THE IMPLEMENTATION OF SMART CIRCUIT MEDIA TO IMPROVE
ENGLISH VOCABULARY MASTERY OF FOURTH GRADE STUDENT AT
ISLAMIC ELEMENTARY SCHOOL NURUL HIKMAH

Presented to Faculty of Tarbiyah and Teaching Training of Maulana Malik
Ibrahim State Islamic University Of Malang in partial fulfillment of the
requirement for the degree of Sarjana Pendidikan (S.Pd)

BY

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MALANG
2015

APPROVAL SHEET

i

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ISLAMIC ELEMENTARY SCHOOL NURUL HIKMAH

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APPROVAL SHEET

THE IMPLEMENTATION OF SMART CIRCUIT MEDIA TO IMPROVE

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AT ISLAMIC ELEMENTARY SCHOOL NURUL HIKMAH

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Has been defended in front of the board of examiners on

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PASSED

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iii

DEDICATION

Bismillahirrahmaanirrahiim...

Let's thank to Allah who has given me some mercies and blessing so I can finished this research perfect. Proudly this paper I offer to:

My Parents Mr. Sukadi Hadi Wasesa and Mrs. Asrikah

Who has been guiding, directing, praying, and giving millions of affection to me. Thanks for educate with full of sincere and patient so that it becomes useful personal later.

My lovely younger brother Muhammad Rendi Andika Al-Karim and Muhammad Reza Andika Al-Karim

That has been support me and make me strong for finished my study.

Amiin

MOTTO

وَالَّذِينَ جَاهَدُوا فِينَا لَنَهْدِيَنَّهُمْ سُبُلَنَا

"And those who strive hard and fight (look for green), we'll show it to them on our streets, and truly God with people who do good."

Dr. Like Reskova Oktaberlina, M.Ed
The Lecturer of Tarbiyah and Teaching Sciences Faculty
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SUPERVISOR OFFICIAL NOTE

Matter   : Thesis of Putri Sukma Ariska, June 15, 2015
Appendixes   : 4 (four) Exemplar

Dear,
Dean of Tarbiyah and Teaching Sciences Faculty
The State Islamic University of Maulana Malik Ibrahim Malang
At
Malang

Assalamu'alaikum Wr. Wb

After carrying out several times for guidance, both in terms of content, language
and writing techniques, and after reading the following thesis:
Name   : Putri Sukma Ariska
NIM   : 11140135
Program   : Teacher Education of Islamic Elementary School
Title of Thesis : The Implementation Of Smart Circuit Media To Improve English
                         Vocabulary Mastery Of Fourth Grade Student At Islamic
                         Elementary School Nurul Hikmah

As the advisor, we argue that this thesis has been proposed and tested decent.
Thus please tolerate presence.

Wassalamu'alaikum Wr. Wb

                                                                    Advisor,

                                                 Dr. Like Reskova Oktaberlina, M.Ed
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CERTIFICATE OF SKRIPSI AUTHORSHIP

I certify that the skirpsi I wrote to fulfill the requirement for Sarjana Pendidikan (S.Pd) entitles The Implementation Of Smart Circuit Media To Improve English Vocabulary Mastery Of Fourth Grade Student At Islamic Elementary School Nurul Hikmah is truly my original work. It does not incorporate any materials previously written or published by another person, except those indicate in quotations and bibliography. Due to fact, I am the only person who responsible for skripsi if there is any objection or claim from others.

Malang, June 2015

Putri Sukma Ariska

PREFACE

Praise to Allah The All Merciful and The All Compassionate. Thanks to Allah because of all blessing ang guidance, so the writer is able to finish the arrangement of Research and Development "The Implementation Of Smart Circuit Media To Improve English Vocabulary Mastery Of Fourth Grade Student At Islamic Elementary School Nurul Hikmah" as the final instruction activities on The State Islamic University of Maulana Malik Ibrahim Malang. Salawat and salam always be given to our prophet Muhammad SAW who brought us form the jahiliyyah to islamiyah era.

The aim of this thesis is the requirement for obtaining bachelor degree of education (S.Pd). The specific purpose of this thesis is as a discourse of education that is still a lot of things from an education that must be developed.

There is no pronounceable word that can be extended except the great gratitude to the excellency :

1. Prof. Dr. Mudjia Raharjo, M.Si., as Rector of Maulana Malik Ibrahim State Islamic University Of Malang.

2. Dr. H. Nur Ali, M.Pd, as Dean Faculty of Tarbiyah and Teaching Training, Maulana Malik Ibrahim State Islamic University of Malang.

3. Dr. Muhammad Walid, MA, as the Chief of Teacher Education of Islamic Elementary School Program.

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viii

ix

12. All the colleagues of ICP PGMI 2011 "WEXA Class" who always encourage and give support to the writer in process of arrangement and observation this report.

13. My classmate when I was in junior high school "Chilore" friends. Thanks for teenage dream memories.

14. My Partners when I did society dedication Nia, Tyas, Ella, Miftah, Bad, Agung, Rijal, Iqbal, Jayora and Udin who always full of fullish so can make me really laugh.

15. My lovely student who full of cuteness and always love me, Erlangga.

Hopefully this simple thesis can be beneficial to all researchers and readers. Hopefully this thesis can become part of academic discourse in order to develop the English lesson. This thesis is still a lot of shortcomings. Therefore, the author expects criticism and suggestions from all parties for the perfection of this thesis.

Malang, June 2015

Writer

x

TRANSLATION GUIDELINES OF ARAB LATIN

Translation of Arab Latin in this thesis utilize the translation guidelines based on the agreement between Religion Minister and Educational and Culture Minister of Indonesia number 158/1987 and number 0543b/ U/ 1987. Those are:

A. Huruf

ا = a	ز = z	ق = q
ب = b	س = s	ك = k
ت = t	ش = sy	ل = l
ث = ts	ص = sh	م = m
ج = j	ض = dl	ن = n
ح = h	ط = th	و = w
خ = kh	ظ = zh	ه = h
د = d	ع = '	ء = ,
ذ = dz	غ = gh	ي = y
ر = r	ف = f	

B. Vocal Panjang

Vokal (a) panjang= â

Vokal (i) panjang= î

Vokal (u) panjang= û

C. Vokal Diftong

آوْ = aw

أيْ = ay

أُوْ = û

إِيْ = î

LIST OF TABLES

LIST OF APPENDIX

TABLE OF CONTENT

ABSTRAK

Vocabulary mastery is the most fundamental thing that must be controlled by a person in learning English which is a foreign language for all students and the people of Indonesia. How someone can express a language if he does not understand the vocabulary of the language. So, the language vocabulary is something that is absolutely needed by student.

The result of the observation conducted by the researcher showed that the level of vocabulary mastery of the 4th grade students at Islamic Elementary School Nurul Hikmah was still low. The researcher observed that this was because the teacher did not use any media during the learning process. Therefore, the researcher wanted to use smart circuit media to be implemented in this study. By using smart media circuit, students can be actively involved in learning process because smart circuit media has the potential to improve English vocabulary mastery of the students.

This study was conducted in Islamic Elementary School Nurul Hikmah with the subject was the 4th grade students. The purposes of this study are: (1) to find out how the implementation of smart circuit media can improve English vocabulary mastery of 4th grade students at Islamic Elementary School Nurul Hikmah, and (2) to find out how the effectiveness of smart circuit media can improve the English vocabulary mastery of 4th grade student at Islamic Elementary School Nurul Hikmah.

This kind of research is a classroom action research and uses qualitative method. Techniques of data collection are done by using the test, observation, interviews, and documentation. This research was conducted in two cycles. Each cycle consisted of stages that include planning, implementation, observation, and reflection.

The result showed that the students had increased their English vocabulary mastery which can be seen from the test result provided by the researcher. This is the evident from the quantitative data which showed that there was an increase in the English vocabulary mastery of 4th grade students as much as 40.70% in the first cycle and 82.54% in the second cycle. Meanwhile, the qualitative data also showed that the students seemed more enthusiastic during the learning process.

ABSTRAK

Ariska, Putri Sukma. 2015. *Penggunaan Media Sirkuit Pintar Untuk Meningkatkan Penguasaan Kosakata Bahasa Inggris Pada Siswa Kelas 4 Madrasah Ibtidaiyah Nurul Hikmah.* Skripsi, Pendidikan Guru Madrasah Ibtidaiyah, Fakultas Ilmu Tarbiyah Dan Keguruan, Universitas Islam Negeri Maulana Malik Ibrahim Malang. Dr. Like Reskova Oktaberlina, M.Ed.

Key words: Penggunaan Media Sirkuit Pintar, Penguasaan Kosakata Bahasa Inggris,

Penguasaan kosa kata merupakan hal yang paling mendasar yang harus dikuasai seseorang dalam pembelajaran bahasa inggris yang merupakan bahasa asing bagi seluruh siswa dan masyarakat Indonesia. Bagaimana seseorang dapat mengungkapkan suatu bahasa apabila ia tidak memahami kosakata dari bahasa tersebut. Hingga jika yang dipelajari itu adalah bahasa asing, sehingga penguasaan kosakata bahasa tersebut merupakan sesuatu yang mutlak dimiliki oleh pembelajar bahasa.

Hasil observasi yang dilakukan oleh peneliti menyatakan bahwa tingkat penguasaan kosakata yang dimiliki oleh siswa kelas 4 SD Nurul Hikmah masih rendah. Hal ini dikarenakan guru tidak menggunakan media apapun selama proses pembelajaran. Oleh sebab itu peneliti hendak menggunakan media sirkuit pintar untuk diimplementasikan dalam penelitian ini. Dengan menggunakan media sirkuit pintar, siswa dapat terlibat secara aktif dalam pembelajaran karena media ini memiliki potensi untuk dapat meningkatkan penguasaan kosakata bahasa inggris yang dimiliki oleh siswa.

Penelitian ini dilaksanakan di Madrasah ibtidaiyah nurul hikmah dengan subject penelitian adalah siswa kelas 4. Tujuan dari penelitian ini adalah: (1) Untuk mengetahui bagaimana penggunaan media sirkuit pintar dalam meningkatkan penguasaan kosakata bahasa inggris pada siswa kelas 4 Madrasah Ibtidaiyah Nurul Hikmah, (2) Untuk mengetahui efektifitas penggunaan media sirkuit pintar dapat meningkatkan penguasaan kosakata bahasa inggris pada siswakelas 4 Madrasah Ibtidaiyah Nurul Hikmah.

