysian Banknotes

Figure 2: Part 1 – List of Malaysian Banknotes

Figure 3: Part 1 – Pull-tab origami envelope card containing Malaysian banknotes

Figure 4: Part 1 – Pull-tab origami envelope card containing Malaysian banknotes

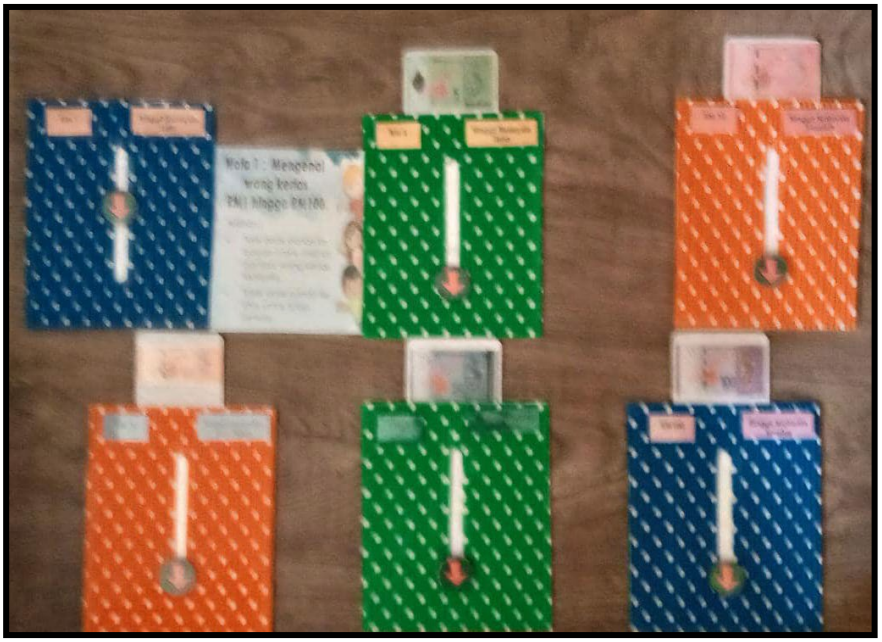


Figure 5: Part 2 – Fill-in-the-blanks exercises based on given notes

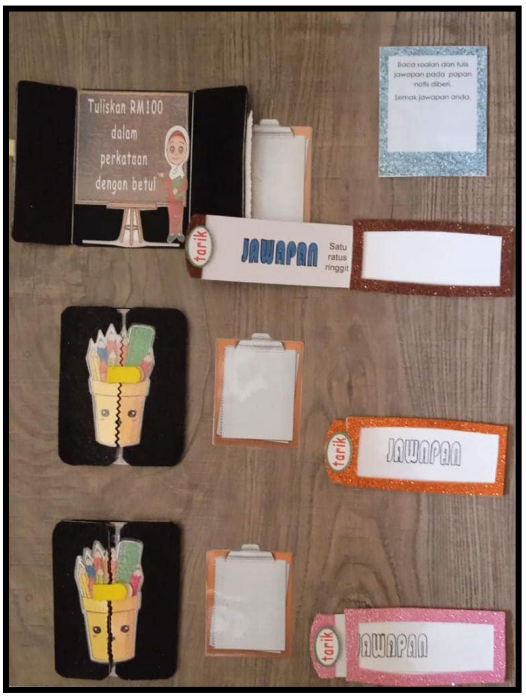
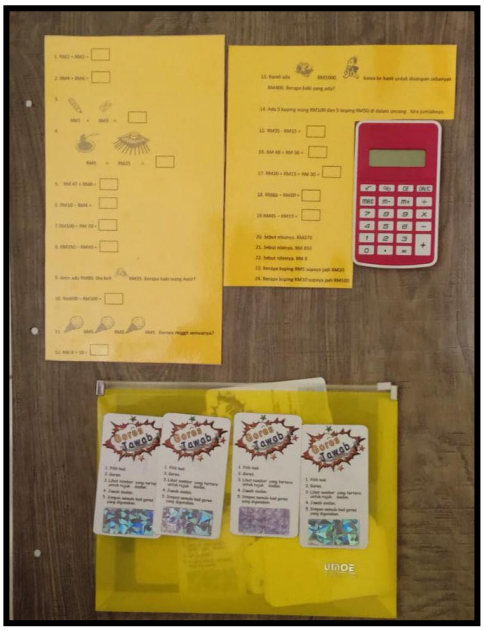


