THE IMPLEMENTATION OF LEARNING BASED ON MODULE SYSTEM ON MATHEMATIC SUBJECT OF 4th GRADE BILINGUAL AT LABORATORY PRIMARY SCHOOL STATE UNIVERSITY OF MALANG

THESIS

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TEACHER EDUCATION PROGRAM OF ISLAMIC PRIMARY SCHOOL
TEACHER EDUCATION ISLAMIC PRIMARY SCHOOL
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MAULANA MALIK IBRAHIM STATE ISLAMIC UNIVERSITY OF MALANG
July, 2014

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THESIS

Submitted to faculty of Tarbiyah and teaching Sciences at Maulana Malik Ibrahim State Islamic University (UIN) of Malang in partial Fulfillment of the Requirement to Obtain a Bachelor Degree of Islamic Primary School Teacher Education (S.Pd.I)

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PASSED

And has been approved by the board of examiners as the requirement to earn an undergraduate Bachelor of Islamic Primary School Teacher Education (S.Pd.I)

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DEDICATION

This simple thesis dedicate to:

My beloved father and mother (Umar Fahruzi and Manisah) who always give prayers and support, both moral and material that was never able to replace it with anything

My beloved sister, Alda Dwin Mar Elisah, who become motivation for me to be a success person

My big family (mbah dok, mbah nang, mbah Kalil, Alm. mbah Suwiti, mak Um, lek Mim, bul Munifah, lek Ir, pal bambang, mbak lil, pakde su, makyu Ya, makyu Ma, pakde Nan, makyu Yat, pakde Mat, makyu A, pakde Di, kak To, bulek Tika, kak Za, kak Yon, kak Din, kak Ari, kak Zian, mbak Silva, mbak Wiwit, adek Fatin, adek Vina, adek Yeyen, adek Najah, adek Uur, adek Tegar dan adek Amel) who always gives prayers and supports to me

Fahmi al Fadlil, thank you to become my inspiration

My big family at Kerto Sariro 4b Malang (Achil, Irma, Suci dan Nur Jannah) who always make my days so meaningful

My best friends (Elly, Ririn, Vivid, Fatin, Hawe, Indi, Ulul, Syifa', Cery, Anis, Hafizah, Lina, Fenti, Zazuk), thank for creating the colorful life

All of my beloved teachers and lectures who have give me lot of knowledge that was never able to calculate and replace it with anything

MOTTO

إِنَّ ٱللَّهَ لَا يُغَيِّرُ مَا بِقَوْمٍ حَتَّىٰ يُغَيِّرُوا۟ مَا بِأَنفُسِهِم

Sesungguhnya Allah tidak merobah Keadaan sesuatu kaum sehingga mereka merobah keadaan yang ada pada diri mereka sendiri

(AR-Ra'd: 11)[1]

[1] Departemen Agama RI, Al-Qur'an dan Terjemahnya Al-Jumanatul A'li, (Bandung: CV.Penerbit J-Art.2004), page.250

H. Akhmad Nurul Kawakib, M.Pd, MA

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ADVISOR OFFICIAL NOTE

Matter : Thesis of Ika Zuni Mar'anis Malang, 10 June 2014

Appendixes : 4 (Four) Exemplar

Dear,
Dean of Tarbiyah and Teaching Sciences Faculty
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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 : Ika Zuni Mar'anis

NIM : 10140071

Program : Teacher Education Islamic Elementary School

Title of Thesis : The Implementation of Learning Based on Module System on Mathematic Subject of 4th Grad Bilingual at Laboratory Primary School State University of Malang

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

Wassalamu'alaikum Wr. Wb.

Advisor,

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STATEMENT LETTER

Hereby state that on this thesis there is no work that ever submitted to obtain bachelor degree on one university, and as far as I know, there is no work or opinion that ever written or published by another person, except for in writes that is referenced on this thesis and mentioned on the bibliography.

Malang, 10 of June 2014

Ika Zuni Mar'anis

PREFACE

Praise author prayed to Allah the Almighty, who has given grace, *taufiq*, and His guidance. Only by the power of him the thesis with the title "THE IMPLEMENTATION OF LEARNING BASED ON MODULE SYSTEM ON MATHEMATIC SUBJEC OF 4th GRADE BILINGUAL AT LABORATORY PRIMARY SCHOOL STATE UNIVERSITY OF MALANG" can be completed on time.

Sholawat and salam is always delegeted to the Prophet Muhammad SAW, who has been brought the Islamic religion from the darkness to the lightness.

Hopefully with the completion of this thesis by the title "The Implementation of Learning Based on Module system on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang" providing benefits to all parties.

This thesis describes about the implementation of learning based on module system on mathematic subject of 4th grade bilingual at laboratory primary school State University of Malang. Researcher looked for the data about the implementation include the learning activities, the module, the evaluation, the superiority, and also about the obstacles faced at the learning process.

With the completion of this report, the authors do not forget to say thank's to:

1. Beloved father and mother who always give me prayers and support, both moral and material that was never able to replace it with anything.

2. Prof. Dr. H. Mudjia Rahardjo, M.Si, as the Rector of Maulana Malik Ibrahim State Islamic University (UIN) of Malang.
3. Dr. H. Nur Ali, M.Pd, as the Dean of faculty of Tarbiyah and Teaching sciences at Maulana Malik Ibrahim State Islamic University (UIN) of Malang.
4. Dr. Muhammad Walid, MA, as Chairman of Teacher Education of Islamic Elementary School Department at Maulana Malik Ibrahim State Islamic University (UIN) of Malang.
5. H. Akhmad Nurul Kawakib, M.Pd, MA, as thesis advisor.
6. The teachers and students of 4th grade at laboratory primary school State University of Malang. Especially to Lilyana Abiba, S.Pd and Rahma Dyah Pintasari, S.Pd as mathematics teacher of 4th grade bilingual .
7. All my friends in the International Class Program of teacher education for Islamic elementary school.
8. To all of my brothers and sisters in Muhammadiyah Students Association (IMM) that I cannot mention one by one.

The authors are aware that in the preparation of this report there are still many shortcomings, the author critiques and suggestions are expected to improve the preparation of the next report. Hopefully, this thesis provides benefits to all parties. Amin Yaa Rabbal Alamin.

Malang, on 10 June 2014

Author

TRANSLATION GUIDELINESOF ARAB LATIN

Writing Arabic-Latin transliteration in this thesis using transliteration guidelines based on the joint decision of the Minister of Religious Affairs and Ministry of Education and Culture, no. 158 1987 and no. 0543 b/U/1987 which can be broadly described as follows:

A. Alfabeth

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	= h̲	ط	= th	و	= w
خ	= kh	ظ	= zh	ة	= h
د	= d	ع	= ‘	ء	= ‘
ذ	= dz	غ	= gh	ي	= y
ر	= r	ف	= f		

B. Long Vocal

Vocal (a) long	= /a/
Vocal (i) long	= /i/
Vocal (u) long	= /u/

C. Diphthong Vocal

أو	=	au
أي	=	ai
أو	=	/u/
اِي	=	/i/

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ABSTRACT

Mar'anis, Ika, Zuni. 2014. ***The Implementation of Learning Based on Module system on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang.*** Thesis, Teacher Education of Islamic Elementary School Department, Faculty of Tarbiyah and Teaching Sciences, Maulana Malik Ibrahim State Islamic University of Malang.

Advisor: H. Akhmad Nurul Kawakib, M. Pd, MA

Keywords: *learning, module.*

There are many efforts make by the educational experts to improve the quality of education. One of the efforts is by learning based on module system. Learning based on module system is the effort of improving educational quality by reforming the educational system as whole. This kind of effort is used at laboratory primary school state university of Malang and become the unique thing because as far as the researcher know only laboratory primary school state university of Malang which applied this kind of effort.

This study discusses the learning based on module system on mathematic subject of 4th grade bilingual at laboratory primary school State University of Malang, by focusing research: (1) How did the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang, (2) What are the obstacles that happen in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

This study used descriptive qualitative method. The data source in this study is from words and actions, the writing source and photos. The data collection technique used in this study is observation, interview and documentation, and than analyzed by systematically reviewing all the data retrieved.

The study results, obtained following data: (1) The implementation of learning based on module system there include: (a) learning activities, that is the learning learning that fully conducted by the students under the instruction of the module and the guidance of the teacher who only explain the learning content when the students need or face some difficulties in doing of modules order, (b) the module use there is use English, mad by the lesson subject, consist of many stage based on curriculum, (c) the evaluation of learning based on module system are: daily evaluation, module evaluation, middle examination and final examination, (d) the superiority of learning based on module system both for the teacher and for the student are for understanding of individual. (2) The obstacles of the learning based on module system on mathematic subject of 4th grade bilingual are the language of the module and the display of the module.

CHAPTER I

INTRODUCTION

A. Background of the Study

Based on some observations that have been done by the researcher at some schools, there are many schools like State Primary School Dinoyo 4, where take the teacher as the main actor in the learning activity. A lot of times used by students to listen and take notes in the class, while the time for raising their questions and showing their learning ability in the classroom is lees. We understand that the student will better understand the material when they are actively involved in the learning. This condition then became one of the factors that make students cannot accept the learning content well.

The educational experts have make efforts to improve the quality of education. There are two kinds of efforts they made, the first effort is only limited to certain components of the education system as well as on: the development of teaching methods, tools / instructional media, the second effort is by reforming education system as a whole as teaching based on module system.[2]

Many schools like State Primary School Dinoyo 4 choose to develop the quality of their education by change the system on certain component of education, as the development of the learning in terms of methods and media. In the implementations of the development system is not doing chronically so

[2] ST. Vembrianto, *Pengantar Pengajaran dengan Modul* (Yogyakarta: Yayasan Pendidikan Paramita, 1985), page. 7

that only on the certain materials the development system is applied. With the above problems, we know that there are many schools unsuccessful in improving their education quality.

The next development system that is by changing the system as a whole, the example is by implementing teaching system based on module. Module as delivery systems in the learning process has become expectation to be able to change the quality of education by transforming passive learning situations into stimulates learning situations. Module also expected to make student more active to read and learn how to solve their own problems under the supervision and guidance of teachers, who always ready to help students having difficulty.[3] Teaching module are using lesson package that includes a concept or unit of the lesson material. Approach in the teaching module is individual learning or using student learning experience. Students are given the opportunity to learn according to them characteristic and speed. Basic assumption underlying the development of the module is that the learning is a process that must be done by the students themselves.[4]

Laboratory Primary School State University of Malang chose module as learning system in the school. As has been presented by Mr. Sulthoni, as the principals of Laboratory Primary School State University of Malang, that the module is the unique characteristics which owned by Laboratory Primary School State University of Malang. Selection of the learning based on module system according to him; because with this system can train the student to be

[3] B.Suryobroto, *Sistem Pengajaran dengan Modul* (Jakarta : Radar Jaya Offset,1983), page.12
[4] Ibid, page. 27

an independent person, because the learning is individualized so students are trained to be independent student in solving any problems that exist in the module. Besides that, the use of the module system at Laboratory Primary School State University of Malang according to him also for selecting the child's ability, because basically the capabilities of every child is also different and can't be equalized, so the teacher has a role as a guide when students need clarity on something they do not understand. In one semester module consists of several levels so that students will be competing to complete their module then they can move to the next module.

From this different system then researcher chose Laboratory Primary School State University of Malang as a study object. Researcher want to know more about the implementation of the learning based on module system at Laboratory Primary School State University of Malang. In order to make this study become more focus, so the researcher chooses to conduct the study of 4th grade bilingual on mathematic subject. According to the basic explanation above, this study entitled **"The Implementation of Learning Based on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang".**

B. Problems Statement

Based on the background of the study above, following questions are formulated:

1. How did the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang?
2. What are the obstacles that happen in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang?

C. Objective of the Study

Based on the previous problem mentioned above, the objectives of this study are:

1. To describe the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Elementary School State University of Malang.
2. To describe the obstacles that happen in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

D. Significances of the Study

The result of this study is expected to give contributions to many parties, they are:

1. For Teachers

   The researcher expects that the result of this study meaningfully contribute for the teacher to evaluate mathematics learning of 4th grade bilingual at Laboratory Primary School State University of Malang.

2. For Students

   This study is conducted to help the students of 4th grade bilingual to improve their learning mathematics.

3. For School

   The results of this study are contributed to improve and correct the learning based on module system at Laboratory Primary School State University of Malang.

4. For Researcher

   This study is conducted to know about the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang, so it can be used as additional knowledge for preparation when become a teacher someday.

E. Limitation of Study

In this limitation of the study, the researcher focuses on:

1. Describe the implementation of learning based on module system on mathematic subject of 4^{th} grade bilingual at Laboratory Primary School State University of Malang.

2. Describe obstacles encountered in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

F. Definition Of Key Term

In order to avoid misunderstanding of terms, here the researcher defines the terms used in this study as follow:

1. Module

   Module is a teaching package used as instruction of learning activities consisting of the students activities-sheet and work-sheet and the objectives of learning which formulated specifically and clearly.

2. System

   System as defined in this study is components of unit interconnected each other and interact with each other to achieve an optimal expected result in accordance with its intended purpose.

3. Mathematic Subject

   Mathematic Subject is one of learning subject that that must be learned and mastered by the students.