Jenis penelitian ini adalah penelitian tidakan kelas dengan menggunakan metode kualitatif. Teknik pengumpulan data dilakukan dengan menggunakan test, observasi, wawancara dan dokumentasi. Penelitian berlangsung selama dua siklus yang pada setiap siklusnya terdapat tahapan-tahapan yang mencakup perencanaan, pelaksanaan, pengamatan dan refleksi.

Hasil analisis data menunjukkan bahwa siswa mengalami peningkatan. Hal itu terbukti dari data kuantitatif yang menunjukkan peningkatan penguasaan kosakata bahasa inggris siswa kelas 4 sebanyak 40,70% pada siklus pertama dan 82,54% pada siklus kedua. Sedangkan data kualitatif juga menunjukkan bahwa siswa tampak lebih antusias selama proses pembelajaran.

ملخص البحث

أريسكا، فوتري سوكما. 2015. استخدام وسيلة المسار الماهر لتطور إتقان المفردات الإنجليزية للطلاب في الفصل الرابع في المدرسة الإبتدائية نور الحكمة. البحث الجامعي. قسم مدرس تعليم المدرسة الإبتدائية، كلية العلوم التربية والتعليم، جامعة مولانا مالك إبراهيم الإسلامية الحكومية مالانج. المشرف: الدكتور ليك ريسكوفا أوكتابرلينا الماجستير.

المفردات الأساسية: وسيلة المسار الماهر، إتقان المفردات الإنجليزية.

إتقان المفردات الإنجليزية أساس في إتقان في تعليم اللغة الإنجليزية وهي اللغة الأجنبية للطلاب والمجتمع الإندونيسي. كيف تعبر اللغة إذا كان الإنسان لم يفهم المفردات من اللغة. حتى ما يدرس هو اللغة الأجنبية، فإتقان المفردات مطلقا لدارس اللغة.

نتائج الملاحظة التي أدت الباحثة هي مستوى إتقان المفردات للطلاب في الفصل الرابع في المدرسة الإبتدائية منخفض بسبب المعلم الذي لم يستخدم الوسيلة حين عملية التدريس. فلذلك ستستخدم الباحثة وسيلة المسار الماهر لتطبيقها في هذا البحث. باستخدامها، يستطيع الطلاب أن يشترك بنشاط لأنها محتملة لتطور إتقان المفردات الإنجليزية لدى الطلاب.

هذا البحث أدى في المدرسة الإبتدائية نور الحكمة بالطلاب في الفصل الرابع كموضوع البحث. أهداف هذا البحث، 1) لمعرفة استخدام وسيلة المسار الماهر لتطور إتقان المفردات الإنجليزية لطلاب في الفصل الرابع في المدرسة الإبتدائية نور الحكمة، 2) لمعرفة فعالية استخدام وسيلة المسار الماهر لتطور إتقان المفردات الإنجليزية لطلاب في الفصل الرابع في المدرسة الإبتدائية نور الحكمة.

نوع هذا البحث هو البحث الإجرائي الصف باستخدام المنهج الكيفي. وطريقة جمع البيانات باستخدام الإختبار، والملاحظة، والمقابلة، والتوثيق. وقع هذا البحث دورين وفي كل الدور مراحل تشمل على التصميم، والأداء، والملاحظة، والانعكاس.

نتائج تحليل البيانات دلت على أن الطلاب تطورون في إتقان المفردات الإنجليزية من نتيجة الإختبار التي تعطي الباحثة. هذا الحال دل على البيانات الكمية الدالة تطور إتقان المفردات الإنجليزية للطلاب في الفصل الرابع هو 40، 70 % في الدور الأول و 82، 54 % في الدور الثاني. وأما البيانات الكيفية الدالة على أن الطلاب يزيدون الحماسة حين العملية الدراسية.

CHAPTER I

INTRODUCTION

A. BACKGROUND OF PROBLEM

English is international language that is widely spoken by the people in various countries. Indonesia is one of the countries whose nationals are also required to be able to learn and explore this global language. Finally, English is incorporated into the curriculum in school, from elementary school level to the university level.[1]

English subject in elementary school is a subject that is included to the subject of local content. Today, English subject is taught to children in elementary school. If deemed importance, whether or not the subjects of English language, this course is not included in the subjects of the national primary school examination. However, English subject cannot be underestimated because it will be incorporated into the National Examination subjects at a higher level, they are the middle and high school levels.

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[1] Fuad AbdulHamid,*Prosedur Belajar-Mengajar Bahasa.*(Jakarta: Depdikbud, 1987), page.13

Understanding vocabulary is generally reputed as an important part in the process of learning a language or developing one's ability in a language that is already occupied.[2] Students are often taught new words as part of a particular subject and there are many adults who consider the establishment of vocabulary as exciting and educational activities.

Vocabulary mastery is the most fundamental thing that must be controlled by a person in learning English which is a foreign language for all students and the people of Indonesia. How can someone express a language if he does not understand the vocabulary of the language? So, the language vocabulary is something that is absolutely needed by the language learner.

It is inevitable that one of the factors that support the advancement of English language skills in elementary student is vocabulary mastery by a student. The more students are able to master English vocabulary the better the ability of the English language.

In fact, mastering the English vocabulary for students is not easy. Students sometimes have difficulty to memorize English vocabulary or increase the number of English language vocabulary. However, if a student can find interesting and fun ways to enhance the mastery of vocabulary, the vocabulary word can be easily controlled as well.

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[2] Ibid, 24.

This phenomenon is similar to what is being faced by 4th grade student in Islamic Elementary School Nurul Hikmah as what is conveyed by the 4th grade students where these students have difficulty mastering the English vocabulary. Even some 4th grade students of Islamic Elementary School Nurul Hikmah assume that some competencies are not resolved properly. From the observations made by the researcher, this is due to the lack of effective ways in learning English. The teacher just asks the students to memorize vocabulary that have been learned without using the media that can increase the interest of students in memorizing the vocabulary being taught simultaneously. In the absence of media used during the learning process, then the things that can support successful learning are also less fulfilled. If teachers only use the old method, for example memorizing, the students are only able to remember vocabulary in a fairly short period of time. However, if the teacher can use the appropriate media in learning process, it can be ascertained that students' English vocabulary may also increase. Therefore, the researcher reveals one way that can help students improve vocabulary mastery of the English language, using smart circuit media in the learning process.

Smart circuit Media is the result of the development of the snake and ladder game that is already familiar to the students. Smart circuit is a valuable educational game which is productive, fun, and is expected to give more benefits in learning. Smart Circuit has educational value because it can be used in

3

learning. Productive valuable is because the children get a result in the form of knowledge or lessons after playing, and fun because smart circuit is a game.

While in reality, smart circuit media has not been known in the education world. Even the Islamic Elementary School Nurul Hikmah has not been using the smart circuit media in the learning process. Thus, the researcher wants to prove the effectiveness of smart circuit media to increase vocabulary mastery of the students by conducting this research.

Researchers found some research about action research, in particular to the use of smart circuit media. In previous research, a thesis was entitled "Using Smart Circuit Media to Improve Literacy Skills Java Script in Java Language Learning Third Grade Students of Genengan 02 Elementary School Jumantono Karanganyar the Academic Year 2011/2012".

Thus, it can be concluded from the study itself that smart circuit media is different from previous ladder snake media. Its effectiveness has been demonstrated through several studies. Smart circuit Media is the result of the development of ladder and snake media. From the results, it can be seen that the development effectiveness of the use of the media is also increasing.

So based on the phenomenon and the problems above, the writer wants to do research with the title: "**THE IMPLEMENTATION OF SMART CIRCUIT MEDIA TO IMPROVE ENGLISH VOCABULARY MASTERY**

OF FOURTH GRADE STUDENT AT ISLAMIC ELEMENTARY SCHOOL NURUL HIKMAH"

B. PROBLEM FORMULATION

Based on the background of the problem, the problems formulation explained in this research are:

1. How is smart circuit media implemented in improving the vocabulary mastery of 4th grade student at Islamic Elementary School Nurul Hikmah?

2. How can the effectiveness of smart circuit media improve English vocabulary mastery of 4th grade student at Islamic Elementary School Nurul Hikmah?

C. RESEARCH PURPOSE

Based on the above formulation of the problem, it can be argued that the purposes of this research are:

1. To find out how the implementation of smart circuit media can improve English vocabulary mastery of 4th grade student At Islamic Elementary School Nurul Hikmah;

2. To find out the effectiveness of smart circuit media can improve the English vocabulary mastery of 4th grade student at Islamic Elementary School Nurul Hikmah.

D. RESEARCH UTILITY

1. For future researchers

a. The benefit of research for the future researchers is to be able to contribute to the advancement of education.

2. For Teachers

a. For the educators themselves is to increase the professionalism of an educator by applying an attractive and fun method to help learners to improve their ability in mastering English vocabulary;

b. To provide motivation and considerations in the selection and provision of appropriate learning media to facilitate the learning process. Moreover, it can provide feedback to the teacher to always use creative and interesting instructional media.

3. For Students

a. The benefit of this research is for learners to be able to more quickly master the vocabulary of the English language with ease and fun,

b. It enhances the ability to learn English in elementary school, especially with regard to vocabulary skills.

E. PROBLEM LIMITATION

From the TITLE **"THE IMPLEMENTATION OF SMART CIRCUIT MEDIA TO IMPROVE ENGLISH VOCABULARY MASTERY OF FOURTH GRADE STUDENT ISLAMIC ELEMENTARY SCHOOL NURUL HIKMAH"** the researchers gave the following restrictions:

1. The use of smart circuit media;

2. Mastery of English vocabulary of 4th grade student Islamic Elementary School Nurul Hikmah;

3. English vocabulary about animal in lesson 5.

F. OPERATIONAL DEFINITION

1. Vocabulary

Vocabulary is the set of unknown meaning and words that can be used by someone in a language. Person's vocabulary is defined as the set of all words that are understood by the person or all the words which are likely to be used by the person to arrange a new sentence.[3] The wealth of a person's vocabulary is generally considered to be an illustration of intelligence or level of education.

A set of words in English is called vocabulary. The vocabulary of a person is defined as the set of all words that are understood by the person or all the words which are likely to be used by the person to develop a new sentence.[4] Meanwhile, according to the researcher's own perception, vocabulary is the set of words known to a person or other entity, or a part of a particular language.