Figure 6: Part 2 – Jigsaw and slide puzzles to incorporate fun learning

Figure 7: Part 2 – Addition and subtraction exercises involving money in the Big Book

Figure 8: Part 2 – Maze activities to incorporate fun learning

Figure 9: Part 2 – Problem-solving questions involving money in the Big Book



2. Literature Review

2.1 Teaching Aids

Norzainariah binti Abu Hassan, in her writing entitled “Usability of Teaching and Learning Kits to Improve Student Performance”, stated that teaching aids could be divided into two categories, namely the electronic and non-electronic category. Teaching aids categorised as electronic such as television, radio, video projection, slides from projectors, and computer-aided tools. Meanwhile, teaching aids classified as non-electronic are magazines, models, journals, pictures, and even flashcards related to the teaching materials.

According to Amir Hasan (2002), in a classroom, each individual has different psychology and intellectual abilities from each other. Therefore, the planned teaching must be appropriate, organised (according to the level of students) and supported (with teaching aids) to stimulate the development of individual potential to the maximum level. Therefore, appropriate teaching aids must be increased to stimulate the development of an individual’s potential to the full and improve the quality of teaching and learning in schools. It may also produce students who can contribute to national development.

In general, teaching aids help teachers in the teaching process, and they are not limited to textbooks, whiteboards or pictures. These teaching aids include materials that can be touched, smelled, felt, seen, read, narrated and heard. Teaching tools are anything that is experienced by students (Kamaruddin Hj. Hussin, 1986). Atan Long (1981) divides teaching aids into three groups: hearing aids, visual aids, and audio-visual aids. While Hanapiah Sudin (1979) classifies teaching aids into two, namely software and hardware materials.

Atan Long (1982) dictates that teaching aids consist of various materials. Material can be conveyed in multiple ways. For example, a material may be published in a book, a chart or placed on a slide and projected onto a screen. The delivery tools are called ‘teaching aids’ based on the above opinion. Kamaruddin Hj. Hussin (1987) specified that teaching aids could be divided into three levels, namely materials that use electronic media

such as instructional films, slide films, projectors (overhead), videotapes, radios, recording tapes, vinyl records and others. Second, materials that do not use electronic media such as voice, books, model chart pictures, newspapers, whiteboards, flashcards and others. Lastly, experiential materials such as acting, pantomime, tours, exhibition projects and materials from nature.

2.2 Mathematical Education

Piez and Voxman (1997) stated that reforms in mathematics education should lead to several changes. Firstly, Mathematics must be associated with daily life. We use Mathematics in our daily life whether it is in trading activities, telling time, or estimating the weather. The reformation in mathematics must also emphasis on the use of mathematics in everyday life. The teachers must be able to associate the learning of mathematics in classroom to its real application in the real world. This will make the students feel the need to master the lessons as they will use it in their life.

Third, the students' original thinking must be emphasised instead of manipulating the formula by rote. These young minds must be stimulated to come up with creative and original ideas. If they were only memorising the formula by rote, their minds will not develop to think outside the box. Thus, comes to the next change which must allow multiple means in solution. There is not one true solution to a problem. There are several probable solutions that may solve an issue. Hence, multiple ideas to solve an issue must not be ridiculed. As long as it solved the problem, it may be regarded a solution as well. Fifth, it must allow a variety of different social approaches. As life is full of surprises and not one person is similar to another, there are many social approaches that deemed suit in order to tackle an issue.

Last but not least, the change that had been brought in by reforming mathematics must diversify perspectives in teaching. As we all know, reformation means taking other steps or different approaches in an issue. Hence, teachers must be able to open their minds to different perspectives in teaching. New concepts and methods are being introduced by academicians in order to liven up educational atmosphere and making the children able to comprehend learning materials easily. Thus, if the teaching methodologies are efficient in educating the students, the teachers must embrace these new perspectives.