G. Previous Study

The researcher knows that the title of this study is not the new title or topic to be studied. There are many educational observers done the study about this topic as one of the effort to increase the quality of learning. As far as researcher knows the educational observer who ever done the study related with the implementation of learning based on module system are:

1. Robiatul Adawiyah.[5] The study is about "The Implementation of Module based on Science, Technology, and Society Approach (STM) to improve the Learning Achievement of Material Composer Object Characteristic Class V at Insan Amanah Primary School Malang". The objective of this study is to know about the improvement of student learning achievement based on cognitive, affective and psychomotor aspect by implemented module based on Science, Technology, and Society Approach (STM). From the result of the study the researcher give the conclusion that the Implementation of Module Based on Science, Technology, and Society Approach (STM) has the influence to the improvement of student learning achievement based on cognitive, affective, and psychomotor aspect.
2. Umi Nur Kholisatun.[6] The study is about "The Application of Modular Learning to Improve Learning quality on Social Science Subject of Class VII-F at State Islamic Junior High School (MTsN) Panekan Magetan". The objective of the study is to know about the improvement of student learning achievement on social subject of 7th grade by applied modular learning. From the result of the study the researcher can give the conclusion that the application of modular

[5] Robiatul Adawiyah,"Implementasi Modul Pendekatan Sains, Teknologi dan Masyarakat (STM) untuk Meningkatkan Prestasi Belajar tentang Sifat Bahan Penyusun Benda pada Siswa Kelas V di SD Insan Amanah Malang", *Skripsi*, Fakultas Tarbiyah UIN Malang, 2009

[6] Umi Nur Kholisatun,"Penerapan Pembelajaran Modul untuk Meningkatkan Kualitas Belajar Mata Pelajaran IPS Siswa Kelas VIII-F Madrasah Tsanawiyah Negeri (MTsN) Panekan Magetan", *Skripsi*, Fakultas Tarbiyah UIN Malang, 2009

learning can improve the students learning quality on social subject of 7th grade at state Islamic junior high school.

The two studies above have the similarities and the differences from the researcher's study. The similarity is that they study about the, implementation of module in the learning process. While there are many differences of the two studies with this study, and the first difference is the researcher of two studies above focus on the improvement of students learning quality and achievement by implemented module, on the other hand the researcher does not, the researcher of this study focus on the implementation and the obstacles of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang. Then the second difference when viewed from the two types of study, both of studies are using type of study on Classroom Action Study (CAR), whereas this study use type of Descriptive Qualitative research. Another difference is the first study is focus on the material composer object characteristic of Natural Science Subject, the second study focus on Social Science Subject and this study focus on Mathematic Subject.

Based on the two studies above, the researcher thinks that learning based on module system is can make the improvement of students learning quality. So that the researcher feels that this study is so important to be done in order to know more detail about the implementation of learning based on module system which has significant different with other kind of learning system.

This study focus on the series activity in the school related to the implementation of learning based on module system on mathematic subject of 4th grade at Laboratory Primary School State University of Malang. The researcher will do some observations, interviews and also take the documentation from the school especially to 4th grade bilingual on mathematic subject. After doing all of the activity so the researcher will make the description of the invention as the result of the study.

CHAPTER II

LITERATURE REVIEW

A. Definition of Module

Module can be formulated as a complete unit that stands alone and consists of a series of learning activities, designed to help students to achieve the objectives that formulated specifically and clearly.

Understanding of the module was also developed by the Research and Development of Education and Culture Department (BP3K) as follow:

> Module is the smallest unit of teaching and learning program that outlines in detail:
> 1. Instructional objectives to be achieved
> 2. The topic that become the base of the teaching-learning process
> 3. Main materials to be studied
> 4. Module position and function in the unity of a broader program
> 5. The role of the teacher in teaching and learning
> 6. The tools and resources will be used
> 7. Learning activities to be done systematically by the students
> 8. Work sheet should be done by students
> 9. Evaluation program will be implemented.[7]

Module can also be interpreting as a process of learning about a particular language unity systematically arranged, operational and directed to use by students, along with the guidance of teachers.[8] Learning based on module system has the following characteristics:[9]

[7] B. Suryosubroto, *Sistem Pengajaran dengan Modul (* Yogyakarta: Bina Aksara, 1983), page.17.
[8] Abu Ahmadi dan Joko Tri Prasetyo, *Strategi Belajar Mengajar* (Bandung: Pustaka Setia, 2003), page. 157.
[9] Mulyono,"Strategi Pembelajaran", *Buku Diktat*, Fakultas Tarbiyah UIN Malang, 2011, page. 53.

a. Each module should provide information and clear instruction about what should be done by the students, how to do, and what learning resources should be used.
b. Module is an individualized learning, so it will involve as much as possible the characteristics of learners. In each module must be: 1) allowing learners to have learning progress according to his ability, 2) allowing learners to measure the learning progress that has been obtained and 3) focuses learners on the specific and measurable learning objectives.
c. Learning experiences in module are provided to help learners achieve the learning objectives efficiently and effectively as possible, and enable learners to perform active learning, not just reading and listening but more than that, the module provides the opportunity to play a role (role playing), simulation and discussion.
d. Learning material is presented in a logical and systematic, so that students will know the start and ends of a module, and does not causes the question of what to do or to learn.
e. Every module has a mechanism to measure the achievement of learners, especially to provide feedback for learners in achieving mastery learning.

B. Teaching Goals with Module

The goals of the teaching module are:

1. Becomes the opportunity for students to learn according to their ability. Based on the assumptions that students will not achieve the same results in the same time and not willing to learn something at the same time.
2. Gives opportunities for students to learn according to them characteristic because, they have the different technique to solve specific problems based on their knowledge background and habits. Good Instruction will also provide a variety of reading textbooks, library books, magazines and other essays, studying photographs, see a movie, learn the demonstrations tools, participate in the projects and experiments as well as participate in various extracurricular activities, and so on.
3. Gives the option of topics in the context of a subject, discipline when we consider that the student does not have a similar interests or the same motivation to achieve the same goal.
4. Gives the opportunities for students to know the advantages and weakness and correct them weakness through remedial module, test or other learning variations. Module often gives the evaluations to diagnose student weakness so that might be improved and gives many opportunities for students to achieve maximum results[10].

[10] S. Nasution,*Berbagai Pendekatan dalam Proses Belajar Mengajar* (Jakarta: Bumi Aksara, 2003), page.205-206.

C. Advantages of Learning based on Module

Module is expecting to give many benefits and advantages for students and teachers.

1. Here are the benefits for students in learning by using module:

   a. Feedback

      Module provides a lot of feedback immediately so that students can be repaired and not left alone as it is with traditional teaching.

   b. Complete mastery

      Teaching module is not giving a normal curve as the base distribution figures. Every student has opportunity to transform and achieve the highest mastered of the learning content. With the complete mastery of learning content that so they will more ready for facing new lessons. The weaknesses of teaching non- module or traditional is that the student's mastery of learning content only in a partly and rarely complete.

   c. The Clear Purpose

      The module is structured as well as possible so the objectives are clear, specific and can be achieved by the students. With clear goals the students targeted to achieve the goals immediately.

   d. Motivation

      The teaching is guiding students to achieve success with the regular steps that caused a strong motivation to do the effort directly.

e. Flexibility

Teaching module can be adjusted with the differences of the student about the speed of learning, how to learn, and what is the favorite lesson.

f. Cooperation

Teaching module reduces or eliminates as much as possible a competition among the students because all the students can achieve the highest results. They do not compete to achieve the highest rank because they do not use the normal curve in the determination of the numbers, so that will open the way towards more cooperation, if the cooperation between students and teachers developed because both of them are equally responsible for the success of teaching.

g. Remedial Teaching

Teaching module intentionally provide opportunities for remedial lessons to improve the weakness, errors or omissions that students can found immediately by a given student evaluation continuously. Students do not need to repeat the entire lesson but only in the part of mistake.[11]

2. The advantage with teaching module for teachers are:

a. Satisfaction

Module structured carefully so making it easier for students to learn and master the learning materials according to appropriate

[11] *Ibid.*, page. 206-207.

methods for different students. Then the quality of learning result for all students is guaranteed. Any history of student's success achievement will give a greater satisfaction to the teacher who feels that he has done his profession well.

b. Individual Assistance

Teaching module provide greater opportunities and more time for teachers to provide assistance and individual attention to every student who needs that, without interrupting or involving the whole class.

c. Enrichment

Teachers also get more time to give lectures or additional lessons as enrichment.

d. Reducing Administration Activity

Module absolve the teacher from routine bound him over the years. Teacher freed from lesson preparation because all of them are provided by the module. Teachers are also free from administration routine because it can be performed by non-professional staff and by all students.

e. Reducing Schedule Time

Module is stand-alone unit lesson on a particular topic and can be used in a variety of subjects or courses. Thus the module can be use in various schools, faculties or departments and therefore do not

need to be rearranged by the parties that need it. This means saving time. Schools and colleges can exchange module.

f. Improving the teaching profession

Teaching module provide the questions about the learning process itself. How do students learn? How can teachers improve the learning process? How does the steps in the learning process? The similar questions that stimulate teachers to think and thus pushing them to be more scientific about their profession. He will also be open to the suggestions from the students to improve module or use it in the preparation of the new module.

g. Formative Evaluation

Traditional subjects, among others: in the form of textbooks, usually presenting the material in large portions, such as chapter by chapter. Thus certainly very difficult to know about the students who understand of the following subjects according to students' learning outcomes. Excess module here include teaching materials are limited and can be tested on the students by conducting pre-test and post-test to see the level of outcome values and determine the effectiveness of the material.[12]

D. Component of Learning Module system

In general, the system of learning module will involve several components, including: (1) student activity sheets, (2) worksheet, (3)

[12] *Ibid.*, page. 207-209.

worksheet keys, (4) pieces of matter, (5) and the answer sheet (6) answer keys.[13]

The components are packaged in a module format, as follows:

1. Introduction, which contains general descriptions, such as the material present, knowledge, skills and attitudes that will be achieved after the study, including the ability to start a must-have for studying the module.
2. Learning objective, contain specific learning objectives to be achieved students, after studying the module. In this section also contained terminal objectives and goals, as well as the conditions to achieve the goal.
3. Pre-tests, which are used to define the position and determine the ability of learners initially, to determine where she should start learning, and whether or not it is necessary to study the module.
4. Learning experience, which contains details of material for each specific learning purposes, followed by formative assessments as feedback to students about learning goals are accomplished.
5. Resources of learning, contains about learning resources that can be traced and used by learners.
6. Final test, the instrument used in the final test similar to that used in the initial test, just more focused on the purpose of each module terminal.

The main task of teacher in the learning module system is to organize and manage the learning process, among other:

[13] *Ibid*., page.54

a. Setting up good learning situation.

b. Helping students who have difficulty in understanding the content of the module or duties.

c. Carrying out research on every student.[14]

E. Implementation of Teaching Module

For studying a module, students must have apperception material or entry behavior that required. If knowledge is inadequate, students will face difficulties and therefore students should be given remedial instruction. Entry behavior is investigated through a pre-test. When he had fully mastered the pre-test, this means that students also have mastered the module.

The students who can finish the module can move to the next module immediately.

1. General Form

In the preparation, Module can be followed of various possibilities. Below are given some of the alternatives on the three main aspects of the content or materials, study time, and the order of the module.

a. Teaching Content

1) Students must complete the entire module or they may be only a few part of module according to needs.

2) The objectives are clearly defined and students should have a plan or learning activities that can help to achieve those goals.

3) Every material in the module should be learn all or just in a part.

[14] *Ibid*., page.55

4) All material or only partially be module

b. Time to learn

1) The learning facilities and learning resources is everyday and in the evening or just for certain times.

2) All the materials studied individually or partially by module.

c. Order

The module studied in a certain order, or students learn according to the order they want.[15]

2. The Evaluation in the Learning Based on Module

a. In the evaluation of the learning module we can provide feedback to students and teachers, evaluation can also find out whether the students have the knowledge and necessary skills to study a module.

b. Learning based on module Can assess the learning itself and give instructions about ways to complete it.[16]

3. Administration Module

Learning module should not be viewed as a teaching programmatic that can be set automatically with the purpose of reducing costs. Teaching module are not aimed at reducing the cost of education but intended to improve student academic achievement by the method according to the individual needs.

[15] *Ibid.*, page. 212-214
[16] *Ibid.*, page. 214

The administration elements of module system consist of:

a. Development of Module

1) Choosing learning materials and learning tools
2) Preparing the ingredients in units for every module
3) Formulating the objective of each module
4) Adjusting the learning objectives
5) Planning how to monitor and record the progress and student learning result.
6) Planning for the final evaluation of student learning outcomes

b. Implementation

1) Distribution, delivery of module to students
2) Record student learning outcomes
3) Monitor students' learning progress
4) Give feedback to students
5) Assess final learning results

c. Module Cost

1) Compared with conventional teaching, teaching module will generally cost a lot more. But it's difficult to calculate exactly the real cost.
2) The time required to prepare teaching module. Estimated to take as many as 50 hours to develop a module that has a 5-7 goal with 8-10 types of learning activities, including record the lesson in the

tape recording, visual planning tool, create a package of laboratory experiments and provide resource books.

3) Cost of audio-visual equipment, administrative staff, laboratory equipment and other.
4) Costs multiplication of module, books tutoring, and other components.
5) Costs of classrooms, and others.[17]

4. How to Develop Module

In the preparation of the module development can follow the steps below:

a. Formulating a clear objective, specifically, in the form of student's behavior that can be observed and measured.
b. The objective order is determining the steps those given in the module.
c. Conducting diagnostic test to measure students' backgrounds, knowledge and skills that have been owned as the requirements to through module (entry behavior or entering behavior). There is a relationship between the test items with the goals of the module.
d. Developing reason or rational significance of this module for students. Students must know what is the purpose of studied this module. Students must be convinced of the benefits of the module so that he wants to learn with a vengeance.

[17] *Ibid.,* page. 215-217.

e. Learning activities are planned to help and guiding students to achieve the competencies as defined in program purpose. It can be to listen the recording, viewing movies, conducting experiments in the laboratory, conduct readings to create questions, and so on. It's necessary to provide some alternative, some way undergone by the student in accordance to student's character. These sections are the core of module, the most important aspect in the module, because it involves the process of learning itself.

f. Preparing a post-test to measure students' learning outcomes, to know how far students master the module objectives. Can also arranged some form of parallel tests. Test items should be related with module objectives.

g. Setting up a center of literature sources that are open to students at any time require.[18]

5. The Problems in Teaching Module

Although its seems that the learning module help students learn more with more satisfactory results when compared with conventional teaching, but there are a number of problems arise for both students and teachers.

a. The difficulty for students

Self-study requires discipline, self discipline. Students should be able to set the time, forcing them self to learn and have power to

[18] *Ibid.*, page. 217-218.

face the temptations of friends to play. Students who familiar to receive lessons from teachers, mostly through listening tends to be "passive" and will find it difficult to switch to a new way of demanding activities as the main basis for learning.