2. Media

Media is all forms and channels used to convey information or messages. The word media is the plural form of the word medium. Medium can be defined as an intermediary or an introductory communication from the sender to the

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[3] Depdikbud, *Tata Bahasa Baku Bahasa Indonesia.*(Jakarta: Balai Pustaka, 1988), page.33

[4] H.G.Tarigan,*Menulis sebagai Suatu Keterampilan Berbahasa* (Bandung:Angkasa, 1994), page.57

7

receiver. The media is one component of communication, namely as a messenger from the communicator to the receiver of the message.[5]

G. PREVIOUS RESEARCH

Related to the previous studies, researchers found some researches about action research, in particular to the use of smart circuit media. In previous thesis entitled "Penggunaan Media Sirkuit Pintar Guna Meningkatkan Keterampilan Baca Tulis Aksara Jawa Dalam Pembelajaran Bahasa Jawa Siswa Kelas III SDN 02 Genengan Jumantono Karanganyar Tahun Pelajaran 2011/2012", there are similarities with action research carried out by researchers, where the same research was done in the classroom and used classroom action research as the research method. In addition, this study uses the same media, smart circuit media.

As for the difference with previous studies related to the implementation of the study, the researcher found several differences. In the previous study, the research carried out a research on the third grade students of Karanganyar 02 Genengan Jumantono Elementary School. The researcher is doing the research in Islamic Elementary School Nurul Hikmah. In the previous study, the use of smart circuit media is intended to improve literacy skills in learning java script Java

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[5] Daryanto, *Media Pembelajaran* (Yogyakarta: Gava Media, 2010), page.4

language, while at the this study the researcher used a smart media circuit to increase English vocabulary mastery in English subjects.

Researchers also found the results of another study entitled "Studi Komparasi Antara Media Sirkuit Pintar Dan Flash Cards Terhadap Keterampilan Hasil Menulis Aksara Jawa". The study aimed to compare the level of effectiveness between smart circuit media and the flash cards media. While in this study, the researchers only want to measure the effectiveness of smart circuit media. In addition, the study was applied to the Java language writing skills, while the researcher used smart circuit media to improve the vocabulary mastery of the English language. Another difference found in the study conducted by the researcher with the researches that have been mentioned above is the venue for the study. As mentioned previously, the researcher conducted a study in Islamic Elementary School Nurul Hikmah, while the previous study was conducted in 3 elementary schools in the area of Ngurah Rai. The elementary schools were Tegalmulyo 85 Elementary School, Sondakan 11 Elementary School, and Premulung 94 Elementary School. These studies used comparative quantitative research, while the researcher in this study used classroom action research.

Similarity among the study conducted by the researcher and the researches above is that they equally measure the effectiveness of smart circuit media. It's just on the research above to measure and compare the effectiveness of two

instructional media, while the researcher only measures the effectiveness of one instructional media, that is smart circuit media.

Another research is entitled "Upaya Meningkatkan Kemampuan Penguasaan Kosakata Bahasa Inggris dengan Metode Poster Coment Pada Siswa Kelas 4 SD Insan Amanah Malang". The research conducted by the researcher used classroom action research and qualitative method. In addition, this study is intended to improve English vocabulary mastery.

As for the difference with previous studies is the place of the research. In the previous study, previous research conducted for 4th grade students in Elementary School Insan Amanah. The researcher was doing research at Islamic elementary school Nurul Hikmah. While the method used to improve English vocabulary mastery in the earlier study was a method called method poster comment, in this study the researcher chose smart circuit media as a media to be studied to improve English vocabulary mastery.

H. SYSTEMATIC DISCUSSION

The discussion of this study showed a clear and thorough explanation, then the followings are the main ideas of this study:

Chapter I: Introduction

This section is the basic framework of this study. This chapter contains the background of the problem, formulation of the problem, the purpose of research,

usability research, problem formulation, operational definition and previous research.

Chapter II: Review Literature

This chapter describes the theoretical framework as a basis for strengthening the effectiveness of the use of media research clever circuitry to improve English vocabulary skills 4th graders MI Nurul Hikmah that contains the definition of vocabulary, various vocabulary, psychology and child development tendency of children who are at grade 4, English language learning media, media usage theoretical basis and explanation of the media and how to use smart circuit.

Chapter III: Research Methods

This section discusses the methods used to study contains about approaches and types of research, research sites, data and data sources, data collection techniques, and data analysis.

Chapter IV: Research Result

From the exposure of data and research reports that include a description of the location of the study, exposure data and the findings of the data in cycle 1 and cycle 2.

Chapter V: Discussion

This section discusses the presentation of the data obtained is then processed in accordance with the discussion of research in the form of description. Discussion consists of planning, implementation, observation and reflection, which includes the assessment or evaluation of the use of smart circuit media on subjects of English for grade 4.

Chapter VI: Conclusion

This section contains the conclusion of the study along with suggestions.

CHAPTER II

REVIEW LITERATURE

A. Vocabulary

Vocabulary is the set of words known to a person or other entity, or a part of a particular language. Vocabulary of a person is defined as the set of all words that are understood by the person or all the words which are likely to be used by the person to develop a new sentence. We often hear the term of vocabulary, but we know that many experts still differ in interpreting its meaning. For that, more is needed to get the opinion of the conclusion of the meaning of vocabulary. Soedjito in Tarin explained that the vocabulary[6] is:

1. All the words contained in a language.

2. The wealth owned by a speaker.

3. Words used in the field of know.

4. A list of words that are arranged like a dictionary along with a brief explanation and practical.

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[6] H.G. Tarigan,*Menulis sebagai Suatu Keterampilan Berbahasa* (Bandung:Angkasa, 1994), Angkasa page.58

Furthermore, the term vocabulary in Indonesian Dictionary is *vocabuler*.[7] Then Keraf in his book suggests that vocabulary of a language is a whole word that is owned by a language.[8] The Keraf Opinion confirms that actually it is a whole vocabulary of words possessed a language.

The addition of a person's vocabulary is generally considered as an important part, both in the process of learning a language or developing one's ability in a language that is already occupied. School students are often taught new words as part of a particular subject and there are many adults who consider the establishment of vocabulary as exciting and educational activities.[9]

We must master the vocabulary so we can easily use the English language, both the making of a sentence or a conversation. Some English words that we master, of course, reflect whether we could actually speak English or only a little English. Person who is a native in English language like the British or the Americans can control all the English words, which is why they can. Therefore, we must learn deeper into the English vocabulary because we are not English native.

1. Various Of Vocabulary

There are several kinds of vocabulary. There are productive and unproductive vocabularies. Productive vocabulary is the vocabulary we often use

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[7] Depdiknas,*Kamus Besar Bahasa Indonesia*. (Jakarta: Balai Pustaka, 2001)

[8] Gorys Keraf, *Tata Bahasa Rujukan Bahasa Indonesia.*(Jakarta: Gramedia Widiasatya, 1991), page.84

[9] Suharsimi Arikunto,*Prosedur Penelitian Suatu Pendekatan Prakti*. (Jakarta: Rineka Cipta, 2002), page.97

in daily life. While unproductive vocabulary is the existing vocabulary, but it is rarely used in daily life. It is said to be productive because the vocabulary is always used in English.[10]

The characteristics of productive vocabulary are the vocabulary that we often hear. Productive vocabulary is also usually easier to understand its meaning and significance. To use the English language properly, we have to learn and understand the productive vocabulary, of course, because this is a widely used vocabulary. Understanding the productive vocabulary would certainly be easier because it is often used in daily life. Example of productive vocabulary is angry. The example in the sentence is I can be angry when you disturb her. Also, hungry or sick; this word is often used in everyday life, both in the making a sentence or conversation.

It is named unproductive because the vocabulary is rarely used in the making of sentence or a conversation in English. Vocabulary is sometimes difficult to understand because this kind of vocabulary is rarely used in daily life. Therefore, we should learn more about this vocabulary so we can solve difficulty to apply in daily life. Examples of unproductive vocabulary are the word ruffle, glaring, blinding. The words above are words that are rarely used in conversation or English sentences.

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[10] Janet Allen,*Words, Words, Words (*Portland: Stenhouse Publishers, 1999) page.42

Vocabulary increasingly needs more time and a lot has changed. We have a lot to learn so that we master all the existing vocabulary. Ways to learn the vocabulary vary, such as watching TV, reading the news, reading novels, or other. By watching TV, many television shows that can add insight, the events on television have many words in conversation or text run.[11] Additionally, we can also add to the vocabulary by reading newspapers or watching the news. In reading the newspapers, we will find a lot of vocabulary, and certainly not all the words in it are known. So, we can use the dictionary to understand the meaning of the word. Then, the vocabulary will increase and widen.

2. Psychology of child development and trends

The theory of Jean Piaget explained that human development through the four stages of cognitive development from birth to adulthood. Each stage is marked by the emergence of new intellectual abilities at which men begin to understand the world that gets more complex.[12]

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[11] Hamalik, Oemar. 1993. *Strategi Belajar Mengajar.* (Bandung: Mandar Maju), page. 97
[12] Winkel, 1989. *Psikologi Pengajaran.* (Jakarta: PT. Gramedia),page.149

Table 2.1 Child Psychology Development

Steps	Age	Ability
Sensori-motorik	0-2 years old	Referring to the concept of object permanence: which is psychic skills to understand that an object still exists. Although at the time it did not appear to us and are not concerned with the activity at that time. However, at this stage permanent objects not perfect.
Praoperasional	2-7 years old	The development of the ability to use symbols that describe the objects around him. Thinking is still egocentric and centered.
Operasional	7-11 years old	Ability to think logically. Able concrete noticed more than one dimension at a time and also can connect with each other these dimensions. Less egocentric. Not able to think abstractly.
Operasional formal	11 years old – adult	Being able to think abstractly and can scientifically analyze the problem and then solve the problem.

Students residing at 4th grade are 9-10 years old. Hence, by seeing at tables of above, we can be pulled a conclusion that 4th students are in the operational phase. Operational phase has characteristic in the form of usage of adequate logic. Important processes during this procedure are:

a. Sequence is ability to sort object according to size measure, form, or other characteristic. The example, when given by object differ size measure, they earn to sorting it of biggest object to smallest.

b. Classification is ability to give name and identify to with refer to object according to its appearance, its size measure, or other characteristic, including idea that with refer to objects can figure in other object into network. Child no longer have limitation of logic in the form of animism (opinion that any object live and have feeling).

c. Decentering is child start to consider some aspect from problems to be able to solving it. For example child will not again assume slimmer short wide cup but its contents compared to high small cup.

d. Reversibility is child start to comprehend that objects or amount can be altered, then return to situation early. For that, child earn swiftly determine that 4+4 equal to 8, 8-4 will equal to 4, previous amount.