3. Research Methodology

3.1 Method of Data Collection

3.1.1 Preliminary Survey with Special Education Teachers

A preliminary study was conducted among four Special Education teachers in the Special Education Integration Program (PPKI) Sekolah Kebangsaan Bukit Beruntung, Selangor, Malaysia. A total of 1 male teacher and three female teachers were sampled in this study. The aim of this initial interview was to figure out what is the real issue behind the lack of interest in students with special needs towards the topic Money in Mathematics. Based on age, most of the teachers who answered this interview are in the age range as shown in Table 1 below:

Figure 10: PPKI Teachers Questionnaire Result

Teacher Age Group (Years)	Number	Gender
20 - 30	1	Male
40 - 50	2	Female
50 - 60	1	Female

From the interview conducted, the researchers understood that there are several problems faced by special education needs students with learning difficulties. When it comes to money, these students lack the ability to distinguish the colour of Malaysian banknotes. It is known throughout the globe that Malaysia have a very vibrant and colourful set of banknotes. MYR 1 is blue in colour, MYR 5 is light green, MYR 10 is in red, MYR 50 comes in dark green and lastly MYR 100 comes in purple. It is believed that the Malaysian government made them this way so that it is easier to distinguish the banknotes just by looking at their colour alone. This will save a lot of time and avoid people from checking their money to ensure it is the correct piece to give to sellers or service providers.

3.1.2 Target Group

The researcher conducted a study involving 30 special education needs students from Sekolah Kebangsaan Bukit Beruntung, Selangor, Malaysia, consisting of various categories who learn mathematics using this teaching aid.

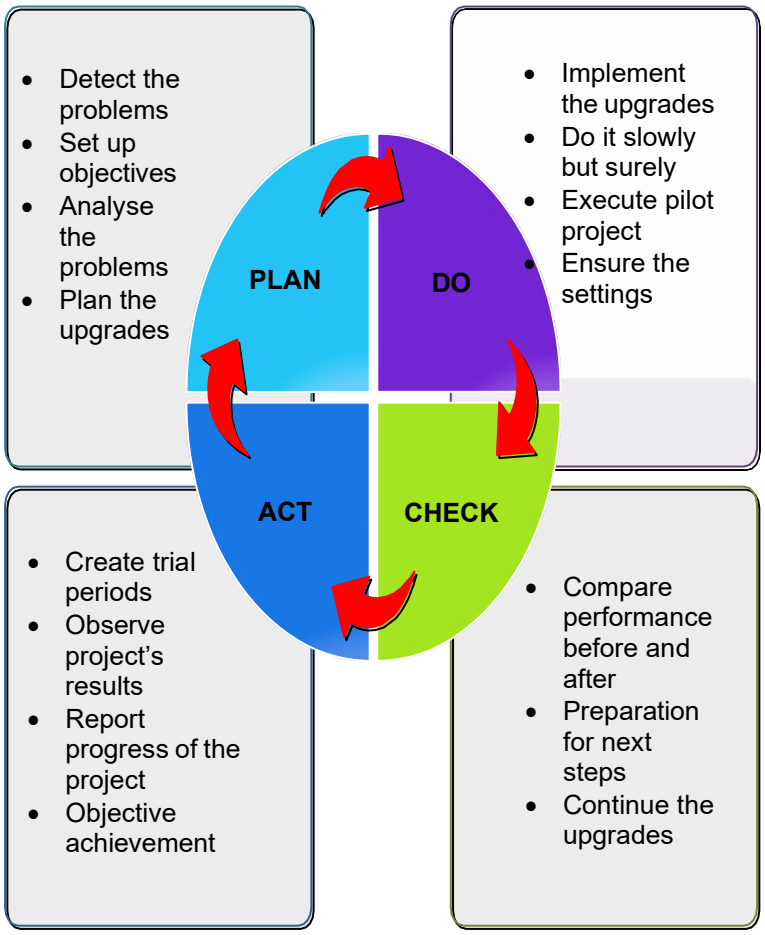
Figure 11: Category of Special Education Needs Pupils with Learning Disabilities

Category of Special Education Needs Pupils with Learning Disabilities	Number of Students
Slow Learner	5
Cerebral Palsy	3
ADHD	10
Autism	6
Dyslexia	5
Speech Problems (Stutters)	1

3.2 PDCA Cycle

The Big Book - Malaysian Banknotes is a teaching aid produced by the researcher to help special education needs students with learning difficulties to deal with recognising and using Malaysian banknotes from the value of Malaysian Ringgit 1 to 100. In this context, the researchers use a PDCA cycle created by William Edwards Deming. The PDCA (Figure 12) is an acronym for Plan, Do, Check and Act to achieve the objectives.