In addition students have exceptional regard to the teacher as the main source of learning and as an authority in the field of science. Make choices from a variety of sources are available and appropriate learning methods can cause difficulties for him.

b. The difficulty for teachers

Prepare the good module other than takes a lot of time also requires considerable expertise and skills. Teachers who will start to teach module should be give special time to prepare. When the program is running smoothly expected that complements the next module will not be much longer into trouble.

Conventional teaching is become teaching center. He had great authority to the students. What is learned, how to learn, depending on the teacher's assessment. High position of teachers will be greatly reduced with the teaching module. There is the possibility of teachers feel as lost prestige.

Module studied by students according to each occasion. Not all students will study the material in the same time. Then the teacher will ask the students who will face the things that may be related to

different phases of the overall material, so it is not concentrated in certain parts such as the case with conventional teaching.[19]

[19] *Ibid.*, page. 218-219.

CHAPTER III

METHOD OF STUDY

A. The Study Site

The study was conducted at Laboratory Primary School State University of Malang, where located at Bogor streets number 19 Lowokwaru Malang. The researcher chooses Laboratory Primary School State University of Malang because as far as researcher knows, Laboratory Primary School State University of Malang has unique character among other primary school in Malang. The unique thing of Laboratory Primary School State University of Malang is the implementation learning based on module system.

A. The Approach and Type of Study

This study uses qualitative approach, because this study produces data in the form of descriptive data, the field notes, the act of the respondent and documentation in the field.[20] The strengths of qualitative study derive primarily from its inductive approach, its focus on specific situations or people, and its emphasis on words rather than number.[21]

The type of this study is a descriptive study, because the researcher should conduct an observation, interview and take the documentation to understand the phenomena or problem about whatever that happen in the implementation of the learning base on module system on mathematic subject

[20] Andi Prastowo, *Metode Penelitian Kualitatif dalam Prespektif Rancangan Penelitian*,(Jogjakarta: Ar-Ruzz Media, 2011), page.43.
[21] Joseph A. Maxwell, *Qualitative Research Design* (California: SAGE Publications, 1996), page.19.

of 4th grade at Laboratory Primary School State University of Malang by describing in the form of words.

The purpose of descriptive study is making a description or picture in systematic and factual about the facts, characteristics and relationships between the investigated phenomenon.[22]

So the researcher of this study want to make a description about all of situation that happen in the implementation, superiority and the obstacles of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

B. The Attendance of Researcher

The position of researcher in qualitative study is complex. Researcher is become a planner, data collector, analyzer, interpreter, and reporter of the result of the study.[23]

Based on the explanation above the attendance of researcher in this study is absolutely needed, because the researcher's action as the instrument that primarily can collects data.

C. The Data and Data Sources

The data in qualitative study is all the material including the facts that cannot be measured and calculated mathematically, but only narrative description like: gorgeous, beautiful, attractive, good-bad, and so on.[24] So the data in this study are all the facts that happen in the location of study which

[22] Moh. Nazir, *Metode Penelitian* (Bogor: Ghalia Indonesia, 2005), page.54.
[23] Lexy J Moleong, *Metode Penelitian Kualitatif* (Bandung: Remaja Rosdakarya, 2002), page.121.
[24] Andi Prastowo, *Metode Penelitian Kualitatif dalam Prespektif Rancangan Penelitian* (Jogjakarta: Ar-Ruzz Media, 2011), page.204.

have a relationship with the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

While the data sources of this study are:

1. The Principal of Laboratory Primary School State University of Malang

   From the principal of Laboratory Primary School State University of Malang acquired the accurate information (data) about the overview of Laboratory Primary School State University of Malang, which includes the history and background of the establishment, location and geographical condition, organizational structure, teachers and students condition, the facilities and all related activities with the implementation of learning based module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

2. The Curriculum Section

   Through curriculum section of Laboratory Primary School State University of Malang will obtain the information (data) of applied curriculum in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

3. The Teachers

   Laboratory primary School teachers are the ones who directly interact with the implementation of the learning based on module system. From these components, we will get data about activities and ways of the

teacher in the implementation and faced the problems or obstacles of learning based on module system.

4. The Student

Laboratory primary school students, as sources of the real data and as also the actors of the programs that have been implemented by the school expected to give the valid data about the implementation of the learning based on module system on mathematic subject of 4th grade at Laboratory Primary School State University of Malang.

D. Data Collection Techniques

Data collection is the urgent step in a research, because the main purpose of research is getting data as much as possible. The methods are used to collect data in this research, they are:

1. Observation

Observation is the systematical monitoring and recording of the condition seen in an object of study.[25] Researcher use this method to get data about the implementation of learning base on module system on mathematic subject of 4th grade at Laboratory Primary School State University of Malang number 19 at Bogor Street Lowokwaru Malang.

There are many kinds of observations. The kinds of observations used in this study is participant observation is process of observation that is done by observer by taking part of the study object. Researcher use participant observation to collect data directly and systematically about the

[25] *Ibid.,* page.220

implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang.

2. Interview

Interview is a meeting of two people to exchange information and ideas through questions and answers, so it can be constructed in a particular topic.[26]

In this technique the researcher will conduct interviews with several sources including:

a. Mr. Sulthoni as the principal of Laboratory Primary School State University of Malang
b. Miss. Siti Nafi'ah as curriculum section of Laboratory Primary School State University of Malang
c. Miss Lilyana Abibah and Miss Rahma Dyah Pintasari as the mathematic teachers of 4th Grade Bilingual
d. Students of 4th Grade Bilingual who are involved in the implementation of learning base on module systems on mathematic subject of 4th grade at Laboratory Primary School State University of Malang.

3. Documentation

Documentation is collecting the information obtained from documents, the written heritage, archives, diploma certificate, report card,

[26]Sugiono, *Metode Penelitian Pendidikan* (Bandung: Alfabeta,2010), page.317.

legislation, diaries, personal letter, biographical notes, and others who have a relationship with problems examined.[27]

This documentation is used to support the authentic and originality of data in the form of photo or document about the history of Laboratory Primary School State University of Malang, the situation or condition of learning based on module system in the class, the identity of principal, mathematic teachers and students of 4th grade bilingual and also the mathematic module used by 4th grade bilingual Laboratory Primary School State University of Malang.

E. Data Analysis

Qualitative data analysis consists of three steps happen chronologically, namely: data reduction, data display and verification. The process of data analysis is conducted by the researcher through the following stages:

1. Reduction of Data

Data reduction was defined as the process of selecting, focusing on simplification, abstraction, and transformation of data "rough" that emerged from the written notes in the field.[28] Data reduction performed during the study, after researcher in the field, until the report is compiled.

Data reduction is a form of analysis that sharpens, classify, direct, dispose of unneeded data, and organize data so that final conclusions can be drawn and verified.

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[27] Andi Prastowo, *Metode Penelitian Kualitatif dalam Prespektif Rancangan Penelitian* (Jogjakarta: Ar-Ruzz Media, 2011). page.226.
[28] Ibid., hlm.242

2. Presentation of Data / Data Display

Presentation of data is a second groove in the data analysis activities. Presentation of data here is a set of structured information that gives the possibility of drawing conclusions and taking action. There are several types of existing forms of presenting data in qualitative study, such as: matrix, graphics, networking, draft.[29]

However, in this study the data presentation will be presented with the main narrative text or draft but also use other types of data presentation accordance with the needs of the presentation of the data will be presented.

3. Verification or Conclusion

In the step of verification or conclusion, will be found the answer from question of study based on the finding of study.

F. Checking the validity of findings

Checking the validity of the data used in this study is the technique of triangulation. According Moleong, "Triangulation is a technique that used to check the validity of data for checking purposes or as a data comparison."[30] In other words that means that technique of triangulation is the techniques of data collection that are combining the various techniques of data collection and data sources which have been there.

Triangulation also was defined as the collection information from a diverse range of individuals and settings, using a variety of methods.[31]

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[29] Ibid., hlm.244
[30] Ibid., hlm.269
[31] Joseph A. Maxwell. *Qualitative Research Design* (California: SAGE Publications, 1996), page. 93.

Denzin distinguish triangulation technique to five kinds, namely triangulation of sources, techniques, time, investigators, and theories.[32]

Triangulation used in this study is triangulation of techniques and source. Triangulation technique is done by checking the data to the same source with different techniques, while the triangulation of sources is done by checking the validity of the same data to different sources.

G. Stages of Study

In the conducting of study, researcher performed the following steps:

1. Submit a license to the educational institution of Laboratory Primary School State University of Malang and enclose study proposal.
2. Doing the observation (note what is researcher needed).
3. Noting the findings of researcher in the location of study as needed.
4. Doing interview to the informant.
5. Trying to obtain documentation of formal and informal activities.
6. The data has been collected and analyzed by the researcher.

After performing the steps above researcher continue to conduct presentation of data and verification then written in the form of a final report or thesis that suitable with book guidance of UIN Maulana Malik Ibrahim Malang.

[32]Andi Prastowo, *Metode Penelitian Kualitatif dalam Prespektif Rancangan Penelitian*,(Jogjakarta: Ar-Ruzz Media,2011), page.269.

CHAPTER IV
EXPOSURE DATA AND RESEARCH FINDINGS

A. Research Site

Laboratory Primary School State University of Malang is located at Bogor Street no. 19 Malang. The Laboratory Primary School State University of Malang was founded in 1986 named primary school Dharma Wanita IKIP Malang.[33] Primary school Dharma Wanita IKIP Malang in 1997 authenticates named Laboratory Primary School IKIP Malang and in the year 1999/2000, in a row with the changes of IKIP Malang to become State University of Malang, so Laboratory Primary School IKIP Malang pass into Laboratory Primary School State University of Malang.

In the beginning, the learning model used in this school is same whit other school and have not applied learning based on module system. The beginning of learning based on module system is in the leadership era of Suprihadi Saputro in 2001. In his leadership era, he develop the school management system based on the mastery learning and continuous progress approach.

This is confirmed by Siti Nafi'ah in her interview as the curriculum section of the school at also as one of the teacher who know about this change in that era as a follow:

> "Dimulainya pembelajaran dengan modul ini sejak kepala sekolahnya bapak Suprihadi Saputro, bukan sejak awal berdirinya sekolah ini. Pada sa'at sekolah ini masih dharma wanita pembelajarannya seperti SD biasa.

[33] Documentation of Laboratory Primary School State University of Malang

Ketika Kepala Sekolahnya bapak Suprihadi Saputro itu beliau mengawali dengan pembelajaran modul"[34]
"*The beginning of this learning based on module is since Mr. Suprihadi Saputro become the head master, not from the beginning of the founding of this school. When this school named primary school Dharma Wanita the learning is similar as usual primary schools so when the head master is Mr. Suprihadi Saputro, he begin with the learning based on module system"*

The expectation of learning based on module system according to Siti Nafi'ah is with using module in the learning process the students can learn individually according to them ability, because actually the learning ability and speed of every students is different so with this kind of learning every students facilitated to mastery the learning content.[35]

B. Exposure Data

1. The Implementation of Learning Base on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang.

Laboratory Primary School State University of Malang is one of schools where implemented the Learning based on module system. Learning based on module system has the different character with other Learning system. In this learning, students learn according to the module steps under the guidance of the teacher when they need the guidance.

As for the data that the researcher obtained from the Laboratory Primary School State University of Malang about the learning based on module system is as follows:

[34] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014
[35] Ibid.

a. Learning Activity Based on Module System

Learning activity based on module system has the difference with another kind of learning. In this learning students are as the main actors in the class and teacher as the guide when the student faces some difficulties in the finishing of module. The students do the module according to them own progress and the teacher emphasize to every students to ask to the teacher or to other friends who have mastery the asked material when they face some difficulties to understand the learning content. This condition found by the researcher when conducts the observation in the 4th grade bilingual on the mathematic subject, that is:

> "Ketika pelajaran dimulai, siswa langsung membuka modul masing-masing dan mengerjakannya sesuai dengan pencapaian mereka. Terlihat guru membagi tugas, bu Pipin bertugas untuk mengoreksi hasil kerja siswa sementara bu Lily berkeliling mengontrol siswa dan berpesan kepada siswa "ada yang tidak faham dengan materinya?" Tidak lama kemudian terlihat salah satu siswa bernama Lenka memanggil bu Lily dan kemudian bu Lily mendekatinya dan memberikan bimbingan secara individu kepadanya" [36]
>
> *"When the learning begin, the students directly open them module and do it according to them own progress. The teachers divide the duty, Mrs. Pipin as the corrector of students' assessment result and Mrs. Lily go around the class to control the students and she said "no one have the problem with the learning content?" so one of the students named Lenka consult to Mrs. Lily about her problem"*

[36] Ibid,.