Theory of Charlotte Buhler, children at age 9-11 years old are in a period of where a tired child of highest objectivity. At this period of this growth, child like to try and novelty have experiment to which is stimulated by accurate motivations and feel to like to know big. A period of this growth is marked also with concentration and also conglomeration of energy to exercise and to explore.

Under normal circumstances, school age children's mind base expand gradually and calmly. Child are really in the learning stadium. Beside family, school gives systematic influence to form its idea. Its knowledge increase swiftly.

Many skills start to be mastered and certain habits start developing of. Ambition to know object reality and events push child to check and do experiment.

Child proclivity at this period poured at everything that has a dynamic move. Everything that is active and make move will be very attractive of interest and attention of child and also its interest concentrated to kinds of activity.

Child's memory at age 8-12 years old is strongest and biggest intensity. Ability of memorize and put down knowledge in memory is strongest. A child can load the amount of memory items at most.

3. English Learning Media

Literally, the media means connector or conductor. Sadiman argued that media is an intermediary or an introductory message from the sender to the receiver of the message.[13] From among the experts, Gerlach and Ely said if understood generally, media is human, material or events that develop a condition or make the students be able to acquire the knowledge, skills, or attitudes. In this sense, teachers, textbooks, and school environment is the media.[14] More specifically, definition of media in teaching and learning is interpreted as graphical tools, photographic, or electronically to capture, process

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[13] Arif Sadiman, *Media Pendidikan Pengertian, Pengembangan dan Pemanfaatannya.* (Jakarta: Rajawali, 1986), page. 7
[14] Cecep Kustandi, Bambang Sutjipto, *Media Pembelajaran Manual dan digital* (Bogor: Ghalia Indonesia, 2011), page. 7

and reconstruct visual or verbal information. Another limitation has been saying also by experts and institutions, which are as follows[15]:

a. AECT (Association of Education and Communication Technology) give limitation about restrictions on all forms of media and mediator are used to convey a message or information. Aside from being a transmitter or introduction system, the media is often replaced with the word mediator is the cause and tools that intervene in both parties in both parties and reconcile. By the term mediator, media shows the function and role of organizing an effective relationship between the two main parties in the student learning process and content. Additionally, the mediator also can reflect that any learning system performs, from the teacher to the advanced equipment, can be called media.

b. Heinich and his colleagues proposed the term medium as an intermediary that transmits information between the source and the receiver. By doing so, television, movies, photos, radio, audio recordings, images are projected, printed materials, and the like is the media. If the media that carries the message or the information it contains aims of learning or learning purposes, the media is called instructional media.

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[15] Ibid, page. 8

Based on the above description, it can be concluded that the instructional media is a tool that can help the learning process and serves to clarify the meaning of the message, so as to achieve the goal of learning better and perfect. Learning media is a means to improve the teaching and learning process. Given the many forms of the media, then the teacher should choose carefully, so it can be used appropriately.

4. Theoretical base of Using Media

In the book Learning Media, Daryanto quoting Bruner stated that there are main levels of learning modes, namely:

a. Direct experience (enactive).

b. Experience pictorial (iconic).

c. Experience abstract (symbolic).

Direct experience is working, example the word "wicker" is understood and instantly created 'webbing'. On the second level is labeled iconic, the word 'webbing' learned from drawing, painting, photo, or movie. Furthermore, at the level of symbols, students read or hear the word 'webbing' and try to match them with the experience of making 'webbing'. The third experiences interacting in an effort to gain experience, knowledge, skills or attitudes that new.

The material is conveyed and the desired students can master the thing referred to as a message. Teachers as a source of messages poured into messages specific symbols and students as receivers interpret these symbols, so it is understood as a message.

Levie and Levie are reviewing the results of research on learning word stimulus and picture stimulus said that the visual stimulus yielded better learning outcomes for tasks such as remembering, recognizing, recalling and link the facts and concepts. On the other hand, a verbal stimulus give learning results more retention when learning involves successive idea (sequential). This is one proof of support for the concept of dual coding hypothesis of Paivio. The concept was to say that there are two systems of human memory, one to process verbal symbols and save them in the form of propositions image, and the other for non-verbal image processing which is then stored in the form of verbal propositions.[16]

The basis for the development is not a difficulty level, but the level of abstractness number of species participating senses during the learning process.[17] Direct experience will give the impression of the most intact and most meaningful of the information and ideas contained in the experience, because it involves the senses of sight, hearing, taste, smell, and touch. This is known as learning by doing, for example participation in collecting various types of leaves

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[16] Daryanto, *Media Pembelajaran* (Yogyakarta: Gava Media, 2010), page. 13
[17] ibid

then dry, making household furniture, stamp collecting, doing experiments in the laboratory, and others. All of them have a direct impact on the acquisition and growth of knowledge, skills, and attitudes.

5. Smart Circuit Media

Smart circuit Media is the result of the development of the snake and ladder game that is already familiar to the students. Smart circuit is a valuable educational game, productive, fun, and is expected to give more benefits in learning.[18]

Smart Circuit has educational value because it can be used in learning. Productive valuable because the children get a result in the form of knowledge or lessons after playing and having fun because smart circuit is a game.

Smart circuit media can be used in many subject in elementary school until high school especially in English and mathematic subject, but this media can not be used in material that need mathematical analysis.

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[18] Yasin Yusuf, Umi Auliya, *Sirkuit Pintar Melejitkan Kemampuan Matematika & Bahasa Inggris Dengan Metode Ular Tangga* (Semarang: Ghalia Indonesia, 2009), page 3

Generally, the game is made up of several parts, namely:

a. Game Board

The square-shaped game board. On the game board, there are 100 square shaped with same wide. Each box contained the form of pictures or vocabulary that its name learned in English subjects.

b. Dice

The form of smart circuit media dice is like a dice in general, the cube-shaped. However, the dice eye is not dice dots but the form is vocabulary in English or Indonesian language that is on the game board.

c. Pawns

The function of pawn is as a pointer position of players. In the game smart circuit, the pawn is replaced with a toy car that can be made using paper. It is intended that the game smart circuit just like a car racing game in the top of the circuit track.

d. Garage Memory

Garage memory is a tool made of paper shaped upright triangular prism. In this garage media there is reference compatibility between the material in the box and dice. The example is drawing stationery along with vocabulary in the English language that serves as references when participants forget the vocabulary in Indonesian.

e. Alternative Question

The alternative is a matter of questions given to students in the process of the game if the pawn occupies a box with a picture of the up arrow or down arrow.

f. The Rules Of The Game Smart Circuit Media

Rules of the game smart circuit are very easy. Largely the same as the game of snakes and ladders, but there is little change, namely the determination of winners. Here are the rules of the game of smart circuit media on English language learning materials.

1) The game was followed by players with first determine the order of players.

2) The player who gets the first order, roll the dice and play first.

3) The first player to run his car into the box that corresponds to the meaning of vocabulary acquired at dice when throwing. For example, children acquire the dice 'chair', the car will run up the box with the vocabulary of 'kursi' or pictorial box chair.

4) Once completed, the second player, and then continued in accordance with the order.

5) Students who received the down arrow must answer the alternative question, if the answer is correct, then these students remain in the box occupied but if the answer is wrong then the student must go down into

the designated box in accordance with the arrows. Likewise, if a student got up arrow then the student must answer the existing alternative question. If the answer is correct, the students are allowed to move into the designated box in accordance with the arrows. If the answer is wrong, then these students must still stay in the box occupied.

6) The player who wins the game is the player running his car to the finish box.

CHAPTER III

RESEARCH METHOD

A. Research Approach and Kind Of Research

The approach used in this study is a qualitative research approach because in doing research on the subject it is highly preferred to express the meaning. The meaning and the learning process is in order to increase motivation. The characteristics of qualitative research: natural background, as a human instrument, qualitative methods, inductive data analysis, theory of basic, descriptive, more concerned with process than results, the existence of the limit prescribed by the focus, the presence of specific criteria for the validity of the data, designs temporary , and the results of the study are discussed and agreed upon.[19]

Based on the characteristics of qualitative research mentioned above, the approach of this study is included in qualitative research. It is because in this study the research object is human, in this case the learners. In addition, in this study the more important thing is the process rather than the result. Also, other things showed the characteristics of qualitative research approaches.

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[19] Lexy J. Melong, *Metode Penelitian Kualitatif* (Bnadung: PT. Remaja Rosdakarya, 1989) page.8

Type of research is a classroom action research (CAR), the research which contributes significantly to the increase in the professionalism of teachers, setting up of knowledge, understanding, and insight into the behavior of teachers teaching and students learning.

So, classroom action research scrutiny action learning activities which deliberately raised and occur in a class together. The action is given by the teacher or by the direction of teachers.

B. **Research Location**

The location of this study is one of the elementary schools that are in the scope of Malang city, Islamic Elementary School Nurul Hikmah in Malang. Object that selected for the study was students in 4th grade this is because the 4th graders are students who are in the transition from low-grade students to the high-class students.

C. **Data and Source of Data**

The data of this study will be drawn from the entire 4th grade students of Islamic Elementary School Nurul Hikmah. The data included in this study is qualitative data and quantitative data. Qualitative data are in the form of a description of the atmosphere of the classroom during a lesson is in progress, the current condition of the student media usage, enthusiastic students to the smart

circuit media and others. Meanwhile, quantitative data is the score of students before and after the media is used in the classroom.

Research instruments to be used by researchers are:

1. Test or test item, to assess the success of the students and to obtain quantitative data;

2. Interview guide, to obtain qualitative data regarding the use of instructional media used by the teacher. In this interview, not all students are a source of data;

3. Check list, to obtain qualitative data based on the method of observation. Researchers observe the state of the class during a lecture and conditions learners.

D. **Technique Of Data Aggregation**

Data collection in this study was implemented using several methods:

1. Observation

Observation is loading activities attention to an object by using all the senses.[20] With direct observation, the researcher will get an idea of the condition and what are the things that happen during the learning activities take place and the condition of the students during the learning.

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[20] Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 2002), page.156

In this study, researchers conduct behavioral observation of students in the following teaching and learning activities in English subjects using smart circuit media. What happens on the field from start to finish as a provision are written by researchers in data collection.