Figure 12: PDCA Cycle



Source: (The W. Edwards Deming Institute, 1986)

3.2.1 Step 1: Plan

In every project that we ought to make, it must have the planning step. Planning is utmost important in order to make sure that the project that we have in mind is the same as what had been imagined by our teammates. The ideas must be put forth in this stage. A good plan will make sure the project does not crumble to pieces. By detecting the problems, we can set up the objectives to tackle the issues. Apart from that, by analysing the problem in depth, we are able to plan the upgrades and new solutions to solve them.

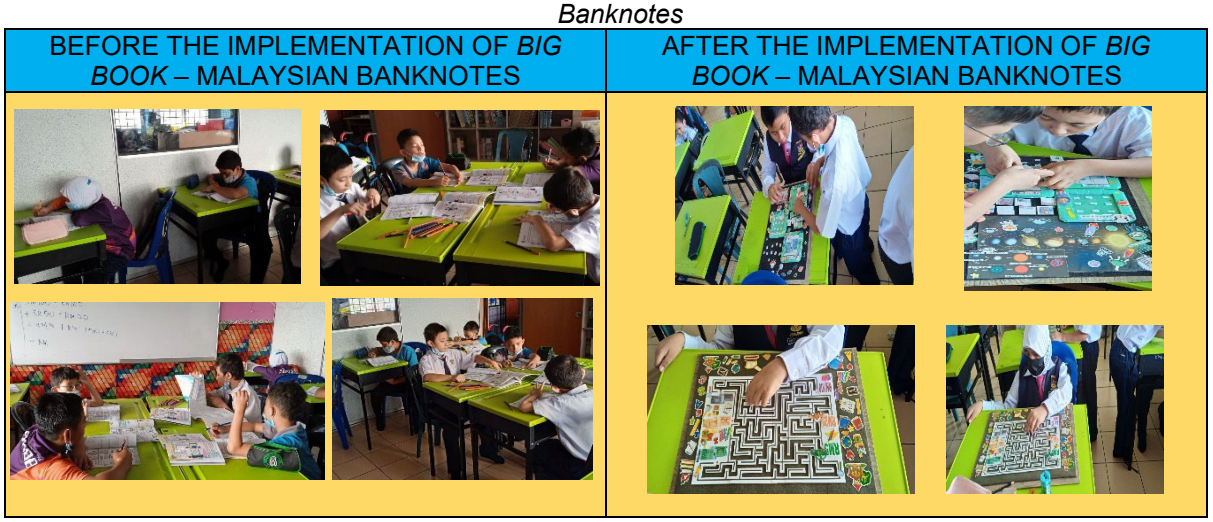
3.2.2 Step 2: Do

Data and information collection were made and given to special education teachers who became respondents using self-constructed questionnaires. This questionnaire was conducted to identify special education problems students with learning difficulties in recognising Malaysian banknotes from the value of MYR 1 to MYR 100.

3.2.3 Step 3: Check

Figure 13 illustrates the third step of the PDCA Cycle, which involves observing the learning of Mathematics in the topic of Money before and after using the Big Book - Malaysian Banknotes.

Figure 13: The images show before and after the implementation of Big Book – Malaysian Banknotes