That matter also expressed by Cheta Abrar Adyatma, one of 4th grade bilingual students Laboratory Primary School State University of Malang, when the researcher asks about that:

> "Ketika pertama kali masuk kelas 4 guru terlebih dahulu menjelaskan materi, setelah itu kita disuruh membaca sendiri, ketika ada yang tidak difahami langsung mengkonsultasikannya kepada guru"[37]
> *"At the first time of 4th grade the teacher was explained the lesson content previously, so after that we always order to read alone the module, if we don't understand the content so we have to ask to the teacher directly"*

The result of the interview above consolidated with the result of other interview which conducted by the researcher to one of mathematics teacher at 4th grade bilingual miss Lilyana Abibah, she said:

> "Sebenarnya kalau menjelaskan secara kontemporer seperti pada pembelajaran yang lainnya itu tidak ada dalam pembelajaran modul, tapi siswa disuruh untuk memahami dengan melihat contoh yang terdapat pada modul. Ketika ada yang tidak difahami mereka akan mengkonsultasikannya kepada guru secara individu/privat…."[38]
> "*Actually no contemporary explanation in the learning based on module, but the students order to understand the learning content by understanding the preexistent example in the module. If they face the difficulties so they will consult it to the teacher individually….*"

One of the consultation activity for the problem student as indicated in the picture below:

[37] Interview with Cheta Abrar Adyatma, Student of 4th Grade Bilingual, 19 November 2013
[38] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 30 November 2013

Picture 4.1

Direct Consultation

Based on the result of the observation and interview above, we can conclude that learning based on module system that implemented on mathematic lesson of 4th grade bilingual at Laboratory Primary School State University of Malang is the learning that fully conducted by the students under the guidance of the module and the teacher explain the material when the students need or face some difficulties in the doing of modules order.

b. The Module Applied In The Learning Process

The module that used in the learning at Laboratory Primary School State University of Malang is made by lesson teacher there. That matter was express by miss. Nafi'ah as curriculum section of Laboratory Primary School State University of Malang:

> "Modul dibuat sendiri oleh guru yang mengajar pada mata pelajaran tersebut karna tentunya guru tersebut yang lebih tau tentang apa yang harus diberikan dan dituangkan dalam modul. Tentunya dengan mengacu pada kurikulum yang ada"[39]

[39] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014

> "*The module is made by the lesson teacher, because they have understood more about what have to give in the module. Certainly refer to the existed curriculum*"

After accepting that expression, the researcher tries to conduct the observation to get the confirmation about the validity of the expression. The researcher observes the module and fined that the module was made by miss. Yuli Fitia Susanti, she is as the mathematics teacher of 4th grade ICP.[40] That's matter bearing that the module is really made by mathematics teacher or lesson teacher.

The module is made by the teacher according to the existed curriculum. The number of module based on Competence Standard of curriculum. In a module there are many chapters, the number of chapter based on the Basic Standard of curriculum. Module printed accordance to teacher desirability and consideration, there are many teacher prints in one periods or one year and there are in one semester.

The researcher find that matter when observe in the 4tg grade on the mathematic subject. The mathematic module is printed for 1 semester and there are 4 modules in the first semester.[41] miss Siti Nafi'ah confirmed about that matter at her interview as follows:

> "Modul dicetak sesuai dengan guru yang membuat ada yang langsung satu periode ada yang persemester, tapi yang paling sering dilakukan oeh guru-guru disini dicetak persemester. Jumlah modulnya disesuaikan dengan jumlah SK sedangkan

[40] Attachment of Module
[41] Ibid..

> jumlah penggalannya didasarkan lah KD. Isi dari penggalan berupa kegiatan pembelajaran yang harus dilakukan siswa"[42]
> "*The module is printing accordance the author, there are many module prints for one period and there are also for one semester, but right usually prints for one semester. The number of module appropriate with the number of Competence Standards and the number of chapter appropriate with the numbers of Basic Competences of the curriculum. The content of chapter is about students learning activities"*

The module that used in Laboratory Primary School State University of Malang uses English language, so beside they learn individually the students also practice English every day. This matter also found by the researcher in the class observation, that is:

> "Semua siswa terlihat antusias untuk mengerjakan modulnya dan ketika peneliti mengamati ternyata semua pengantar yang ada pada modul berbaha inggris tidak satupun berbahasa Indonesia" [43]
> "All of students seen enthusiastic to do their module and when the researcher sees, all of the module content used English and no one used bahasa Indonesia"

Like one of 4th grade bilingual student said at his interview when the researcher asks about his module as a follow:

> "Modulnya memakai bahasa inggris kak. Dari dulu sudah memakai bahasa inggris, jadi sudah agak terbiasa. Kalau memang tidak faham langsung bertanya kepada bu Pipin dan bu Lily"[44]
> "*The module uses English language. Previously we have use English, so we have be familiar about that. If we don't understand we have to ask to miss Pipin and Lily*"

As the essence, modular learning is based on the students learning ability. The student who has high learning ability will finish

[42] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014
[43] Result of Observation, 29 November 2013
[44] Interview with Luqman Rizky Ardana Putra, Student of 4th Grade Bilingual Laboratory Primary School State University of Malang, 29 November 2013

the module before other and can move to the next module without waiting other friend who cannot finish the module in the same time. For the student who has medium ability of learning, they can finish the module according to their ability until they are really mastery the learning content. They haven't need to forcing them self to move to the next module because that will not disturbed other students, as has been observed by researcher:

> "Jum'at 18 April 2014 saya mengikuti kegiatan pembelajaran di kelas 4 Bilingual pada pelajaran matematika. Saya berkeliling kelas untuk mengobsirvasi siswa, ketika saya melihat salah satu siswa yang bernama Adrian Desta Prayoga, dia sedang mengerjakan modul 7 dengan materi pecan, ketika saya melihat Rangga Cahyo Vebriansyah dia sedang mengerjakan evaluasi untuk modul 7, dia berkata "saya mau pindah kemodul 8 kak jadi saya harus ngerjakan evaluasi dulu" dan yang terakhir ketika saya mengamati Cheta Abrar Adyatma dia sedang mengerjakan soal untuk UAS karena dia telah menyelesaikan semua modulnya" [45]
> *"Friday 18 April 2014 I join the learning process of 4th Grade Bilingual on mathematic subject. I try to go around the class to observe the students, when I looked to one of students Adrian Desta Prayoga, he does the seventh module and the material is about fraction but, when I looked to Rangga Cahyo Vebriansyah he does module evaluation for the seventh module, he said "I want to move to module eighth so I have to do evaluation" and the last when I looked to he does Final task because he has finish all mathematic module"*

In the interview with Mr. Sulthoni as the head master of Laboratory Primary School State University of Malang, he said that:

> "Dalam satu semester modul terdiri dari beberapa tingkatan sehingga para siswa akan berlomba-lomba untuk menyelesaikan modul mereka sehingga bisa berpindah kemodul selanjutnya"[46]

[45] Result of Observation, 18 April 2014
[46] Interview with Sulthoni, Head Master of Laboratory Primary School State University of Malang, 3 Oktober 2013

"*In one semester module consist of many levels so the students will compete to finish their module so they can move to the next module*"

Based on the explanation above, the student who has fallen in the finishing module can move to the next module without waiting other friends. Before they can move to the next module the students have to do the evaluation sheet. The students ask to do the evaluation individually and order to sit in the special seat. This is similar to observation of the researcher, is:

> "Bu Pipin memberi salah satu siswa lembar evaluasi dan kemudian berkata "duduk disebelah mbak Ika sana sayang kerjakan evaluasinya!", kemudian saya mengamati anak tersebut dengan melihat soal yang dibawanya, ternyata soal tersebut berhasa inggris dan tertulis diatasnya *Grade 4 Evaluation 2*. Salah satu siswa yang duduk didepan saya berkata "kak Ika gak boleh dibantu lo soalnya dia lagi ngerjakan evaluasi biar bisa lanjut kemodul 3".[47]
> "*Mrs. Pipin gives evaluation sheet to one of the students and she said "please seat beside mbak Ika and do your evaluation", so I observe the evaluation sheet and the question is using English language and named Grade 4 Evaluation 2. Another student who seat infront of me said "don't help him sister, because he does the evaluation in order can move to module 3"*

Picture 4.2

Evaluation Module

[47] Result of Observation, 15 November 2013

The students can pass the evaluation when the result of the evaluation met the criteria of minimum completeness or KKM (Kriteria Ketuntasan Minimum), when the students losing out the KKM; they have to do the correction until they can achieve KKM. The students who have achieved the KKM can continuo to the next module.

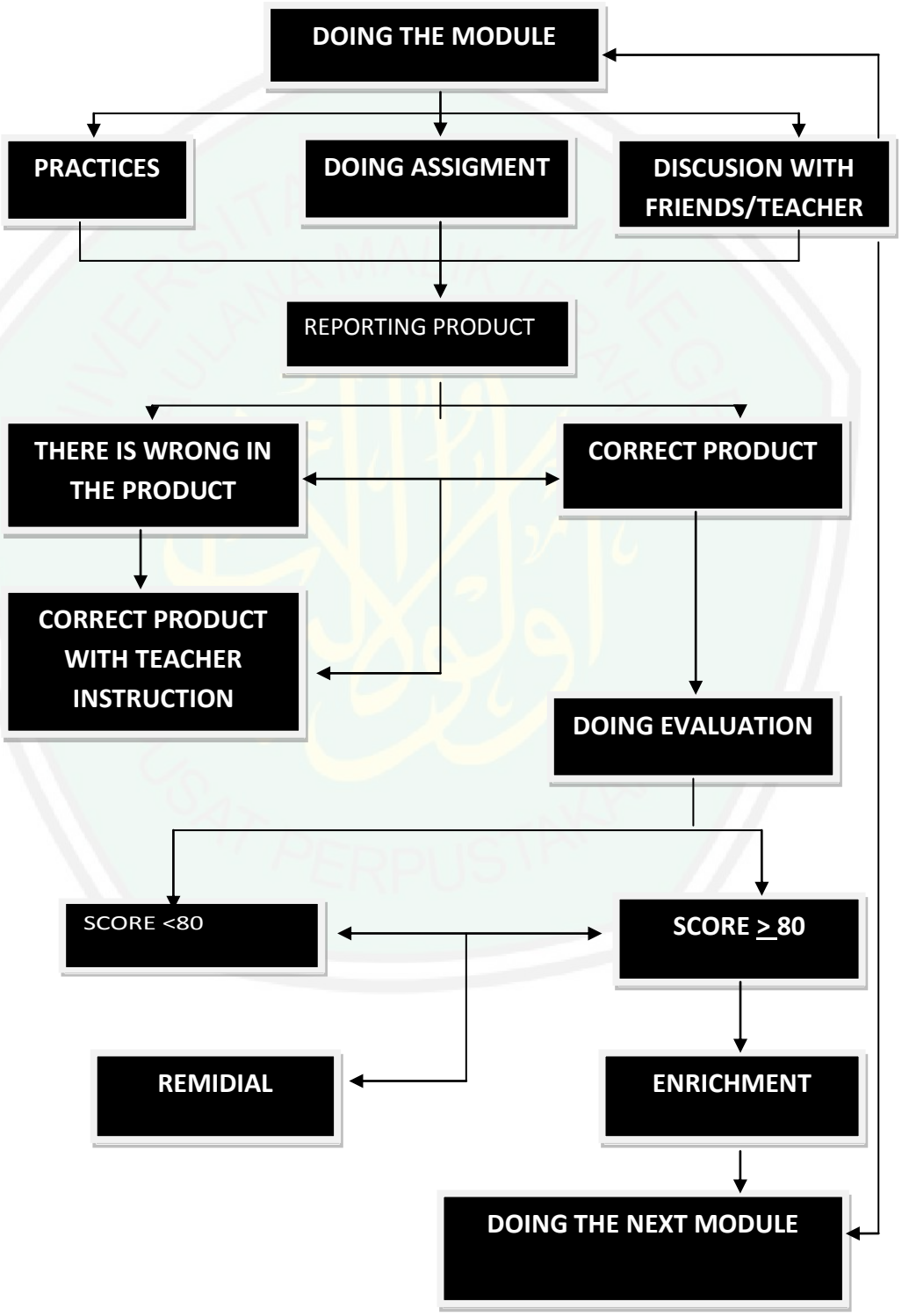
> "Siswa baru bisa berpindah kemodul selanjutnya jika memang nilainya mencapai KKM, kalau memang belum maka harus melakukan pembetulan sampai nilainya mencapai KKM. Baru setelah itu mereka diperbolehkan untuk berpindah kemodul selanjutnya"[48]
> "*The students can move to the next module if the result of the evaluation fills the KKM, if they have not fills the KKM so they must do the correction until they can achieve the KKM and they can move to the next module*"

That's matter suitable with the step of learning based on module system which explained in the curriculum book of Laboratory Primary School State University of Malang as in the diagram bellow:

[48] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 29 November 2013

Picture 4.3

Grove Of Learning Based On Module System



Clearly the steps of learning module as a follows::

1. The students doing the module by practice, doing assignment or discussion with friends or teacher.
2. After doing the module the students reporting the product to the teacher.
3. For the students who have correct product they do the evaluation but, If there is some wrong in the product, the students correct the mistake under the instruction of the teacher until they get the god result so they can do the evaluation.
4. The students who get the score less than 80 they have to do remedial and for the student who get score more than 80 they do the enrichment.
5. If the students have success to do all of the steps they can move to the next module.[49]

The students who have done all of the existed module allow to join acceleration program. Acceleration program applied in the Laboratory Primary School State University of Malang is natural acceleration. Natural acceleration program in Laboratory Primary School State University of Malang is the acceleration that has not the special class for the acceleration students. They stay in the same class with other students who did not join in the acceleration program, but only the module for the acceleration students is the

[49] Documentation : KTSP SD LABORATORIUM UM. Page.159-160

module for the higher level. The students can join this program if they have finished all the module of all subjects, not only in the one subject.