2. Interview

The interview is a dialogue that is made by the interviewer to obtain information from interviewees.[21] In this study, researchers conducted interviews with principals, teachers, students, and some parents of 4th graders to learn about the results of students' vocabulary and also the students' responses and all parties to the subjects, especially English vocabulary mastery of the students.

3. Test

Test method has variety. Tests used in this study were achievement tests. This test is used to measure the achievement of a person having learned something. The tests were given in the form of pre-test and post-test. In this case, the researcher conducted an evaluation or test material only for English 4th grade.

4. Documentation

Documentation is derived from the word document, which means the written stuff. The implementation of this documentation method, researcher investigates the written objects such as books, magazines, documents, regulations, meeting minutes, diaries, and so on.[22] In this study, researcher

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[21] ibid, 155.
[22] Ibid, 158

conducted the documentation, which is to investigate the written objects that exist in schools and 4th grade there in Islamic Elementary School Nurul Hikmah.

E. Data Analysis

In the book Classroom Action Research Management, it is mentioned that data collection is at the heart of CAR and data analysis is the soul of CAR.[23] The data has been obtained and presented. In CAR there is exposure data and discussion. All observations during classroom activities presented, ranging from planning of the first cycle, the implementation of the first cycle, the first cycle of observation, what the obstacles encountered and the events mentioned and discussed and so on until the second cycle are.

Qualitative data, such as data from observation, interviews and documentation were analyzed with descriptive qualitative analysis. Meanwhile, the collected data is numeric or quantitative data simply by using descriptive analysis and visual presentation. Serving is to illustrate that the action taken can lead to an improvement or change towards better state when compared to the previous state.[24] Qualitative data are in the form of a sentence that describes the expressions of student behavior, students' views, and cognitive abilities of students using the coding process[25] with the following basic steps:

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[23] Sukidin Basrowi, dkk. *Manajemen Penelitian Tindakan Kelas* (Insan Cendekia, 2011), page.110
[24] Sodarsono. F.X, *Aplikasi Penelitian Tindakan Kelas* (Jakarta: Pusat Antar Universitas Untuk Peningkatan Dan Pengembangan Aktifitasi Instruksional Dirjen Dikti Depdiknas,2001) page 25
[25] Ibid, 111.

1. Creating a data matrix;

2. Coloring code in each cell;

3. Reading data thoroughly a sentence by sentence, paragraph by paragraph, phrase by phrase, and determines appropriate to each theme;

4. Classifying each of these statements in the boxes corresponding cell;

5. Summarizing the data as possible.

Quantitative data can also be analyzed with descriptive analysis and visual presentation. Serving is to illustrate that the steps to be done can lead to an improvement, improvement, and or change to a better direction when compared to the previous state.

To determine action changes result, the type of quantitative data obtained from the evaluation results were analyzed by using the formula[26]:

$$P = \frac{\text{post rate} - \text{base rate}}{\text{Base rate}} \times 100\%$$

Specification:

P   : percentage increase in

Post rate   : the average value after the action

Base rate : the average value before action

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[26] B. Uno Hamzah, *Model Pembelajaran, Menciptakan Proses Belajar MengajarYang Kreatif Dan Efektif* (Jakarta: Bumi Aksara, 2007), page.73

F. Measuring Of Data Validity Technique

Member check is the process of checking data obtained by researchers to data providers. It aims to find out how far the data obtained in accordance with what is given by the data provider or informants. If data are found agreed upon by the data providers means the data is valid data. Implementation Member check can be done after a period of data collection is complete, or after obtaining a finding, or conclusion.[27]

G. Research Phase

This study aimed to describe how the effectiveness of smart circuit media to improve English vocabulary mastery in the subjects of English in order to obtain maximum results, it formulated a stage. The stages are carried out in this study is the phase pre-action and stage action.

Pre-action was done by giving researchers a pre-test to determine the ability of students to research early before action is taken. Pre-test was conducted one session with duration 1x35 minutes. Implementation of the action was performed by two cycles. Each cycle was held one meeting with duration 2x35 minutes. Implementation of each action research cycle includes four phases namely, planning, action, observation, and reflection. Details on each cycle are as follows:

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[27] Sugiyono. *Metode Penelitian Kuantitatif Kualitatif dan R&D*.(Bandung: Alfabeta,2014),page 44

1. Planning

   The plan is based on the preliminary reference in the action plan. The steps are namely:

   a. Preparing the material to be delivered;

   b. Preparing instructional media smart circuit;

   c. Preparing a lesson plan in accordance with the specified material;

   d. Preparing the evaluation sheet;

   e. Preparing the observation sheet for students;

   f. Preparing questionnaire.

2. Action

   Action in this research means learning activities using smart circuit media on animal subject. Animal material on the English subject will also be taught using smart circuit media in the second cycle.

   Step-by-step execution of each cycle in general, namely:

   a. Presentation materials and posttest;

   b. Carry out activities with the group for the implementation of smart circuit media;

   c. Evaluation materials.

3. Observations

Observations were carried out in order to obtain more detailed information about the activity data from the beginning to the end of the action. These observations were made by researchers assisted by English teacher. The observations noted in the observation form.

4. Reflection

Reflection is used to measure the success of a cycle. This activity is to look at the successes achieved and the weakness of the planning process undertaken in the cycle. Reflection is also a reference in determining the improvement of the shortcomings of the previous cycle to be applied to the next cycle.

In this reflection phase, researchers will involve students drawn randomly to discuss the shortcomings inherent in the smart circuits media used during the learning process, the progress that has been achieved by students and next plan learning. The success indicators are used to determine the effectiveness of the use of smart circuit media are qualitative indicators and quantitative indicators. Qualitative indicators are enthusiasm of students in the learning process and quantitative indicators are in the form of test scores obtained student score and then compared with the scores obtained during the pretest action and scores on the previous cycle.

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CHAPTER IV

EXPOSURE DATA

A. **SCHOOL PROFILE**

   1. School Identity

      a. School Name   : MI Nurul Hikmah

      b. Address   : St. Muharto VII/41, Kedungkandang, Malang

      c. NSS   : 111235730014

      d. Founding Year : 1985

      e. Headmaster   : Sholikin S.Pdi

   2. Data of Teacher and Student

      a. Teacher Data

Table 4.1 Teacher Data

No	Name	Position	Teaching
1.	Sholikin S.Pdi	Headmaster	Religion Teacher
2.	Dra. Siti Rohmah	Homeroom Teacher	4th Grade Teacher
3.	Dra. Isnaniyah	Homeroom Teacher	3rd Grade Teacher
4.	Sulikah S.Pd	Homeroom Teacher	6th Grade Teacher
5.	Hamidah S.Pd	Homeroom Teacher	English Teacher

36

6.	Christina, SH	Homeroom Teacher	1st Grade Teacher
7.	Inanik	Skill Teacher	2nd-6th Skill Teacher
8.	Susi Indrayani S.Pd	Homeroom Teacher	5th Grade Teacher
9.	Wahyu H. S.HI	Homeroom Teacher	2nd Grade Teacher
10.	Ervina Rahayu N.	Administration Staff	
11.	Munasid	Security	

b. Student Data

Table 4.2 Student Data

No	Class	Student gender		Total	
		Male	Female		
1.	1	23	13	36	
2.	2	15	9	24	
3.	3	18	17	35	
4.	4	8	16	24	
5.	5	9	14	23	
6.	6	20	18	38	
Total		93	87	180	

I. EXPOSURE DATA

Before the implementation of the action using smart circuit media, the researcher conducted a pretest to determine the condition before action. Pretest was held in one meeting, the date 11th December 2014. In action, the researcher divided the activities into two cycles which were held in two meetings starting on 15th December 2014 until 18th December 2014.

1. Pretest

   a. Pretest plan

   Before the research was conducted, the researcher held a meeting on 1st December 2014 with the head master, homeroom teacher, and English teacher. At this meeting, the researcher conveyed the purpose of the research. Then, she proceeded with talks about planning research schedule.

   Researcher had discussion with English teacher and requested fourth graders data and English materials that were learned in the classroom to serve as a reference for the researcher. In this planning activity, researcher prepared a pretest questions are given to students to determine students' initial ability.

   b. Observations and the results of the pretest

   Pretest was conducted on 11th December 2014 with class hours were 2x35 minutes using a lecture and Q & A method. On the implementation of the pretest, all of students can attend the class.

   Learning begins by reminding students on animal vocabulary in the English subject. Then, the teacher explained about animals English vocabulary. The teacher asks the students to memorize the names of animals in English and said together after hearing the teacher's questions. At the end of the lesson, the teacher gives the evaluation in the form of 25 written test for the student to know student's ability before implementation.

c. Observations and the results of the pretest

From the results of the pretest conducted and the results of observation sheets, students seem less enthusiastic and less interested in the learning process of English subject because it still uses the monotone method is a lecture and Q & A, so students tend to be quiet, some have listened to teachers' explain and some students play itself when the teacher explains the material.

Table 4.3 Pretest Results

No.	Name	Score	
1.	Afif Mahbubi	45	Not Passed
2.	Ainun Marsuki	70	Passed
3.	Alfina Amliatul	55	Not Passed
4.	Auliya Ayu Winda Sari	20	Not Passed
5.	Dicky Saputra	85	Passed
6.	Efendi Khoiri	40	Not Passed
7.	Elya Masruroh	25	Not Passed
8.	Fitrotin Hariani	60	Not Passed
9.	Hanien Arif Al Maduri	55	Not Passed
10.	Ida Rahmah Ika Putri	70	Passed
11.	Ismawati	50	Not Passed
12.	Keren Imanaini Izzah	80	Passed
13.	Khoirul Umam Febrianto	30	Not Passed
14.	Moh. Abdul Aziz	50	Not Passed
15.	Mutiatul Hasanah	75	Passed
16.	Novita Sari Marsya	55	Not Passed
17.	Nur Jannatin Arifah	65	Not Passed
18.	Riham Khazin	70	Passed
19.	Sandy Saputra	50	Not Passed
20.	Siti Aisya El Bahrofah	70	Passed
21.	Siti Nurul Hikmah	60	Not Passed
22.	Yusril Maulana MH	35	Not Passed
23.	Zahrotul Fadilah	15	Not Passed
24.	Hamdan	60	Not Passed

d. Reflection pretest

From the observations presented above, it can be concluded that the method adopted by English teacher in English subject cannot make students become enthusiastic about learning English. When the teacher explained, many students did not focus on the teacher's explanation.