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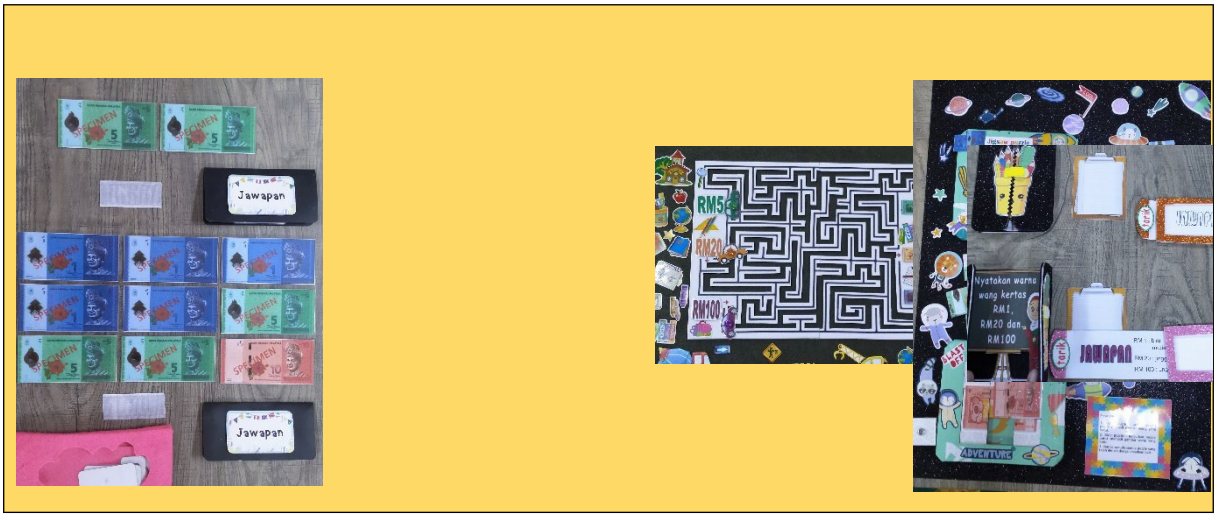
3.2.4 Step 4: Act

Figure 14 displays the last step in the PDCA Cycle. The researcher used the observation method by means of a checklist on the use of Big Book - Malaysian Banknotes to assess students' progress through the test before and after the intervention using Big Book - Malaysian Banknotes conducted. Pupils show confidence and a positive attitude to participate in activities involving recognising and making mathematical operations such as addition and subtraction involving money.

Figure 14: Learning activities involving Big Book – Malaysian Banknotes



4. Results and Discussion

This study was conducted because money is significant in the daily lives of special education needs students with learning difficulties, both while in school and after school. In the learning process, these students only recognise money as a tool for buying items. However, they do not recognise their value, appearance, colour and how to use money properly. Therefore, the researcher has produced a form of teaching aid, the Big Book - Malaysian Banknotes to help and facilitate students to understand the learning objectives of the topic Money fully. Big Book – Malaysian Banknote has pictorial notes in the form of pop-ups and exercises such as puzzles, mazes, slide card questions, scratch card questions and others.

4.1 Respondents' Demographic

Figure 15: The respondents' demographic

No.	Item	Male	Female
1.	Age	18 -29 years old: 1 respondent	30 – 49 years old: 2 respondents Above 50 years old: 1 respondent
2.	Gender	1 respondent	3 respondents
3.	Race	Malay = 1 respondent	Malay: 3 respondents
4.	Religion	Islam = 1 respondent	Islam = 3 respondents
5.	Teaching Experience	1 – 5 years = 1 respondent	6 – 15 years = 1 respondents Above 16 years = 2 respondents

This survey was conducted towards four special education needs' teachers who teach at Sekolah Kebangsaan Bukit Beruntung, Rawang, Selangor. Their experiences in teaching the special education needs' children are what important in order to bring this research into fruition. Without their abilities to pinpoint the issues that these children had, the researchers would not be able to come up with a solution to overcome the issue.

The respondents who answered the survey consisted of one male and three female teachers. The male teacher is from the age group of 18 to 29 years old. Meanwhile, 2 of the female teachers were from 30 to 49 years old; and another female teacher is above 50 years old. They are all of Malay race and embrace Islam as their religion. The male teacher possesses 1 to 5 years teaching experience. Meanwhile for the female teachers, one of them has 6 to 15 years teaching experience and the remaining two possess more than 16 years teaching experience.

4.2 Respondents' Knowledge Regarding Learning Aids

Figure 16: Question 1 of Knowledge in Learning Aids

No.	Question	Male teacher	Female teachers
1.	What is your knowledge level regarding learning aids?	Very knowledgeable = 1	Very knowledgeable = 3

When the respondents were asked about their knowledge in learning aids, all four of them claimed to know the definition of learning aids and how to use them in classroom. Hence, they all know the importance of learning aids in helping students to grasp the lessons taught. It is undeniable as well that these teachers may have use at least one type of learning materials in the classroom to aid their teaching.

4.3 Implementation of Learning Aids in Classroom

Figure 17: Question 1 of Implementation of Learning Aids

Questions No.	Question	Yes	No
1.	Do you use learning aids in classroom while teaching?	3	1

The first questions in this segment asked whether the teachers use learning aids in the classroom while they are teaching. Three teachers answered Yes to the question, while 1 teacher said that she had not use learning aids in the classroom.