> "Anak yang ingin mengikuti aksel harus menyelesaikan semua modul pada semua mata pelajaran jadi tidak hanya pada matematika saja, semua mata pelajaran harus diselesaikan setelah itu mereka bisa dinominasikan untuk ikut aksel"[50]
> "*The students who want to join the acceleration program, they have to finish all the module of all subjects. Not only in mathematic subject but they have to finish for all subject, so they can nominated to join acceleration program"*

That matter was confirmed with curriculum section when the researcher asks about that. That is:

> "Untuk bisa mengikuti aksel siswa harus menyelesaikan semua modul pada semua mata pelajaran. Setelah itu mereka baru bisa dinominasikan untuk mengikuti aksel, karena setelah itupun masih ada beberapa persyaratan yang harus dipenuhi diantaranya:menyelesaikan modul untuk satu semester dalam 4 bulan pertama, menyelesaikan semua modul untuk semua mata pelajaran izin dari orang tua, dan juga persetuan dari semua guru mata pelajaran untuk mengikuti aksel"[51]
> "*To join acceleration the students have to finish all the module of all subjects, after that they can nominate to join acceleration. Beside that to join in the acceleration program there are many qualifications for them, they are: they have to finish all module of semester on the 4 month, they have to finish all the module of all subject, the parent permission, the agreement from all the teachers to join acceleration*"

[50] Ibid.
[51] Interview with Siti Nafi'ah, CurriculState University of Malang Section of Laboratory Primary School State University of Malang, 22 March 2014

Picture 4.4

Acceleration student

c. Learning Evaluation Based On Module System

There are many evaluation in the learning based on module system at Laboratory Primary School State University of Malang, they are:

1) Daily Evaluation

Daily evaluation is implemented when the student finish the exercise in the daily learning. The teacher correct the result of student exercise so the student who have lot of mistakes asked to do the evaluation by doing correction until they have a god result accordance to the given standard. The researcher found in the observation, there was one of student did the correction to the exercise 11.1 about solve problems in daily life using LCM and HCF. When the researcher asked about it he said:

> "Ini lagi pembetulan kak, tadi sudah dikoreksi sama bu Pipin dan masih ada yang salah jadi sekarang disuruh pembetulan"[52]

[52] Interview with Luqman Rizqi Ardana Putra, Student of 4th Grade Bilingual, 15 November 2013

"I am correcting my work now; just now I have correct it to miss. Pipin, but there are many mistake I have so I must correct it now"

Picture 4.5

Daily Evaluation

2) Module Evaluation

Module evaluation is implemented when the students have finished the module and will move to the next module. The evaluation conduct individually and no schedule time for it because this evaluation conduct according to the students learning speed, when the student finishes the module so the teacher will give module evaluation for them. In the observation the researcher found that situation, that is:

> "Bu Pipin memberi salah satu siswa lembar evaluasi dan kemudian berkata "duduk disebelah mbak Ika sana sayang kerjakan evaluasinya!", kemudian saya mengamati anak tersebut dengan melihat soal yang dibawanya, ternyata soal tersebut berhasa inggris dan tertulis diatasnya *Grade 4 Evaluation 2.* Salah satu siswa yang duduk didepan saya berkata "kak Ika gak boleh dibantu lo soalnya dia lagi ngerjakan evaluasi biar bisa lanjut kemodul 3"[53]

[53] Result of Observation, 15 November 2013

"*Mrs. Pipin gives evaluation sheet to one of the students and she said "please seat beside mbak Ika and do your evaluation", so I observe the evaluation sheet and the question is using English language and named Grade 4 Evaluation 2. Another student who seat infront of me said "don't help him sister, because he does the evaluation in order can move to module 3"*

The researcher asks about that to the mathematics teacher who teach and that time. She said:

"Siswa yang saya minta untuk duduk disebelah dipojok tadi sedang mengerjakan evalusi karena dia udah menyelesaikan modul ke-3 dan mau pindah kemodul ke-4"[54]
"*The student who I order to sit beside you is doing the evaluation because he has finished the third module and wants to move to the fourth module*"

3) Middle Examination

The implementation of middle examination at Laboratory Primary School State University of Malang is same with other middle examination in the other school. The application time is similar with other school and the schedule is determined by DIKNAS (Departemen Pendidikan dan Kebudayaan) Malang, in accordance with what had been stated by miss. Lilyana Abibah as a follow:

"Kalau untuk UTS pelaksana'annya sama seperti sekolah pada umumnya dan dilaksanakan serentak juga sesuai dengan jadwal yang ditentukan oleh DIKNAS"[55]
"*For the implementation of middle examination is same with other school and conduct together accordance to the schedule of DIKNAS"*

[54] Interview with Rahma Dyah Pintasari, Mathematics Teacher of 4th Grade Bilingual, 15 November 2013
[55] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 29 November 2013

4) Final Examination

The final examination, in the learning based on module system at Laboratory Primary School State University of Malang hold an exam twice. One test that the exam is hold by DIKNAS that conduct together with other school, and the second is exam hold by the school for the students who have finished the all of modules in a semester before the finish of the time of semester.

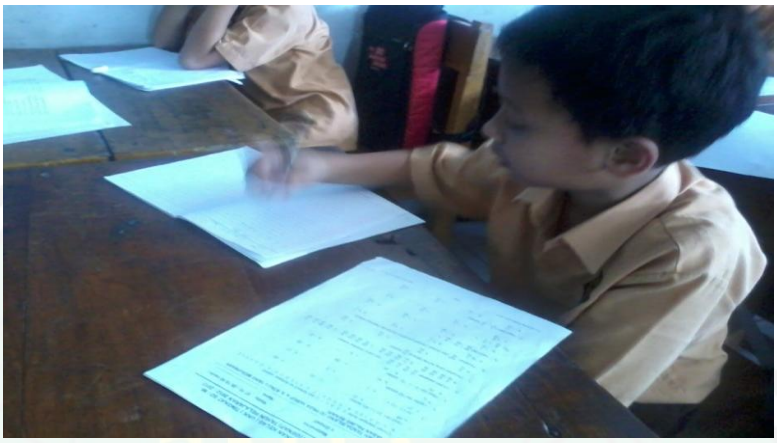
For the students who can join in acceleration program, they have not to follow the examination hold by DIKNAS but for the students who cannot join in acceleration program they have to follow the examination hold by DIKNAS which used to correct the first examination result. This is seen when the researcher conduct the observation at 4th grade bilingual at Laboratory Primary School State University of Malang as a follow:

> "Salah satu siswa yang bernama Cheta Abrar Adiyatma sedang mengerjakan UAS sedangkan siswa yang lainnya masih mengerjakan modul masing-masing seperti biasa" [56]
> *"There is one of 4th grade bilingual student named Cheta Abrar Adiyatma who did the final examination but other students learn as usual"*

[56] Result of Observation, 19 April 2014

Picture 4.6

Individual Final Examination



This is in line whit what has been communicated by Siti Nafi'ah as Curriculum Section of Laboratory Primary School State University of Malang:

> "UAS juga disesuaikan dengan kecepatan belajar siswa. Kalau memang dia sudah selesai maka guru akan mengadakan UAS kepada dia, jadi tidak harus menunggu yang lainnya. Akan tetapi ketika ada UAS dari DIKNAS mereka tetap UAS lagi yang nantinya nilainya dapat digunakan sebagai perbaikan nilai kecuali untuk anak-anak yang ikut aksel mereka dibebaskan" [57]
> "*The application of final examination is appropriate with the student learning speed. If they have finished the entire module, the teacher will give the final examination to them without waiting other students. When the time for final exam hold by DIKNAS they have to follow the exam again as the correction for the first result except for the acceleration students they have not to follow the exam*"

d. The Superiorities of Learning Based on Module system

Learning based on module system at Laboratory Primary School State University of Malang has the superiority from another

[57] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 Maret 2014

kind of learning. This superiority is become the reason for the school member to maintain learning based on module system as the kind of learning model used at Laboratory Primary School State University of Malang. Based on the result of the study has been conducted by the researcher, the researcher get many explanation from the interview to many informants and also from the observation, there are many superiorities they feel during the implementation of learning based on module system:

1) For the Students

With the learning based on module system the students comfortable to learn, because they can learn according to them characteristic. The students who have god learning ability will finish the module fast without waiting other students who have different learning ability. This is supported by the utterance of a mathematics teacher of 4th grade bilingual:

> "Enaknya ya itu mbak menurut saya anak-anak yang kecepatan belajarnya tinggi itu bisa menyelesaikan materi mereka lebih cepat karna systemnyakan individu jadi mereka juga tidak bosan karena harus menunggu teman yang lainnya dengan pembelajaran yang sudah mereka kuasai" [58]
> "*According to me the livable of this study is the students who have the god learning ability can finish them learning content fast, because the system is individual learning so they don't feel boring in the learning because waiting other students with them mastery content*"

[58] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 30 November 2013

This is also expressed by the curriculum section of Laboratory Primary School State University of Malang:

> "Anak itu memiliki perkembangan dan tingkat kecepatan belajar yang berbeda, sehingga dengan menggunakan module pembelajaran dikelas bersifat indivial sesuai dengan kecepatan masing-masing. Sehingga kalau ada yang telatpun tidak akan menjadi masalah karena mereka tidak akan menghambat yang lainnya"[59]
> "*The students have the different development and learning character, so by using module they learn individually according to them speed. So if there is the students late in the learning that is not become the problem because they will not disturb other students*"

That Statement proved with the result of the observation as a follows:

> "Beberapa siswa mengalami kesulitan dalam menentukan sudut seperempat putaran, setengah putaran, tiga perempat putaran dan satu putaran penuh pada modul 4. Guru mengelompokkan siswa yang mengalami kesulitan untuk duduk di deretan tengah dan bu Rahma Dyah Pintasari memberikan penjelasan kepada mereka, sementara siswa lain yang tidak memiliki masalah pada bab tersebut mengerjakan modul seperti biasa dan terlihat tetap focus dan tidak terganggu dengan penjelasan guru" [60]
> *"There are many students have the difficulty in the determining the angle of the quarter turn, half turn, three quarter turn, and full turn on the fourth module. The teacher grouped the students and orders them to site in the middle suite of seat and one of the teacher Rahma Dyah Pintasari give the explanation to the problem students, and other students who have go through that content are learn their own content and seen focus and undisturbed with the problem students"*

[59]Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014
[60] Result of Observation, 30 November 2013

Picture 4.7

The student's different activities

2) For the Teacher

This kind of learning has the superiority for the teacher. With implementation of learning based on module system the teacher easier to understand the students' character. Based on that superiority the teacher can easier to take the action for facing the students. One of the examples is when the teacher feel there is the student have the difficulties in the learning or there is the student late to finish the module the teacher directly give the action by giving more intensive guidance to the student. As expressed by Miss Lilyana Abibah as follow:

> "Dengan pembelajaran modul ini kita jadi tau kemampuan masing-masing siswa mbak, jadi kita bisa tau mana yang membutuhkan pendampingan lebih dan mana anak yang kecepatannya tinggi"[61]
> "*With this learning based on module system we can know about every student's abilities, so we can know where the students who need the intensive guidance and the students who have high ability in the learning*"

[61] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 30 November 2013

This following picture showing one of the action done by the teacher to one of the students who need more intensive guidance so she put near of the teacher seat.

Picture 4.8

Intensive guidance

2. The Obstacles That Happen In The Implementation Of Learning Based On Module System On Mathematic Subject Of 4th Grade Bilingual At Laboratory Primary School State University Of Malang

In the implementation of learning based on module system certain to be the obstacles had been around. Based on the interview to Mrs. Lilyana Abibah as mathematics teacher of 4th grade bilingual who involved in the learning process in the class so she can feels the obstacles faced during the learning process, she said:

> "Kalau kendalanya lebih pada bahasa kalau menurut saya, banyak anak yang terlambat karena tidak dapat memahami perintah yang ada di modul jadi terkadang kita harus menjelaskan berulang kali"[62]

[62] Interview with Lilyana Abibah, Mathematics Teacher of 4th Grade Bilingual, 30 November 2013

"*The obstacles in this learning is about the language, there are many students late because they cannot understand the order of the module so sometimes we have to explain repeatedly"*

That statement confirmed by miss. Siti Nafi'ah in the interview as a follow:

"Memang kendalnya juga pada bahasa karena memang sebenarnya dulu seebelum ada kelas bilingual adanya kelas reguler dan ICP, mungkin yang lagi diteliti itu gurunya baru dua tahunngajar memakai bahasa inggris jadi agak kesulitan. Sebenarnya bukan karena tidak bisa akan tetapi guru-guru ada yang belum mau membiasakan. Tetapi sekarang ini sudah mulai diacak semua biar bertukar pengalaman dengan yang sudah mengajar dikelas ICP…."[63]

"*The language is become one of the obstacles faced in the learning, because actually in the previous no bilingual class here only regular and ICP class. The teachers of your objected class just 2 year teach with English language so they feel difficulty. Actually not because of them ability in English but they don't want to habituate it. But now we try to random the teacher between bilingual and ICP teacher in order they can sharing each other….*"

And a similar thing happened when lessons take place, as researcher has observed in the 4th grade bilingual, that is:

"ketika saya melakukan observasi saya bertanya kebeberapa siswa tentang bahasa, mereka menyatakan bahwa bahasa inggrir tidak menjadi masalah, mereka tidak kesulitan karena memang sudah terbiasa, akan tetapi ada juga beberapa yang mengalami kesulitan karena mereka tidak bisa memahami perintah yang ada pada modul. Salah satu siswa bernama Bhatara maju kemeja guru untuk konsultasi, ketika kembali ketempat duduk peneliti menanyakan hal tersebut dan dia menjawab "tanya artinya tadi sama bu Pipin soalnya gak faham kak", bahkan selama melakukan observasi beberapa siswa menanyakan maksud dari perintah yang ada pada module kepada peneliti" [64]

"There are many students when the researcher asks about the language they say that the language is not become the problem because they have been familiar to use English in the learning process, but there are many students also feel difficult because they cannot understand about the order of the module. one of the student

[63] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014
[64] Result of observation, 22 April 2014

named Bathara go to the teacher seat and when he come back to his seat he said "I ask the meaning of this statement because I can't understand.Many times when the researcher observe the students in the class, there are many students ask to the researcher to explain them about the order of the module"

Beside the language the display of the module also become the problem of the learning. The display of the module which seen monotone, colorless and limited of picture makes the students bored to do their module. When the researcher conduct the observation the researcher found as a follows:

"Salah satu siswa yang bernama Rangga Cahyo Vebriansyah sedang asyik menggambar dan tidak focus untuk mengerjakan modulnya, ketika peneliti menanyakan hal tersebut di menjawab "bosen kak capek"[65]
"*One of the student named Rangga Cahyo Vebriansyah, he seen draw the animals by locking to another book and not does his module. When the researcher asks about that he said "I feel bored and tired to do this module"*