Most of the students had not been able to memorize the vocabulary so that the students have difficulties working on pretest given by the researchers. Responding to the pretest results are implemented, then the things needs to be done by the researcher are:

1) Add instructional media using smart circuit media;

2) Conduct an evaluation at the end of each study, to determine the extent of the development of students' ability in learning English subject.

2. Cycle 1

a. Plan

In the first cycle, learning activities is designed to help students memorize the vocabulary on the English subjects for animal materials in lesson 5. Some forms of planning that are prepared by the researcher in this cycle are as follows:

1) Prepare the teaching material to be delivered;

2) Create a lesson plan;

3) Prepare the research instrument in the form of questions for written tests used to measure student achievement;

4) Prepare smart circuit media;

5) Prepare the student observation sheet during learning activities.

b. Implementation

The first cycle was held on 15th December 2014 with 2x35 minute time duration was at 07.30 until 08.40. In these meetings, 1 students did not present in the learning activity. Total students participating in learning activity were 23 students. Implementation of the first cycle was adjusted with a lesson plan that was created earlier.

The second cycle was executed on 17th December 2014 with 2x35 minute time duration was at 07.30 until 08.40. Total students participating in learning activity were 24 students. Implementation of the second cycle was adjusted to the lesson plan that was created earlier.

In the preliminary event comprising the steps of apperception and motivation, teacher asked us to pray together before the start of the lesson. When finished praying, the teacher was conditioning the students to be ready to learn and provide motivation to the students. Teacher motivated students by inviting students to sing along with the song of "The name of the finger". In the next stage of apperception stage, the teacher asked the students about what animals live in the woods and what animals can live in the water.

The next activity is a main activity. At the main activity, there are three stages given, namely the exploration stage, elaboration and confirmation. In the exploration phase, students are asked to observe the image given by teacher and then mention any animal that is in the image by using the English language.

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Later in the elaboration stage, the teacher divides the class into five groups. The division of the group is done in a way that was previously done in cycle 1 is found by dividing the paper blue, red, yellow, green, purple and brown. Students who receive the same color paper, then these students are in the same group. Once the students are divided into groups, representative of each group was asked to come forward to take the game board, dice, pawns, garage memories and alternatives questions. The teacher explained to students how to play the game. In accordance with the rules of the game, the students who received the down arrow must answer the alternative question, if the answer is correct, then these students remain in the box occupied but if the answer is wrong then the student must go down into the designated box in accordance with the arrows. Likewise, if a student got up arrow then the student must answer the existing alternative question. If the answer is correct, the students are allowed to move into the designated box in accordance with the arrows. If the answer is wrong, then these students must still stay in the box occupied.

After students are able to complete the game, the teacher gives students English vocabulary exercises about vocabulary in lesson 5 that are 25 questions consisting of 10 multiple choice questions, 10 questions match vocabulary and 5 question matching picture. It is intended as an evaluation activity therefore the students are asked to work on the problems individually. At the confirmation stage, the teacher discusses the results of student work together and students can

asking the things unknown to teachers. In addition, teachers also straighten misunderstanding, conclude and provide reinforcement material to students.

The last activity is the closing. At the closing activity teachers together with learners make conclusions about learning activity today. In addition, teachers also provide feedback on the process and outcomes of learning by asking questions about the material that has been studied as well as inform instructional materials at the next meeting.

c. Observation

Based on the results of observations made by researchers, while early learning activities of students seemed not eager to participate in learning activities, but after the teacher gives the educational song seemed enthusiastic. During process of learning activities, students were enthusiastic because at the beginning of the learning process, teachers promising will play game using smart circuit media.

Students look more enthusiastic and happy during learning activity cause teacher use smart circuit media. However there are still some obstacles in the use of smart circuit media. That is because the teacher did not explain the rules of the game in detail, so students are less able to understand the rules of the game.

From first post-test evaluation given by the researchers, there are some students who completed the whole questions precisely because the student has begun to memorize vocabulary in lesson 5 easily. In this earning activity there is 1 student cannot attend the class. There are 6 students got perfect score.

Table 4.4 Student scores in the first cycle

No.	Name	Score	
1.	Afif Mahbubi	70	Passed
2.	Ainun Marsuki	100	Passed
3.	Alfina Amliatul	85	Passed
4.	Auliya Ayu Winda Sari	55	Not Passed
5.	Dicky Saputra	100	Passed
6.	Efendi Khoiri	75	Passed
7.	Elya Masruroh	50	Not Passed
8.	Fitrotin Hariani	85	Passed
9.	Hanien Arif Al Maduri	65	Not Passed
10.	Ida Rahmah Ika Putri	100	Passed
11.	Ismawati	75	Passed
12.	Keren Imanaini Izzah	100	Passed
13.	Khoirul Umam Febrianto	75	Passed
14.	Moh. Abdul Aziz	70	Passed
15.	Mutiatul Hasanah	95	Passed
16.	Novita Sari Marsya	100	Passed
17.	Nur Jannatin Arifah	100	Passed
18.	Riham Khazin	95	Passed
19.	Sandy Saputra	-	Not Passed
20.	Siti Aisya El Bahrofah	90	Passed
21.	Siti Nurul Hikmah	80	Passed
22.	Yusril Maulana MH	55	Not Passed
23.	Zahrotul Fadilah	25	Not Passed
24.	Hamdan	70	Passed

From the table, it can be seen that the average score of the class has increased from 53.75 on the pretest becomes 75.63 in the first cycle. Of the average score of the class can be seen that an increase in the score of student learning outcomes with a percentage 40.70 %.

e. Reflection

From the results of the implementation of the action on the first cycle, it can be seen that an increase in the percentage of learning outcomes 40.70%. However, this increase is not maximized so that the need for revision of learning in order to improve students' vocabulary mastery. Some constraints on learning activities in this first cycle, among others:

1) Students are still confused use smart circuit media because the teacher did not explain in detail the rules of the game, students are only required to read the rules of the game on a sheet that has been provided by the researcher;

2) Some students are still afraid to ask vocabulary that cannot be understood.

Addressing constraints contained in the first cycle, revision is needed in order to correct the error in this cycle not repeated in the second cycle. The forms of revision are as follows:

1) Teacher explains the rules of the game smart circuit in detail;

2) Teacher motivates students to not be afraid to ask.

3. Cycle 2

   a. Planning.

   In the second cycle, the learning activities designed to reinforce the students' vocabulary on the animals matter. Some forms of planning that are prepared by the researcher in this cycle are as follows:

   1) Prepare the material to be delivered;

   2) Create a lesson plan;

   3) Prepare the research instrument in the form of questions for written tests used to measure student achievement;

   4) Prepare instructional media smart circuit;

   5) Preparing student observation sheet during learning activities.

   b. Implementation

   The second cycle was executed on 17th December 2014 with 2x35 minute time duration was at 07.30 until 08.40. Total students participating in learning activity were 24 students. Implementation of the second cycle was adjusted to the lesson plan that was created earlier.

   In the preliminary event comprising the steps of apperception and motivation, teacher asked us to pray together before the start of the lesson. When finished praying, the teacher was conditioning students to be ready to learn and provide motivation to the students. The teacher motivated students by inviting students to sing along with the song "The name of the finger". In the next stage

46

of apperception stage, the teacher asked the students about what animals live in the woods and what animals can live in the water.

The next activity is a main activity. At the main activities there are three stages is given, namely the exploration stage, elaboration and confirmation. In the exploration phase, students are asked to observe the image given by teacher and then mention any animal that is in the image by using the English language. Later in the elaboration stage, the teacher divides the class into five groups. The division of the group is done in a way that was previously done in cycle 1 is found by dividing the paper blue, red, yellow, green, purple and brown. Students who receive the same color paper, then these students are in the same group. Once the students are divided into groups, representative of each group was asked to come forward to take the game board, dice, pawns, garage memories and alternatives questions. The teacher explained to students how to play the game. In accordance with the rules of the game, the students who received the down arrow must answer the alternative question, if the answer is correct, then these students remain in the box occupied but if the answer is wrong then the student must go down into the designated box in accordance with the arrows. Likewise, if a student got up arrow then the student must answer the existing alternative question. If the answer is correct, the students are allowed to move into the designated box in accordance with the arrows. If the answer is wrong, then these students must still stay in the box occupied.

47

If the alternatives questions have been used up, the students who got a box that has a downward arrow should go down towards the box designated arrows. If the student is in a box that has the up arrow then the student can directly go up to the designated box in accordance with the arrows.

At the end of the game, students first arrive at the finish line in each group reported successful player to the teacher. To appreciate the successful student, teacher giving rewards to the students at the next meeting.

After students are able to complete the game, the teacher gives students English vocabulary exercises about vocabulary in lesson 5 that are 25 questions consisting of 10 multiple choice questions, 10 questions match vocabulary and 5 question matching picture. It is intended as an evaluation activity therefore the students are asked to work on the problems individually. At the confirmation stage, the teacher discusses the results of student work together and students can asking the things unknown to teachers. In addition, teachers also straighten misunderstanding, conclude and provide reinforcement material to students.

The last activity is the closing. At the closing activity teachers together with learners make conclusions about learning activity today. In addition, teachers also provide feedback on the process and outcomes of learning by asking questions about the material that has been studied as well as inform instructional materials at the next meeting.

Before closing the learning, the researcher gives rewards in the form of stationery to students who can complete the game in each group in cycle 1 and cycle 2 and 3 students to get the best average score on the pretest, posttest 1 and posttest 2.

After second cycle ends, the researchers conducted interviews with English teacher and 4 students in 4th Grade are taken randomly. Things asked by the researcher were about impressions of teachers and students towards learning that has been done.

Name: Hamidah S.Pd (English Teacher)

Q: Strategi atau metode apa yang ibu terapkan dalam mata pelajaran bahasa inggris khususnya untuk meningkatkan kemampuan bahasa inggris siswa?

A: Saya biasanya lebih mengawali pembelajaran dengan membacakan kosakata yang mereka tidak tau bagaimana cara membacanya. Setelah saya suruh mereka menghafalkan kosakatanya. Jika waktunya saya rasa cukup beberapa siswa saya suruh maju ke depan kelas untuk menghafal kosakata tapi jika waktunya tidak cukup ya hanya saya suruh menghafal dengan teman sebangkunya. Terus setelah itu saya lanjutkan pembelajaran sesuai dengan rpp dan sumbernya hanya dari buku paket saja. Soalnya waktunya juga terbatas, mbak.