75% of teachers prefer two-way teaching and use teaching aids in the form of printed materials to facilitate the complete delivery of learning content. They prefer to use cooperative learning, a teaching strategy where students help each other in a small group with the same goals and objectives. Studies have found that collaborative learning can improve students' achievement, creative and critical thinking, social skills and group interaction, and confidence and mutual respect (Artzt and Newman, 1997: Slavin, 1995). According to Johnson and Johnson (1989), traditional teaching is a passive and non-stimulating teaching method.

Overall, the level of use of teaching aid among special education teachers with learning difficulties is moderate. The analysis results show that only printed material is the most frequently used teaching aid by respondents in the teaching and learning process. This means that respondents, which are the special education teachers, prefer to provide printed materials to be used in their teaching because it is easier and simpler to prepare.

Figure 18: Question 2 of Implementation of Learning Aids

Questions No.	Question	Male teacher	Female teachers
2.	What is the scale that can be given to the student's development before the teacher uses the teaching aids in education?	Scale 2 = 1 respondent	Scale 1 = 1 respondent Scale 2 = 2 respondents

The second question asked regarding the scale that the teachers may give to the students' educational development before the teachers use teaching aids in classroom. The male teacher gave a scale of 2 out of 5, where 5 is the highest. Meanwhile for the female teachers, one of the three teachers gave a score of 1 out of 5. The rest of the teachers gave a scale of 2 out of 5. This signified that the performance of these children is not very satisfactory and not even mediocre. They should be at least 3 out of 5 in order for them to be average.

According to the survey done earlier in this study, these children with special educational needs are unable to associate the colour of the banknotes with their values. Thus, making it hard for them to engage in trading activities. Some of them only recognise one or two banknotes since they are familiar with it. For example, MYR 1, 5 and 10 are quite easy for several of them to recognise; since these banknotes are familiar to children. For MYR 50 and 100 however, would be quite an arduous task for them to comprehend as these banknotes are almost alien to them. They are not accustomed to holding a piece of MYR 50 or 100 freely in their hands.

A number of the students are aware that money is used for buying items. However, they do not know that money is something that must be saved for future usage. As we all familiar with the saying, "money does not grow on trees"; these children however, do not understand the concept of frugality and saving. Hence, they do not know the proper way to

save money. Saving money for future use is vital as we do not know what lies in front of us. Having a piggy bank or savings would be a great benefit in times of need.

In order for these children to understand the concept of saving money, the first need to differentiate between cheap and expensive items. Thus, they will know that if we choose to buy cheap item, we are able to save money. However, it is not the case with these special children. They may take a generous amount of time in order to differentiate and distinguish whether an item is cheap or expensive. To the eyes of these children, they will give money in order to obtain the item. It does not matter whether it is cheap or expensive, as long as the money they have is sufficient to buy the item, they will use their money.

Figure 19: Question 3 of Implementation of Learning Aids

Questions No.	Question	Male teacher	Female teachers
3.	What is the scale that can be given to the student's performance after the teachers use teaching aids in education?	Scale 4 = 1 respondent	Scale 4 = 2 respondents Scale 5 = 1 respondent

To answer the third question, the teachers had used teaching aid in subsequent learning sessions. A test after using the teaching aid was conducted, and it was found that the students test scores improve drastically for students with low functionality, an increase of 25%; for medium functionality by 35% and high functionality by 40%. This improvement is the effect of the first-time use of teaching aid built by the researcher.

The special education needs teachers gave a very promising rating regarding their students' educational progress. The male teacher gave a scale of 4 out of 5, where 5 is the highest grade to be awarded. 2 out of 3 female teachers gave 4 out of 5, and one female teacher gave a full 5 marks. Hence, this showed that the Big Book – Malaysian Banknotes intervention served its purpose well.

Figure 20: Question 4 of Implementation of Learning Aids

Questions No.	Question	No changes	Lesson objective achieved
4.	What is the effectiveness of teaching after using Big Book teaching aid.	0	4

For the last question given to the teachers, they were asked the level of effectiveness achieved by implementing the Big Book – Malaysian Banknotes in their teaching lesson. It is vital to know whether there is change or improvement in the learning of these special children. All 4 teachers claimed that the insertion of Big Book – Malaysian Banknotes in the topic Money of the Mathematics subject had given a significant impact towards the learning of these pupils. They approved that the lesson objective had been achieved successfully with great results.