This problem is explained by the curriculum section as follows:

"….Selain itu kendala yang kita rasakan juga dari modulnya. Kami untuk sa'at ini belum mampu untuk membuwat modul yang menarik yang berwarna-warni sehingga kadang kala anak-anak jenuh karena modulnya hanya buram saja, padahal anak-anak itu lebih suka yang berwarna-warni. Untuk itu kami dari pihak sekolah juga sedang berusaha untuk melatih guru-guru. Karena memang kendala tersebut bukan hanyadari segi biaya saja mbak tapi juga kemapuan guru sebagai pembuwat modul tersebut"[66]
"…. Beside that the obstacles I feel is come from the module. We have not be able to make the interesting module which has the multicolored so some time the students surfeited because the module is blur, but we know that the child is like multicolored thing. So that we try to train the teacher because this problem is not only come from the cost but also because of the teacher creativity as the maker of the module"

[65] Ibid..
[66] Interview with Siti Nafi'ah, Curriculum Section of Laboratory Primary School State University of Malang, 22 March 2014

C. The Finding of Study

1. The Implementation of Learning Base on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang.

Based on the result of the study that has been described above, then it can be drawn the conclusion about the implementation of learning based on module system of 4th grade bilingual at Laboratory Primary School State University of Malang, as a follows:

a. Learning Activity Based on Module System

Based on the result of the study conducted by the researcher above, we can conclude that learning based on module system that implemented on mathematic lesson of 4th grade bilingual at Laboratory Primary School State University of Malang is the learning that fully conducted by the students under the guidance of the module and the teacher explain the material when the students need or face some difficulties in the doing of modules order.

b. The Module Applied In The Learning Process

The module used in the learning at Laboratory Primary School State University of Malang has own characteristic, there are:

1) The module was make by subject/lesson teacher
2) The module was use English language
3) The number of module appropriate with the number of SK of Curriculum

4) The number of chapter appropriate with the number of KD of Curriculum
5) The module consists of many stages and the student has to do module evaluation before they can move to the next module.
6) The students who want to join the acceleration program have to finish the entire module of all subjects.

c. Learning Evaluation Based On Module System

There are many evaluation in the learning based on module system at Laboratory Primary School State University of Malang, there are:

1) Daily Evaluation
2) Module Evaluation
3) Middle Examination
4) Final Examination

d. The Superiority of Learning Based on Module system

The superiorities of learning based on module system are:

1) For the students they can learn according to them ability and characteristic because learning based on module system is kind of individual learning.
2) For the teachers the implementation of learning based on module system make them easier to understand the learning character of every students so that make easy for them to give the action to every different students.

2. The Obstacles That Happen In The Implementation Of Learning Based On Module System On Mathematic Subject Of 4th Grade Bilingual At Laboratory Primary School State University Of Malang

Based on the data that researcher got through the study, can be drawn a conclusion that there are several obstacles in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang as follows:

a. Language of the module

b. The display of the module

CHAPTER V

DISCUSSION

In the previous chapter, researcher has exposed the findings of the study. Then in this chapter, findings that resulted from the study related with the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang will be analyzed to construct the concept based on empirical information.

In accordance with the data analysis techniques selected by the researcher, the researcher uses a descriptive qualitative analysis by analyzing data that has been collected from interviews, observation, and documentation during the researcher was conducting research in related institution, namely Laboratory Primary School State University of Malang.

The data obtained by researcher from the study result will be analyzed in accordance with this study questions above. As for the parts that will be discussed in this chapter is adapted to the study questions, which includes: 1) How did the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang?, 2) what are the obstacles that happen in the implementation of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang?.

For more details, the researcher will describe in detail the analysis of the study result are as follows:

A. The Implementation of Learning Based on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang.

1. Learning Activities Based on Module System

Based on the study findings in chapter four, then it can be concluded that the learning activities based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang is learning that fully conducted by the students under the instruction of the module and the guidance of the teacher who only explain the learning content when the students need or face some difficulties in the doing of module order.

Related to one of learning module concept that is learning individualization, which the learners learn according to them learning ability and speed, not too much dependent to the tutor or the teacher but the learner determine the learning strategy.[67]

From the above theory, then the learning based on module system on mathematic subject on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang, is the learning which the students learn according to them learning ability and speed, not too much dependent to the teacher because they are as the determiner of the strategy to mastery the learning content.

[67] Oemar Hamalik, *Sistem Pembelajaran Jaraj Jauh dan Pembinaan Ketenagaan*, (Bandung: Trigenda Karya, 1994), page.145

Based on the study finding we know that no previous explanation from the teacher in the learning based on the module system on mathematic subject on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang, but the teacher explain when the student face some difficulties in the solving of module problem. The student order to consult to the teacher or other friends who has understand or have pass for the learning content that they want to asked. This matter was appropriate to the role of the teacher in the modular learning that the teachers emphasize to the students that they have to ask to the teacher or to other friend who know better that them about unclear module instruction.[68]

2. The Module Applied in The Learning Process

The module used in the learning at Laboratory Primary School State University of Malang has own characteristic, there are:

a. The module was make by subject/lesson teacher

The author of the module at Laboratory Primary School State University of Malang is the lesson teacher. According to Siti Nafi'ah in her interview, she said that the module is made by lesson teacher there because according to her, the teacher is more understand about the situation of the learning process so they are reputed as the one who can create a good module according to the students and also refer to the curriculum.

[68] B. Suryosubroto, *Sistem Pengajaran dengan Modul*, (Yogyakarta: Bina Aksara, 1983), page.30

One of the characters that must be owned by the teacher is able to involve the students to the lesson to achieve the expected result.[69] To achieve that purpose, the teacher can achieve it by making the module by own self because they are the one who know what must be given in the module.

b. The module was use English language

The mathematic module used in the 4th grade bilingual at Laboratory Primary School State University of Malang is using English language. As the standard international school, Laboratory Primary School State University of Malang use English as the medium language of the learning process. This used to train the students in order to become the graduate who can competitive with the global in the future by mastery English language as the international language.

c. The number of module appropriate with the number of SK of Curriculum and The number of chapter appropriate with the number of KD of Curriculum

In the period there are many stage of the module, the number of the module is appropriate with the number of SK. In a module there are many chapter, the number of the chapter is appropriate to the number of KD. This matter indicate that the making of learning sources in the laboratory primary school State University of Malang is refer to the existent curriculum.

[69] S. Nasution,*Berbagai Pendekatan dalam Proses Belajar Mengajar* (Jakarta: Bumi Aksara, 2003), page.123

d. The module consists of many stages and the student has to do module evaluation before they can move to the next module.

When the students' success to finish the work sheet of the module the teachers will give named module evaluation before the students can move to the next module. According to the theory of the evaluation of modular learning the students, who have success to finish the work sheet of the module with the standard of the teacher, the teacher will give the evaluation formative for them.[70] This evaluation done to knows the successful of the learning process, and become the regulation for students before they can move to the next module.

e. The students who want to join the acceleration program have to finish the entire module of all subjects.

At laboratory primary school State University of Malang there is acceleration program. The acceleration is natural acceleration by refer to the students speed in the finishing of the entire module in a period. The students who want to join in the acceleration program have to finish all the entire module of all subjects. It is refer to the concept of mastery learning that is the learning emphasize that the students have to be optimal in the mastery of learning content in the out module.[71]

Based on that we can conclude that the concept of natural acceleration program at laboratory primary school State University of

[70] B. Suryosubroto, *Sistem Pengajaran dengan Modul*, (Yogyakarta: Bina Aksara, 1983), page.44
[71] Ibid., page. 18

Malang is appropriate with the theory of module concept, that the students have to mastery the learning content before they will move to study about the next learning content.

Based on the result of the study has been analyzed above, there are many characteristic of mathematic module at Laboratory Primary School State University of Malang, and there can be seen in the table below:

Table 5.1

The Characteristic of Module

	The characteristic of mathematic module at Laboratory Primary School State University of Malang
1.	The medium language is English language
2.	Made by mathematics teacher
3.	The number of the module in a period is based on the number of the SK
4.	The module consist of several chapter and the chapter is appropriate with KD of the curriculum
5.	The component of the module consist of: cover (title: the title taken from SK), mission learning (basic competencies, indicators of competence), the instruction of students learning, student learning activities, introduction, student learning-sheet, student work-sheet.

3. Learning Evaluation Based On Module System

Based on the findings of the research have been presented in the previous chapter, There are many evaluation in the learning based on module system at Laboratory Primary School State University of Malang, there are:

a. Daily Evaluation is implemented when the student finish the exercise in the daily learning. This evaluation done to make the students to

have complete mastery of learning content because in this evaluation the students train to correct them mistake until they are really mastery them learning content.

b. Module evaluation is implemented when the students have finished the module and will move to the next module.

c. Middle Examination, this middle examination conducted in the middle of the period of the semester. This evaluation done to know the students attainment in the half of semester

d. Final Examination, this examination conducted in the last period of semester, this evaluation done to determine the students learning result. In the 4th grade bilingual at laboratory primary school State University of Malang, the Final Examination is done twice. The first is done according to the students learning speed and the second is the final examination hold by DIKNAS.

The evaluation of the learning based on module system at laboratory primary school State University of Malang more lot of done individually because appropriate with the students learning speed. It is refer to the characteristic of learning module according to Oemar Hamalik that the evaluation strategy of learning module stand on the self evaluation so the students directly will get the feed back of their learning result.[72]

[72] Oemar Hamalik, *Sistem Pembelajaran Jaraj Jauh dan Pembinaan Ketenagaan*, (Bandung: Trigenda Karya, 1994), page.146

Theoretically, according to B. Suryosubroto in his book, he explains that there are two kinds of evaluation used in the learning based on module system,[73] there are:

a. Formative Evaluation

Formative evaluation is the evaluation done in the last of learning process to know the success of its learning process.[74] Formative evaluation given by the teacher to the students who have done them work sheet perfectly so the teacher will correct it according to the key answer, if the score of the result attain to the standard or KKM the students allowed to continuo to the next module.[75]

b. Summative Evaluation

Summative Evaluation is the evaluation given to the student in the last of semester, appropriate to the school period. The learning content to be examined is all learning content of module which programmed in a period.[76] The purpose of the Summative evaluation is to determine the students learning result.

Based on the both of explanation about, we can conclude that the evaluation of the learning based on module system on mathematic subject at laboratory primary school State University of Malang is appropriate with the theory that is formative evaluation and summative evaluation.

[73] Ibid.,page. 43-45
[74]Sulistyorini, *Evaluasi Pendidikan dalam Meningkatkan Mutu Pendidikan*, (Yogyakarta: Teras, 2009), page.68
[75] Suryosubroto, *Sistem Pengajaran dengan Modul*, (Yogyakarta: Bina Aksara, 1983), page.44
[76] Ibid.,

4. The superiority of learning based on module system

Based on the study conducted by the researcher there are many superiority of the learning based on module system on mathematic subject of 4th grade at laboratory primary school State University of Malang, there are:

a. For the students

They can learn according to them ability and characteristic because learning based on module system is kind of individual learning. In the learning based on module system the students learn according to the ability. Module gives the opportunity to every students to learn according to them speed, so that for students who have a good ability in the learning can continuo the module without waiting other friends. For the students who have low ability in the learning, they will get the opportunity to add their time of learning.

It's suitable with the statement of B. Suryosubroto in his book that in the modular teaching the students who have fast ability in learning are oppressively to wait other leisurely students, the other way the students who have low ability of learning may not forcible to follow the fast students.[77]

[77] Ibid., page.16

b. For the teachers

The implementation of learning based on module system makes them easier to understand the learning character of every student so that make easy for them to give the action to every different students.

According to the role of the teacher in the modular learning that the teacher has to give direct action to every student, both of the students who fast to finish the module order and also the students who have difficulty in the learning.[78]

Based on the explanation above we can get the conclusion that by implementing learning based on module system the teacher can understand about every student character and both of the students and the teacher can know the improvement of the learning directly.

Learning based on module system on mathematic subject at Laboratory Primary School State University of Malang has the differences with conventional learning model used at other school. In this table will explain about the differences between the learning based on module system and conventional learning:

[78] Ibid., page 30

Table 5.2

The Difference Between Learning Based On Module System And Conventional Learning

Learning based on module system	Conventional Learning
Learning content	
The students enable to learn the different learning content in the same time.	The learning content of every student is similar.
Time for learning	
The students learn according to every student learning ability/ speed.	The students learn according to the set time of the teacher.
Mastery learning	
The students can complete mastery the learning content because, they study individually and they only can move to the next learning content when they have success for the learning content before.	Possibility, there are only several students who complete mastery the learning contents, there are several only mastery the learning content partly, may even exist of many students failed in the learning because they learn according to the set time of the teacher.
Learning experience	
The learning experience oriented to the students learning activities.	The learning experience oriented to the teacher activities.
Evaluation	
There are many evaluations done according to the students learning ability.	The evaluation done together.
The reinforcement	
The reinforcement is given immediately after the students do partly of the module content.	The reinforcement given after doing the evaluation and even no reinforcement because sometimes the result of the evaluation is not been studied.

B. The Obstacles of Learning Base on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang.

Based on the data that has got by the researcher, it can be seen that there are several obstacles in the implementation of learning base on module system on mathematic subject of 4th grade bilingual at laboratory primary school State University of Malang, as follows:

a. Language of the module

One of the obstacles of the learning based on module system on mathematic subject is the language of the module; the language of the module is English language. The researcher found in the observation there are many students feel difficult to do the module because they don't understand about the order of the module.

This matter caused of the habit of the teacher, they don't want to habituate English language in the daily learning. That is making the students not familiar with English so it makes them difficult to understand English instruction in module.

According to the psychology of the learners, that the language is the communication tools. The development of the student's language ability is influenced by the environment, because basically the language is the result of the learning with the environment.[79] Based on the explanation above that teachers have lot of influence in the handling of

[79] H. Sunarto and B. Agung Hartono, *Perkembangan Peserta Didik*, (Jakarta: Rineka Cipta, 2006), page.137

this language problem, if the teachers can make English situation in the class the student will not get the language problem because they have familiar to the language.