Q: Apa media yang sering ibu gunakan dalam mata pelajaran bahasa inggris?

A: Untuk media sendiri saya jarang, mungkin hanya menggunakan ppt karena fasilitas dari sekolah yang tersedia untuk saat ini Cuma lcd dan proyektornya saja.

Q: Bagaimana respon siswa kelas 4 saat anda mengajar di kelas?

A: Nama juga anak-anak mbak, kadang juga ada yan ramai sendiri. Untungnya jadwal bahasa inggris jam pertama jadi anak-anak itu masi seger-segernya soalnya masih pagi. Tapi kalau seumpama ditaruh setelah jam istirahat pasti banyak yang ngaantuk soalnya anak-anak kalau istirahat mainnya itu sambil lari-lari, waktu masuk kelas sudah lemes terus ngantuk. Ya Alhamdulillah mbak.

Q: Apa saja kendala yang sering ibu alami dalam pembelajaran bahasa inggris?

A: Ya itu kendalanya tadi mbak, anak-anak sering ramai sendiri, nggak memperhatikan gurunya menjelaskan. Yang aktif ya Cuma itu saja. Yang paling saya ingat kalau kelas empat itu yg aktif namanya Karen.

Q: Bagaimana proses pembelajaran bahasa inggris dengan menggunakan media pembelajaran sirkuit pintar pada siklus 1? Kalau menurut saya ini ide bagus. Saya lihat anak-anak kemarin juga lebih antusias. Meskipun rame tapi mending ramenya belajar. Saya juga lihat medianya sederhana, tidak membutuhkan biaya banyak kelihatannya.

A: Bagaimana proses pembelajaran bahasa inggris dengan menggunakan media pembelajaran sirkuit pintar pada siklus 2? Kalau yang siklus kedua kemaren saya dengar ada anak yang bertanya "Bu ayo belajarnya pakai permainan yang kemarin." Dari situ saya rasa mereka benar-benar tertarik dengan media ini. Saya juga lihat kemarin hasil tesnya juga banyak yang dapat nilai bagus.

Q: Apakah menurut ibu, siswa kelas 4 mengalami peningkatan dalam menguasai kosakata bahasa inggris terutama pada materi animal setelah mengunakan media sirkuit pintar?

A: Iya pasti ada peningkatan mbak. Malah ada beberapa siswa yang biasanya ramai sendiri seperti Yusril itu juga akhirnya bisa dapat nilai yang baik.

Q: Apakah menurut ibu media pembelajaran ini efektif untuk membantu meningkatkan penguasaan kosakata bahasa inggris pada materi-materi berikutnya?

A: Iya sangat efektif sekali merut saya. Seperti yang sudah saya jelaskan sebelumnya dampak positif yang nampak diperlihatkan siswa setelah media ini digunakan.

Name : Zahrotul Fadilah

Q: Apakah menurut kamu media sirkuit pintar ini menarik?

A: Menarik, seperti sedang bermain, bu.

Q: Apakah kamu suka belajar bahasa inggris saat menggunakan media sirkuit pintar?

A: iya enakan sambil main bu. Kalau biasanya kan hafalan aja terus disuruh maju.

Q: Apakah kamu merasa lebih mudah menghafal kosakata bahasa inggris saat menggunakan media sirkuit pintar?

A: Iya bu. Enakan gini daripada mengahafal terus.

Name: Novita Sari Marsya

Q: Apakah menurut kamu media sirkuit pintar ini menarik?

A: Ya menarik dong bu. Lebih enak kalau kelompokan gini jadi nggak ngantuk.

Q: Apakah kamu suka belajar bahasa inggris saat menggunakan media sirkuit pintar?

A: Suka apalagi kalau saya sampai di garis finish duluan pasti dapat hadiah.

Q: Apakah kamu merasa lebih mudah menghafal kosakata bahasa inggris saat menggunakan media sirkuit pintar?

A: Iya. Nilai saya kan jadi bagus, bu.

Name: Afif Mahbubi

Q: Apakah menurut kamu media sirkuit pintar ini menarik?

A: Menarik bu. Warna-warni. Ada gambar juga bu.

Q: Apakah kamu suka belajar bahasa inggris saat menggunakan media sirkuit pintar?

A: Suka sekali bu. Kalau belajar jadi nggak deg-degan.

Q: Apakah kamu merasa lebih mudah menghafal kosakata bahasa inggris saat menggunakan media sirkuit pintar?

A: Iya bu daripada ke depan satu-satu itu deg-degan sekali.

Name: Keren Imanaini Izzah

Q: Apakah menurut kamu media sirkuit pintar ini menarik?

A: Ya menarik bu daripada belajarnya lihat papan terus.

Q: Apakah kamu suka belajar bahasa inggris saat menggunakan media sirkuit pintar?

A: Ya suka kan bisa sambil main juga bu. Nggak tegang gitu bu.

Q: Apakah kamu merasa lebih mudah menghafal kosakata bahasa inggris saat menggunakan media sirkuit pintar?

A: Iya donk bu kalau nggak hafal kosakatanya nanti pion saya nggak bisa jalan.

In addition to the interview, to complement the data on student responses to the study, researcher gives questionnaires to grade 4 at MI Nurul Hikmah after giving action. Based on analysis of the results of the questionnaire, it can be concluded that the students love learning by using smart circuit media. This is evident from the student responses to each question, almost on the 10 questions most students responded agree and strongly agree on every question.

Table 4.5 Students' response

No	Response	Percentage	Frequency
1.	Agree	41,7%	10
	Strongly agree	54,1%	13
	Disagree	4,1%	1
	Strongly disagree	0%	0
2.	Agree	41,7%	10
	Strongly agree	54,1%	13
	Disagree	4,1%	1
	Strongly disagree	0%	0
3.	Agree	41,7%	10
	Strongly agree	58,3%	14
	Disagree	0%	0
	Strongly disagree	0%	0
4.	Agree	37,5%	9
	Strongly agree	49,9%	11
	Disagree	8,3%	2
	Strongly disagree	8,3%	2

5.	Agree	50%	12
	Strongly agree	49,9%	11
	Disagree	0%	0
	Strongly disagree	4,1%	1
6.	Agree	29,1%	7
	Strongly agree	49,9%	11
	Disagree	25%	6
	Strongly disagree	0%	0
7.	Agree	49,9%	11
	Strongly agree	37,5%	9
	Disagree	12,5%	3
	Strongly disagree	4.1%	1
8.	Agree	41,7%	10
	Strongly agree	58,3%	14
	Disagree	0%	0
	Strongly disagree	0%	0
9.	Agree	20,9%	5
	Strongly agree	62,5%	15
	Disagree	12,5%	3
	Strongly disagree	4,1%	1
10.	Agree	41,7%	10
	Strongly agree	58,3%	14
	Disagree	0%	0
	Strongly disagree	0%	0

c. Observation

Based on the results of observations made by researchers, students seemed more enthusiastic in participating in the current study compared the following study on the pretest and cycle 1. At the main activity, which is when the teacher explains the learning materials, students look very serious because they do not want get wrong answer in alternative questions when playing smart circuit media learning like on the first cycle. The number of students who dared to ask about

unknown vocabulary is increasing it means students are not afraid anymore or feel free to ask the teacher.

At this meeting, the students were very excited to start the game. The game runs smoothly and all the students are clear about the rules of the game because the teacher explains the rules of the game very detailed when compared with the explanation on the first cycle. Students are increasingly enthusiastic because at the beginning of the meeting teacher promised reward for students who first reached the finish box in each group. For the evaluation questions, the majority of students get a perfect score.

Table 4.6 Second Cycle Score

No.	Name	Score	
1.	Afif Mahbubi	100	Passed
2.	Ainun Marsuki	100	Passed
3.	Alfina Amliatul	100	Passed
4.	Auliya Ayu Winda Sari	95	Passed
5.	Dicky Saputra	100	Passed
6.	Efendi Khoiri	100	Passed
7.	Elya Masruroh	100	Passed
8.	Fitrotin Hariani	100	Passed
9.	Hanien Arif Al Maduri	100	Passed
10.	Ida Rahmah Ika Putri	100	Passed
11.	Ismawati	100	Passed
12.	Keren Imanaini Izzah	100	Passed
13.	Khoirul Umam Febrianto	95	Passed
14.	Moh. Abdul Aziz	100	Passed
15.	Mutiatul Hasanah	100	Passed
16.	Novita Sari Marsya	100	Passed

17.	Nur Jannatin Arifah	100	Passed
18.	Riham Khazin	100	Passed
19.	Sandy Saputra	100	Passed
20.	Siti Aisya El Bahrofah	100	Passed
21.	Siti Nurul Hikmah	100	Passed
22.	Yusril Maulana MH	75	Passed
23.	Zahrotul Fadilah	90	Passed
24.	Hamdan	100	Passed

There are 20 students who managed to get a perfect score. The average class score increased from 53.75 on the pretest becomes 98.12 in the second cycle. Of the average value of the class can be seen that an increase in the percentage of 82.5%.

d. Reflection

From the results of the implementation of the action in the second cycle, it can be seen that an increase in learning achievement with a percentage 82.5%. Through field observations in each cycle, it can be concluded that the use of smart circuit media proven effective to improve the vocabulary mastery about animal in the lesson 5 of English subjects in 4th grade MI Nurul Hikmah.

The indicators of the successful use of instructional media smart circuit are as follows:

1) At the time of the learning, the students look happy and very enthusiastic;

2) By using smart circuit media, students are easier to memorize English vocabulary;

3) There is an increase in learning after using smart circuit media of 40.70% in first cycle and 82.5% in the second cycle.

C. RESEARCH FINDINGS

Research findings of each cycle are:

1. Cycle 1

c. Planning stage

At first cycle, researcher decided one meeting as learning activity 2x35 minutes in duration. Learning activities were designed to help students memorize the vocabulary.

b. Implementation phase

Implementation of learning in the first cycle was conducted on 15th December 2014. In this first cycle, students are still confused in understanding instructions or rules of the game. This is because the teacher only asks students to read rules of the game on paper that has been distributed to each group.

In the implementation of learning activity, students were more enthusiastic when using smart circuit media. However, students' motivation should be further enhanced because there are still some students who are shy to ask about the vocabulary that they do not know.

c. Assessment phase

Assessment was carried out during the learning process by providing students about evaluation to determine students' mastery of vocabulary is currently used media smart circuit.