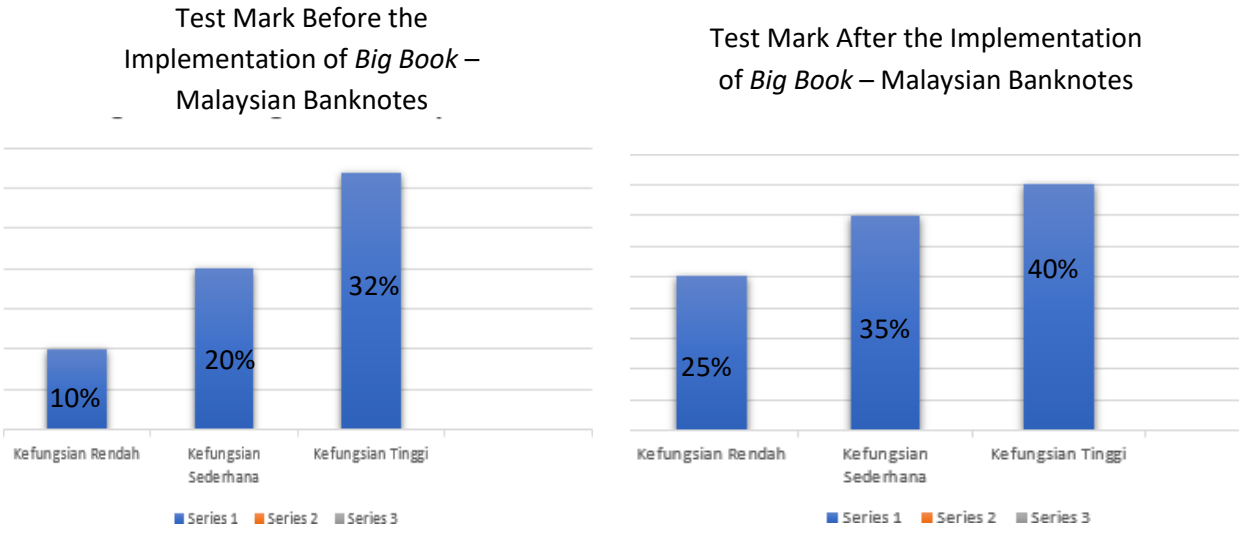
Before the intervention using the Big Book, it was found that special education needs students with learning difficulties only knew money as an object or as a tool to purchase items. They are unable to identify and specifically use the money even if it has been taught by teachers, parents and/or guardians. These are several problems that they encounter while studying the topic of Money in the subject of Mathematics.

Pupils find it difficult to recognise banknotes through textbooks learning and activity books only. Apart from that, pupils find it challenging to remember the banknotes taught by using only one teaching aid. They also find it hard to answer the questions in the exercise

book without the teacher's guidance. This makes it hard for them when the teachers teach mainly using textbooks and 1 or 2 forms of teaching aids and lack elements of creative thinking in a given activity. In addition, the pupils do not have the opportunity to explore activities in the subjects taught because there are not many activities provided.

Before using these teaching aids, students pay less attention to learning. They do not remember the inputs taught because the learning primarily uses textbooks, exercise books and teaching aids in the form of example banknotes only. A brief test was made after that and found that the students' marks were unsatisfactory. Subsequent learning has implemented the teaching aid of Big Book – Malaysian Banknotes and found that the students are very excited, entirely focused and positive because they can fully use the teaching aids. These students need to create creative ideas to produce good output. A simple quiz was made, and it was found that the students' scores increased by a significant percentage. The graph before and after the intervention can be seen below.

Figure 21: Bar Chart for Test Mark Before and After the Implementation of Big Book – Malaysian Banknotes



The figure above showed the graphs before and after the intervention of the Big Book. Written questions are often given after teaching a concept or skill to ensure that students understand the lessons taught by a teacher. In this context, tests conducted before using teaching aid found that special education needs students with learning difficulties have obtained unsatisfactory marks for each of their respective functions. For low functionality students, they got 10%; medium functionality received 20%, and high functionality gets 32%.