According to Chomsky the child born with the language capacity, but it's similar with other ability; the environment aspect will take a big role in the influence of child language development.[80]

b. The display of the module

The display of the module used by laboratory primary school State University of Malang is not interesting, it's seen from the color of the module, the module is not colored and also limited of the picture.

That matter makes the students feel bored in the learning process so that is make them unconscious to do the module. This matter becomes one of the factors of the students delay in the finishing of the module.

[80]Ibid., page. 141

CHAPTER VI

CLOSING

A. Conclusion

After describing the theoretical study and analysis of data based on the research finding, then there are a few conclusions that we can be drawn. This study focuses on the implementation and the obstacles of learning based on module system on mathematic subject of 4th grade bilingual at Laboratory Primary School State University of Malang

1. The implementation of learning based on module system on mathematic subject of 4th grade at laboratory primary school State University of Malang
   a. Based on the finding, it can be concluded learning based on module system that implemented on mathematic lesson of 4th grade bilingual at Laboratory Primary School State University of Malang is the learning that fully conducted by the students under the instruction of the module and the guidance of the teacher who only explain the learning content when the students need or face some difficulties in doing of modules order.
   b. The Module Applied In The Learning Process at Laboratory Primary School State University of Malang has own characteristic, there are: 1) The module was make by subject/lesson teacher, that the author of the module there is the lesson teacher, 2) The module was use English

language, all the instruction of the module is use English language, 3) The number of module appropriate with the number of SK of Curriculum, 4) The number of chapter appropriate with the number of KD of Curriculum, 5) The module consists of many stages and the student has to do module evaluation before they can move to the next module. 6) The students who want to join the acceleration program have to finish the entire module of all subjects.

c. The evaluations of the learning base on module system are: 1) Daily evaluation, the evaluation is done in the daily learning in form of rectification of the work sheet, 2) Module evaluation, the evaluation is done as the regulation before the students can move to the next module, 3) middle examination, the middle evaluation done to measure the success of students in the mastery of learning content in a middle of period, 4) Final Examination, the final examination in the laboratory primary school State University of Malang done twice, the first is hold by the teacher for the students who have finish the module before the time given and the second is the final exam hold by DIKNAS.

d. The Superiority of Learning Based on Module system on mathematic subject of 4^{th} grade bilingual at laboratory primary school state university of Malang are: 1) For the students they can learn according to them ability and characteristic because learning based on module system is kind of individual learning. 2) For the teachers the

implementation of learning based on module system make them easier to understand the learning character of every students so that make easy for them to give the action to every different students.

2. The obstacles are faced in learning based on module system on mathematic lesson of 4th grade bilingual Laboratory Primary School State University of Malang include: a) the language of the module, the language of the module used at Laboratory Primary School State University of Malang is English language, not all the student have a good ability in English and the teacher not habituate to use English in the daily learning activities so that make many students have the difficulty in understanding the learning content. Then the next problem comes from b) the display of the module, the display of module used at Laboratory Primary School State University of Malang is not interesting. The module is not colored and limited of the picture that is make the students bored to do their module.

B. Recommendation

From the result of the study obtained, the researcher provide feedback related to the implementation of learning based on module system on mathematic subject of 4th grade bilingual at laboratory primary school State University of Malang:

1. The teacher is a barometer of the success of an education. In order to make the learning based on module system run well, so the teachers have to enrich them English language ability and habituate it in the class room in

order the English language become the habit in the learning activities. When English language becomes the habituate in the learning process so the difficulties of the students in the understanding of the module instruction will be lost and the students will complete mastery the learning content so the learning process will run as well as possible.

2. The laboratory primary school State University of Malang as the institution should facilitate the teacher as the author of the module both in the form of cost or training in order to repair the quality of the module to become the interesting module both from the module content and also from the module display.
3. Parents should participate actively for cooperation with schools for supervising the students/children learning improvement, because however, the parents have the potential to supervising and guiding the children to learn at home.

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Data of 4th Grade Bilingual Students

NO.	NIS	NISN	NAMA	L/P
1	1752	0042713335	Achmad Faizur Rahman	L
2	1753	0042713342	Adinda Salsabilla R.H.	P
3	1755	0042713337	Adrian Desta Prayoga	L
4	1759	0042713291	Alika Rizky Aurelia	P
5	2047		Amanda Yurista D.	P
6	1948	0038979496	Bagus Putra Pratama	L
7	1766	0036517150	Baiq Asshaela Hirjani	P
8	1767	0042713294	Bhatara Arundaya	L
9	2040		Bramantha Naraprima	L
10	1769	0042713288	Cheta Abrar Adyatma	L
11	1771	0042713293	Citra Yama Arifa	P
12	1942	0044552659	Falah Khairan M.	L
13	1774	0042713322	Farel Hanif Andaru	L
14	1781	0036517152	Grandiest Ibni Attahilla	L
15	1782	0042713289	Hafidh Setyo Ismail	L
16	1785	0036517153	Ilyas Syarifuddin	L
17	1786	0036517154	Imam Syamsuddin	L
18	1787	0042713280	Islamy Bintang Y.	L
19	1788	0042713339	Izrasyiar Qolbu Ridhoni	L
20	1790	0042713329	Khansa Sabilillah	L
21	1792	0042713296	Lenka Melinda Florienka	P
22	1793	0042713320	Luqman Rizqi Ardhana	L
23	1795	0042713297	Martsha Cinta Devira	P
24	1796	0042713304	Maulid Akbar	L
25	1797	0042713300	Mochamad Jihadil Islam	L
26	1800	0042713340	Muhammad Najwidin	L
27	1806	0036517159	Nadia Paramitha Hapsari	P
28	1807	0042713287	Nafla Diandra Putri	P
29	1810	0042713308	Nuraliy Wardhana Fadjar	L
30	1811	0042713298	Rafif Vidhar Zain Zuhdi	L
31	1815	0042713282	Rangga Cahyo V.	L
32	1819	0042713315	Rezalva Luna Aina Haq	P
33	1820	0042713327	Sahira Khodijah W.	P
34	1826	0042713292	Tara Yama Aqila	P
35	1830	0036517157	Zidhan Absardi	L

Pedoman Wawancara

1. Bagaimakah implementasi pembelajaran dengan system modul di SD Laboratorium UM?
2. Bagaimanakah evaluasi yang digunakan dalam pembelajaran ini ?
3. Mengapa SD Laboratorium UM memilih modul sebagai cirikhas dalam pembelajarannya?
4. Apa sajakah keunggulan dari pembelajaran dengan system modul di SD Laboratorium UM ?
5. Apakah harapan dari implementasi pembelajaran dengan system modul di SD Laboratorium UM ?
6. Apa sajakah hambatan yang di hadapi dalam implementasi pembelajaran dengan system modul di SD Laboratorium UM ?
7. Bagaimakah cara mengatasi hambatan-hambatan yang dialami ?

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Nomor : Un.3.1/TL.00.1/ 1885/2013 — 27 September 2013
Lampiran : 1 (satu) berkas proposal skripsi
Perihal : **Penelitian**

Kepada :
Yth. Kepala SD Labotarium UM
di
Malang

Assalamu'alaikum Wr. Wb.

Kami mengharap dengan hormat agar mahasiswa di bawah ini:

Nama	:	Ika Zuni Mar'anis
NIM	:	10140071
Jurusan	:	Pendidikan Guru Madrasah Ibtidaiyah (PGMI)
Semester	:	Ganjil, 2013/2014
Judul Skripsi	:	**Implementsi of Learning Base on Module System of 4th Grade at Labotary Primary School State University of Malang**

dalam rangka menyelesaikan tugas akhir/menyusun skripsi yang bersangkutan mohon diberikan izin/kesempatan untuk mengadakan penelitian di lembaga/instansi yang menjadi wewenang Bapak/Ibu.

Demikian atas perkenan dan kerjasama Bapak/Ibu disampaikan terima kasih.

Wassalamu'alaikum Wr. Wb.

Dr. H. Nur Ali, M.Pd
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1. Yth. Ketua Jurusan PGMI
2. Arsip

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SURAT KETERANGAN
Nomor : 197/UN32.20.5/PG/2014

Kepala Sekolah Dasar Laboratorium Universitas Negeri Malang menerangkan bahwa,

No.	Nama	Jurusan/Program
1.	Ika Zuni Mar'anis	PGMI / S1 - PGMI

adalah mahasiswa UIN Maliki Malang Fakultas Ilmu Tarbiyah dan Keguruan yang telah melaksanakan kegiatan observasi tentang The Implementation of Learning Based on Module System , on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang di SD Laboratorium UM pada bulan November 2013 - April 2014.

Demikian surat keterangan ini di buat untuk dipergunakan sebagaimana mestinya.

23 Mei 2014
Kepala Sekolah,

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Judul : The Implementation of Learning Based on Module System on Mathematic Subject of 4th Grade Bilingual at Laboratory Primary School State University of Malang

Dosen Pembimbing : H. Akhmad Nurul Kawakib, M.Pd, M.A

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1.	25 Maret 2014	Chapter I	
2.	03 April 2014	Chapter I & IV	
3.	15 April 2014	Chapter I	
4.	06 Mei 2014	Chapter II & III	
5.	13 Mei 2014	Chapter IV	
6.	04 Juni 2014	Chapter V	
7.	10 Juni 2014	Chapter V & VI	

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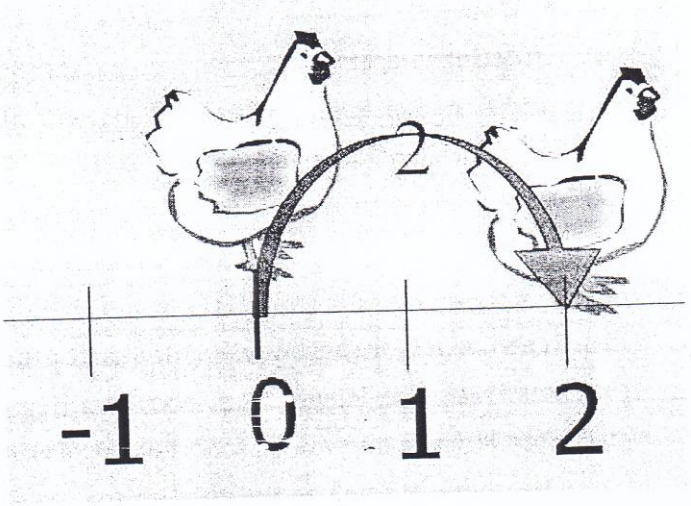
MATHEMATIC

Grade 4
Semester 2

Sekolah Dasar Laboratorium
Universitas Negeri Malang

MATHEMATICS 4 MODULE 6[85]

ADDITION AND SUBTRACTION OF INTEGERS



By :
Yuli Fitria Susanti, S.Pd

LABORATORY PRIMARY SCHOOL
STATE UNIVERSITY OF MALANG
2013 / 2014

3. If you still do not understand with the unit, please ask to your teacher in front.
4. Read another book as a reference study.
5. Do the exercises according to the order of activities.
6. Match your answer with the answer key provided.
7. If in one exercises your score are less than 80, you have to repeat it or fix it.
8. If in all exercises your score are as same as or greater than 80, and are you ready, ask for an evaluation to your teacher.
9. If your evaluation score are as same as or greater than 80 you can continue to the next unit.

C. Students Learning Activities

1. Read the material in a unit.
2. Answer the questions.

LESSON 18.1
READ AND WRITE INTEGERS

Look at the picture below !

From the picture, there are numbers above and below 0 (zero). Number which are greater than zero or above zero are referred to as positive numbers and we attach a '+' sign in front of each number, i.e. +1, +2, +3, ...

Number which are less than zero or below zero are referred to as negative numbers and we attach a '-' sign in front of each number, i.e. -1, -2, -3, ...

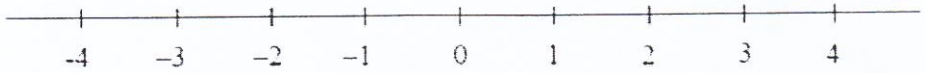
From the picture above we can say that :

Integers are the number that are both positive and negative,

i.e. ... , -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, ...

Zero is an even integer, and it is neither positive nor negative.

On the horizontal number line, integers can be described as follows.



On the horizontal direction of a number line, it is valid that :

- If a lies to the right of b, so a > b
- If a lies to the left of b, so a < b

To read and write the integers, look at the example :

+24 is only written 24 and read positive twenty four or only read twenty four

- 18 is read negative eighteen

LESSON 18.2
COMPARE TWO INTEGERS

In integers if go to the right its mean the number is greater and if go to the left its mean the number is smaller.

Example :

-5 < 0

-100 < -1

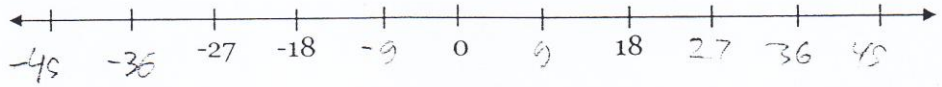
10 > -10

0 > -25

EXERCISE 18.2

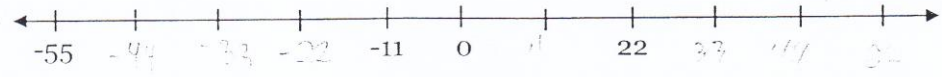
Compare these numbers using < , > , or =

1. -11 ...<... 21
2. 0 ...<... 17
3. -350 ...<... 10
4. -45 ...<... -30
5. 1 ...<... 13
6. -1 ...<... 0
7. 38 ...=... 38
8. -61 ...<... 61
9. 121 ...>... 112
10. -59 ...<... -12
11. 11 ...>... -91
12. -5 ...<... 12
13. 81 ...>... -23
14. 225 ...<... 252
15. 9 ...>... -10
16. 1 ...>... -51
17. 25 ...<... 70
18. -67 ...<... 73
19. -110 ...<... 11
20. -20 ...<... 2

7. 