2. Cycle 2

a. Planning stage

In this second cycle, researcher set a meeting time as learning activity with 2x35 minutes time duration. Learning activities were designed to strengthen the English vocabulary mastery of students.

b. Implementation phase

Learning implementation in the second cycle was executed on 17th December 2014. In this second cycle, students are able to understand the rules of the game as a whole. In the learning process, students are very eager to do the smart circuit game.

Indicator of achievement in second cycle is the number of students who asked and answered questions increased. Some students were initially embarrassed to ask and answer questions, at this meeting there is better change. In addition, students can also complete the questions given by the teacher in a faster time than ever before.

c. Assessment Stage

Assessment was carried out during the learning process by providing an evaluation for the student to determine student mastery of the vocabulary of animal that has been studied. From the evaluation, most students can complete in time. Out of the 25 questions given, the whole questions can be answered by the students. Almost all students are able to answer the overall question correctly and there are only a few students who could not finish the whole questions correctly.

From the results of the evaluation in the second cycle, class average score increased from 53.75% on the pretest becomes 98.12% in the second cycle. From average score, it is known that an increase in students' English vocabulary with a percentage 82.5%.

From the research findings in the first cycle and second cycle, it is proven that the use of smart circuit media can improve English vocabulary at fourth grade students MI Nurul Hikmah on the English subject. The effectiveness of

smart circuit media on English subject as a whole can be seen from the success indicators of using smart circuit media that include:

1) At the time of the learning, the students look happy, more energetic and enthusiastic;

2) Using smart circuit student media easier to remember English vocabulary and its meaning, and can write with correct spelling;

3) With the direct involvement of students in the learning process enables students to become more active.

There is an increasing in students' English vocabulary mastery after using smart circuit media with the percentage 40.70% on first cycle, and increased to 82.5 % on the second cycle.

CHAPTER V

RESULT STUDY

A. **Learning Planning by Using Smart Circuit Media to Improve English Vocabulary Mastery**

This study was divided into two cycles. Each cycle was held in one meeting with 2x35 minutes time duration. The first cycle was designed to help students memorize English vocabulary in lesson 5.

Planning is done by preparing the necessary things on learning activities, they are:

1. Prepare material to be delivered;

2. Prepare a source of learning;

3. Make lesson plan;

4. Prepare the research instrument in the form of questions for written tests used to measure student achievement;

5. Prepare instructional smart circuit media;

6. Prepare the student observation sheet during learning activities;

7. Prepare a questionnaire to be filled by students at the end of the lesson in second cycle.

The learning process is done by using smart circuit media. The source used in the study is English Book for 4th grade. Base Competence and Standards Competency and direct experience are used to meet the needs of the students. The first action performed was a pretest which was held to determine the initial ability of students using method that is often used by teachers, a lecture and Q & A and do not use any instructional media. Pretest was held one meeting on 11th December 2014. From the result of pretest and interview, it is known that learning conditions of English in 4th MI Nurul Hikmah still tend to be passive. In addition, there are many students who are less enthusiastic about learning English because English seems to be a difficult subject that have an impact on students' vocabulary mastery.

B. Implementation of Learning by Using Smart Media Learning Circuits To Improve English Vocabulary Mastery

After knowing the early conditions of 4th grade students MI Nurul Hikmah then in implementation step used smart circuit media to improve English vocabulary mastery on English subjects. The learning process begins by explaining material and then doing game by use smart circuit media. Before finishing learning activity an evaluation held in order to determine students' vocabulary mastery.

By using smart circuit media in English lesson, students will feel the learning atmosphere is different than usual, as well as to make the students to concentrate full and atmosphere in the classroom also conducive so can increase memory ability toward lesson.[28]

Using smart circuit media is expected to help students to better master English vocabulary. The selection of smart circuit media is also because this media is easy to make and does not require a lot of money. In general, smart circuit media consists of a board game, dice, pawns, and workshop memory and to improve students' insight, researcher made alternative questions.

From the first cycle was held on 15th December 2014, it is known that at the beginning of learning activity student seem less excited, but when teacher use smart circuit media students are very enthusiastic to do the game. Smart circuit media is media that can directly involve students in the learning process that will help students to understand the lesson being taught.

Submission of information that is only through verbal language can make verbalism and misperceptions, also support students to grasp the message will be further reduced because students are not given stimulus to think and appreciate

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[28] Yasin Yusuf, Umi Auliya, op.cit., page 18-19

the message, but to understand something needs the involvement of students both physically and psychologically.[29]

When conducting a smart circuit game, students are divided into 5 groups each group consisting of 4-5 students adjusted to the number of students who entered at the time of implementation in the first cycle. When first cycle is held, a lot of students are still confused when doing this game because the teacher did not explain the rules of the game in detail.

In the second cycle implemented on 17th December 2014, it can be seen that the students were more enthusiastic when compared to previous meetings. At this meeting, the media used is smart circuit media. Second cycle is made to improve deficiencies that occur in the first cycle for better learning process. Improvements among others, the teacher explains the rules of the game media smart circuit in detail. Teachers motivated students to not be afraid to ask or answer questions posed by the teacher. Teachers also provide an opportunity for students who are less active to answer questions.

Students are active during learning process is not only dominated by the same students, but some other students are already willing to answer questions. In addition, students are very excited to start the game. The game runs smoothly

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[29] Wina sanjaya, *Istrategi Pembelajaran Berorientasi Standar Proses Pendidikan*,(Jakarta:Kencana prenada media group, 2009), page. 169

because students are getting used to using smart circuits media and because the teacher had explained the rules of the game in detail.

Out of the 20 questions given in the second cycle, the majority of students are able to answer the overall question correctly. Teacher does not have problems were experienced in the second cycle.

In addition to the increasing number of students are active during learning process, students also seemed very enthusiastic to learn English not only in the implementation of the game, but also when the teacher explains learning materials. Students look more prepared play game because students have memorized vocabulary in lesson 5.

C. **Learning Assessment by Using Smart Circuit Media to Improve English Vocabulary Mastery**

Learning Assessment in this study was held on each cycle at the end of the learning process to determine extent to which smart circuits media used have increased English vocabulary mastery. By using smart circuit media on English subjects, it is at least able to change the students' mindset about English lessons are boring and difficult to be fun so students become interested in studying that impact on improvement English vocabulary mastery who owned by students. Results evaluation of first cycle, 6 students already get a perfect score. The class average score in the first cycle increased from an average pretest score 53.75 to

75.63. From class average score can be seen that an increase in the percentage of first cycle 40.70%.

From evaluation results in second cycle, 20 students get perfect score. The class average score in second cycle increased from 53.75 on pretest to 98.12 on second. From class average score can be seen that an increase in second cycle with a percentage of 82.54%.

Table 5.1 Increasing English vocabulary mastery using smart circuit media

Meeting	Class average score	Increasing percentage
Pretest	53,75	-
Posttest 1	75,63	40,70%
Posttest 2	98,12	82,54%

From evaluation results of each cycle, it is known that the use of smart circuit media can improve English vocabulary mastery on lesson 5. Overall, the researcher can make conclusion that the use of smart circuit media is proven to improve English vocabulary mastery on lesson 5 for 4th grade students MI Nurul Hikmah. The indicator of successful use smart circuit media is:

1. At the time of the learning, the students look happy, more energetic and enthusiastic;

2. Using smart circuit media, students were easier to remember English vocabulary and its meaning, and can write with correct spelling;

3. With the direct involvement of students in the learning process enables students to become more active;

4. There is an increasing students' English vocabulary mastery after using smart circuit media with the percentage 40.70% on first cycle, and increased to 82.5% on the second cycle.

CHAPTER VI

CONCLUSION

A. **Conclusions**

1. Implementation of smart circuit media to improve English vocabulary mastery in 4th grade students Islamic Elementary School Nurul Hikmah was conducted in two cycles. Stages that exist in each cycle are the planning, implementation, observation and reflection. In its implementation, smart circuit media was used by students during the learning process. Teacher begins by explaining about various animal names that exist on the chapter V material, followed by questions and answers methods. The teacher divides the class into six groups. Once the group is formed, teachers share smart circuit media in each group to be played. The player who gets the first order, roll the dice and play first. The first player to run his dice into the box that corresponds to the meaning of vocabulary acquired at dice when throwing. For example, children acquire the dice 'chair', the dice will run up the box with the vocabulary of 'kursi' or pictorial box chair. Once completed, the second player, and then continued in accordance with the order. Students who received the down arrow must answer the alternative question, if the answer is correct, then these students remain in the box occupied but if the answer is wrong then the student must go down into the designated box in accordance with the arrows. Likewise, if a

student got up arrow then the student must answer the existing alternative question. If the answer is correct, the students are allowed to move into the designated box in accordance with the arrows. If the answer is wrong, then these students must still stay in the box occupied. The player who wins the game is the player running his dice to the finish box. After students finished the game, teacher give posttest to each student find out English vocabulary improvement after using smart circuit media in each cycle.

2. The results that have been obtained show that students have increased in terms of vocabulary mastery after using smart circuit media during the learning process. Quantitative data obtained from the comparison of average value of students before and after using of smart circuits media showed that the students has increased as much as 40.70% in the first cycle and 82.54% in the second cycle. While the qualitative data obtained from observations showed that students seem more active and enthusiastic during the learning process when smart circuit media is used. Learning is no longer centered on the teacher but the teacher only as a facilitator. From the results of a questionnaire distributed to students, it can be seen that the circuit smart media can give a positive impact for students to increase English vocabulary mastery. It can be stated that smart circuit media proved to be effective to improve English vocabulary mastery for 4th grade students Islamic Elementary School Nurul Hikmah.

B. Advice

1. For teachers

    a. Teachers should understand the various strategies, methods, and instructional media so the basic competencies that are targeted to be achieved and the learning process are not running boring. By using varying methods and media, teachers can make students more eager to learn so as to make the atmosphere in the classroom is conducive and can involve all students actively in the learning process.

    b. An educator is required to keep abreast of the times and to be able to work professionally and optimized by using media that can simplify the process of students' understanding of the material being studied.

    c. Teachers should use the media that close to the students to further enhance students' understanding so that the students are more active during the learning process so that learning is more focused on students and teachers act as facilitators only.

2. For students

    a. Students should be more active and more involved in the learning activities, do not be shy to ask and be trying to gain as much experience as possible from friends or from other learning resources and can establish good communication and cooperation with other students in order to share knowledge that has been obtained.

71

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