A test after using the teaching aid was conducted, and it was found that the students test scores improve drastically for students with low functionality, an increase of 25%; for medium functionality by 35% and high functionality by 40%. This improvement is the effect of the first-time use of teaching aid built by the researcher.

5. Discussion and Conclusion

5.1 Research Findings and Discussion

Based on the study results, the researcher found that the selection of teaching strategy methods appropriate to the topic, classroom atmosphere, and the students' situation is critical to ensure that lessons can be delivered as much as possible. In addition, this study is able to increase the innovation power of educators to improve the quality of teaching and learning. Holistic development and mastery of skills is the direction of every teacher when guiding special education needs students.

According to Amir Hasan (2002), in a classroom, each individual has different psychology and intellectual abilities from each other. Therefore, the proposed teaching must be appropriate, organised (according to the level of students) and supported (with teaching aids) to stimulate individual potential to the maximum level.

Noor Azlan and Nurdalina (2010) specified that teaching aids play a significant role in understanding the concepts in the teaching process other than aiming to attract students in the subject of Mathematics. Teaching aids are instruments in aiding students' understanding and further helping to stimulate the academic world for students. The use of teaching aids also contributes to improving the quality of teaching and learning among teachers and students. Teaching aids can also solve various teaching methods of teachers that are constantly changing with the passage of time (Noor Azlan and Nurdalina, 2010).

In addition, the use of teaching aids in the teaching and learning process is to highlight concepts. According to Norma (2004), the use of teaching aids actually gives students the opportunity to acquire knowledge through the use of various senses such as visual senses, tactile senses, and auditory senses.

Asri (2000) describes that traditional teaching that only focuses on listening to the teacher's explanation in theory without evidence cannot be used as a reinforcement in order for the lessons to understand faster and remembered effectively. On the other hand, classes that use teaching aids can strengthen learning because students can experience what is taught.

Although teachers find it easy using the mechanism of 'chalk and talk' in education, the method of teaching and learning using teaching aids for the subject of Mathematics can have a massive impact; especially on the development of special education students with learning difficulties.

It is hoped that this study can open the eyes of all teachers so as not to rely on books and worksheets only.

5.2 Implications of the Study

This research has a significant impact on the education world. The outcome of this study, which implemented Big Book intervention as a form of fun learning, had been proven by the substantial rise in academic performance of the students in Mathematics. Their interest in Mathematics had risen and thus will make them more interested in learning. The task of teaching these special students are very menial for these teachers. However, the teachers are able to pull it off without any complaints. Their spirits stay strong to educate these young minds.

With the implementation of Big Book - Malaysian Banknotes, the researchers hoped that it can ease their burden and making the teachers enjoying themselves in teaching the pupils. The improvement of these students' performance in learning had proved the positive implications towards the development of these young generations as well to their teachers.

5.3 Limitations and Future Suggestions

It is undeniable that every research has its own limitations and drawbacks. Although it is of best interest of the researcher to do our best, there are several aspects of the research that we are unable to give our utmost best. The first limitation is that the number of samples for the research is small. The respondents consist of 4 Special Education Needs teachers and 30 students from Special Educational Needs Program.

Apart from that, this Big Book only caters for students in the city area. Bukit Beruntung, Rawang is an industrial city with a lot of factories. Hence, the students' upbringing is much better compared to the students who live in the rural areas. Although the students have special needs, their living status and familiarity to the topic Money are much better compared to students living in villages.

Besides that, one cannot leave the fact that Big Book – Malaysian Banknotes is made specially to improve a certain topic, which is Money in the Mathematics subject. It focused clearly in educating the children regarding the topic Money.

For future researchers, it will be great if they can gather at least 100 students with special educational needs in order for the analysis to be more competent and solid. The number of teachers giving responses must be added as well to pinpoint the issues faced by these young generation.

To solve regarding the geological aspects of the respondents, future studies may include special education needs students from schools in villages and outskirts. These students may have different or add-on issues surrounding them that may not present in urban children.

Last but not least, the Big Book may include other topics as well. It may not solely for Mathematical purpose. It can be related to language learning, science and technology as well as religious subjects. The elements in a Big Book which includes shapes, colours, and games are well accepted by students as they are the concepts comprised in fun learning which may engage the students to learn better.

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