8. 

9. 

10. 

LESSON 18.4
ORDER INTEGERS FROM THE GREATEST OR SMALLEST

To order integer numbers, we know that if to the right the value of a number is greater and if to the left the value of a number is smaller. It means that the numbers located to the right on the number line always have greater value than the number located to the left.

Example :

Order the following numbers from the smallest

-38, 14, -1, 4, -11, 20, 17, -20, 0, 16

So, the answer is : -38, -20, -11, -1, 0, 4, 14, 16, 17, 20

Order the following numbers from the greatest

-5, 27, -30, -16, 2, 19, 3, -10, 10, 30

So, the answer is : 30, 27, 19, 10, 3, 2, -5, -10, -16, -30

LESSON 19.1
ADD INTEGERS WITH NUMBER LINE

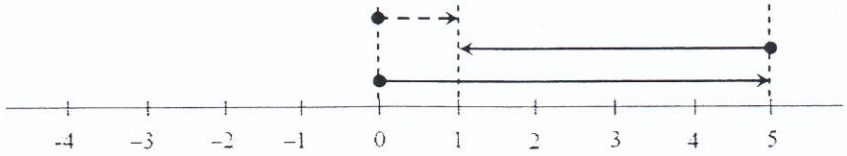
Addition of integers can be done by using a number line. On the number line it has been agreed that the positive integers indicate to the right direction an negative integers indicate to left direction.

Example :

1. 5 + (-4) = ...

   The steps to add up 5 and -4 are :

   - From point zero we move to the right as far as 5, we obtain point 5
   - From the edge of the first step, it is point 5, we move to the left as far as 4, we obtain point 1.
   - The location of the last point, namely 1 is the sum of 5 and -4
   - The figure of the steps above in the followings.

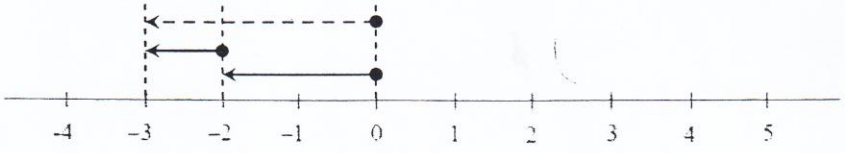


   So, 5 + (-4) = 1

2. -2 + (-1) = ...

   The steps to add up -2 and -1

   - From point 0 we move to the left as far as 2, we obtain point -2.
   - From point -2 we move to the left as far as 1, we obtain point -3.
   - The location of the last point, namely -3 is the sum of -2 and -1
   - The figure of the steps above in the followings.

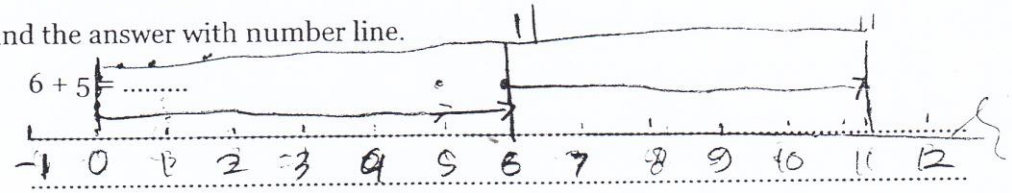


   So, -2 + (-1) = -3

EXERCISE 19.1

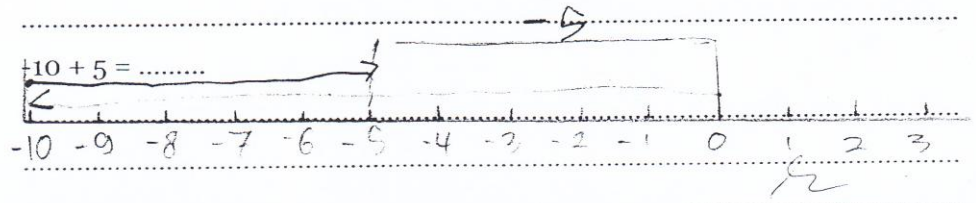
Find the answer with number line.

1. 6 + 5 = ...



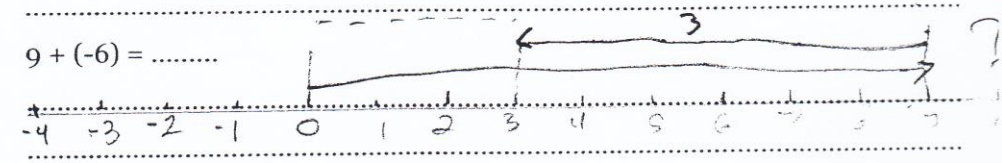
So, 6 + 5 = 11

2. +10 + 5 = ...



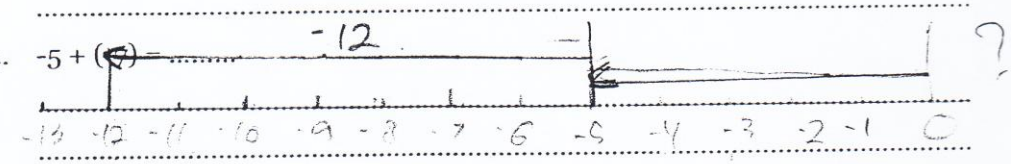
So, -10 + 5 = -5

3. 9 + (-6) = ...



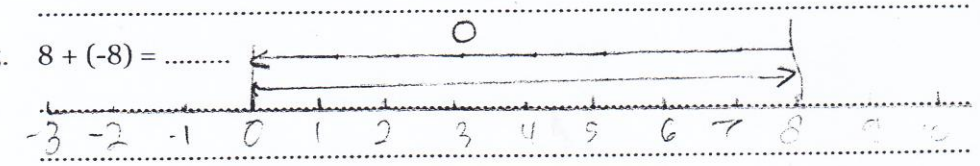
So, 9 + (-6) = 3

4. -5 + (-7) = ...



So, -5 + (-7) = -12

5. 8 + (-8) = ...



So, 8 + (-8) = 0

give ruler Batara ??

LESSON 19.2

CHANGE SUBTRACTION TO ADDITION OF INTEGERS

Example :

1. $-9 - 7 = -9 + (-7)$
   $= -13$
2. $10 - 8 = 10 + (-8)$
   $= 2$
3. $-15 - (-3) = -15 + 3$
   $= -12$
4. $21 - (-5) = 21 + 5$
   $= 26$

70 80

EXERCISE 19.2

Change the subtraction to addition and find the answer.

1. $-26 - 17$ = $-26 + (-17) = 43$
2. $35 - 41$ = $35 + (-41) = -6$
3. $-90 - (-35)$ = $-90 + (35) = -55$ → $-90 + (35) = -$
4. $243 - 114$ = $243 + (-114) = 129$
5. $78 - (-51)$ = $78 + 51 = 129$
6. $-45 - (-45)$ = $-45 + (45) = 0$
7. $89 - 23$ = $89 + (-23) = 66$
8. $-67 - 93$ = $-67 + (-93) = -160$
9. $65 - (-39)$ = $65 + (39) = 20$ → $65 + (+39) = +$
10. $-54 - (-87)$ = $-54 + (87) = -141$ → $-54 + 87 = 3$

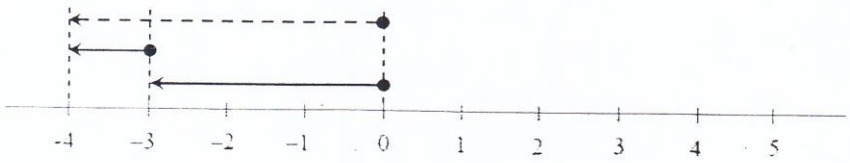
LESSON 20.1
SUBTRACT INTEGERS WITH NUMBER LINE

Example :

1. $-3 - 1$ = ...

   To find the answer, we can change the subtraction to addition.

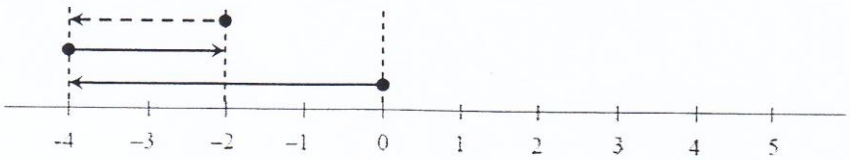
   So, $-3 - 1 = -3 + (-1)$ and the way same with to find addition with number line.



   So, $-3 - 1 = -4$

2. $-4 - (-2)$ = ...

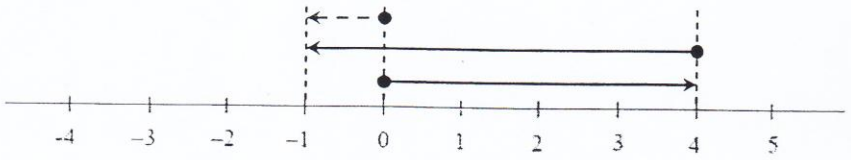
   Change the subtraction to addition. So, $-4 - (-2) = -4 + 2$



   So, $-4 - (-2) = -2$

3. $4 - 5$ = ...

   Change the subtraction to addition. So, $4 - 5 = 4 + (-5)$

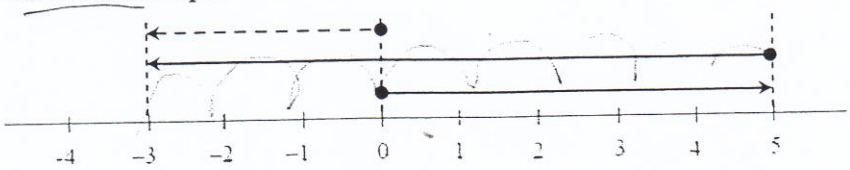


   So, $4 - 5 = -1$

baca perintahnya ??

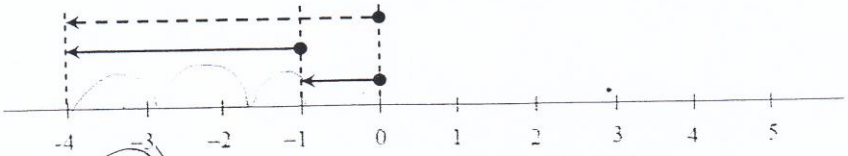
Write in subtraction operation.

6.



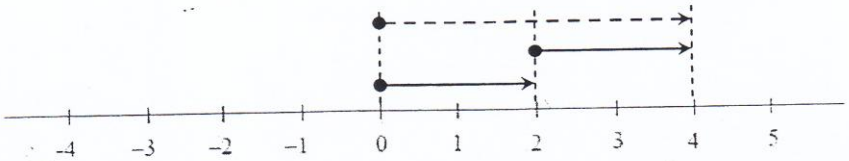
5 (-) (-8) = -3 = 5 - 8 = -3

7.



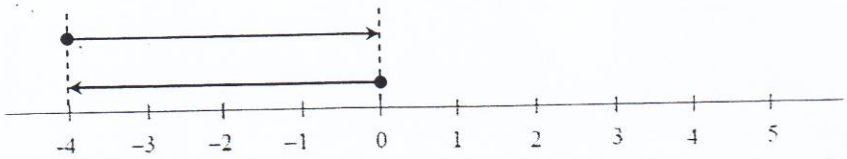
-1 - (-3) = -4 -1 - 3 = -4

8.



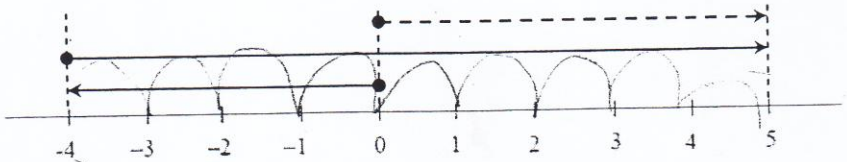
2 (-) 2 = 0 ⇒ 2 - (-2) = 4

9.



-4 (-) 4 = 0

10.



-4 (-) 9 = 5

CHAPTER 21
MIXED OPERATION OF INTEGERS
Time Allocation : 1 meetings

Indicator :

Mixed operation in addition and subtraction of integers

Instruction for Student's Learning

1. Read the material and understand what is being presented in the literature.
2. Study the example of problem.
3. Next, do the exercises according to the order of activities.
4. If you still do not understand with the learning, please ask to your teacher in front.
5. Match your answer with the answer key provided.
6. If in one exercises your score are less than 80, you have to repeat it or fix it.
7. If in all exercises your score are as same as or greater than 80, you can continue to the next learning.

LESSON 22.1
SOLVE THE PROBLEMS ABOUT INTEGERS

Example :

In a game, it applies a rule that the highest score is 100 and the lowest mark is -100. In 4 times of playing, Ardi gets 60, -50, 40, -30, and Riki gets -30, 80, 60, -40. Calculate the sum of marks Andi and Riki achieve. Who gets higher mark?

Answer :

Ardi's marks = 60 – 50 + 40 – 30 = 20

Riki's marks = -30 + 80 + 60 – 40 = 70

So, Riki get the higher mark.

EXERCISE 22.1

Solve these problems below.

1. A country in summer the temperature is 39°C. In winter the temperature is -5°C. What the difference between the temperature in summer and winter ?
   39 + 5 = 44 So, the difference between the temperature in summer and winter is 44
2. During a high school basketball game, the home team scored 51 points and the opponents scored 62 points. What is the difference between the number of points scored by a team and its opponent team ?
   62 - 51 = 11 So, difference between the number of scored by a team and its opponent team
3. At 2 P.M., the temperature was 29°C. If the temperature drops 5 degrees, what is the new temperature ? 29 - 5 = 24 So, new temperature is 24°C
4. To play a game on a game board, Drew puts his game piece on START. On his first turn, he moves his game piece ahead 7 spaces. On his second turn, Drew moves his game piece back 4 spaces. How many spaces away from START is his game piece now ? 7 - 4 = 3 So, 3 spaces away from START is his game piece now, is 3