



UNIVERSITAS  
ISLAM  
INDONESIA

**GUIDEBOOK OF**

# **PROPOSAL THESIS & THESIS**

**Chemistry Education Study Program**

The Faculty of Mathematics and Natural Sciences

UNIVERSITAS ISLAM INDONESIA



## PREFACE

*Bismillaahirrahmanirrahiim*

*Alhamdulillah* *robbil 'alamiin*, all praise and thanks to Allah SWT, who has blessed and guided all of us. *Shalawat* and *salam* are always devoted to the Prophet Muhammad SAW along with his family, friends, and all his followers until the end of time.

This Thesis and Thesis Proposal Guidelines were created by paying attention to the applicable rules at the Islamic University of Indonesia as well as the inputs from lecturers, students, educational institutions, and institutions as stakeholders. This Guidebook is intended to serve as a resource for students working on their theses and proposals.

We'd like to express our gratitude to everyone who has helped and contributed to the completion of this book. We accept suggestions from a variety of sources in order to enhance this book.

Yogyakarta, December 2018

The Team



Version/Revision : 1/2  
Effective Date : December 2018  
Document Code : BPA-Prodi Pendidikan Kimia-FMIPA

**THE TEAM OF GUIDEBOOK OF PROPOSAL THESIS AND THESIS  
CHEMISTRY EDUCATION PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA  
YEAR 2018**

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**THE REGULATIONS OF THE CHEMISTRY EDUCATION PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA**

**ON THESIS AND THESIS PROPOSAL WRITING**

**CHAPTER I  
GENERAL CONDITIONS**

**Article 1: Terms**

In this regulation:

1. Faculty is FMIPA (Faculty of Mathematics and Natural Sciences) UII
2. Dean is the Dean of FMIPA UII
3. Study Program is Chemistry Education Study Program of FMIPA UII
4. Head of Study Program is The Head of Chemistry Education Study Program of FMIPA UII
5. A supervisor is a thesis supervisor
6. A student is the student of the Chemistry Education Study Program of FMIPA UII
7. The Board of Examiner is the thesis examiner
8. The thesis proposal is Thesis Proposal Course
9. The thesis is Thesis Coursework

**CHAPTER II  
DEFINITION, CHARACTERISTICS, AND  
SCOPE OF THESIS PROPOSAL AND  
THESIS**

**Article 2: Thesis and Thesis Proposal Definition**

1. A thesis proposal is a two Semester Credit Unit (SKS) Thesis Proposal Course in which students are expected to write a thesis proposal, which is subsequently presented in a seminar.
2. The thesis is a Four-Credit Thesis Proposal Course in which students must prepare a thesis and be assessed in order to pass.
3. The thesis is a written report on the results of research from the thesis proposal with a minimum passing grade of C that is completed by students with the assistance of a supervisor lecturer as one of the prerequisites for completing the Thesis Course and obtaining a Bachelor of Education (S.Pd.) in Chemistry Education Study Program, FMIPA UII.
4. Research activities must take place at educational institutions such as school or non-formal education.

### **Article 3: Thesis Characteristics**

A thesis and thesis proposal are required for all students for obtaining a Bachelor of Education (S.Pd.) degree in Chemistry Education Study Program, FMIPA UII.

### **Article 4: Scope of Thesis**

The topic of the thesis is an issue in the field of chemistry education.

## **CHAPTER III SUPERVISOR AND THESIS AND THESIS PROPOSAL EXAMINERS**

### **Article 5: Supervisor**

1. A supervisor is a lecturer who has at least a master's degree and has the academic position of Expert Assistant and has been designated by the study program to supervise the writing of thesis proposals, research, and thesis.
2. Supervisors who are not listed in paragraph 1 may be appointed as supervisors with the Dean's consent if they have competence in the thesis topic.
3. There are two types of supervisors: main supervisor and second supervisor.
4. Doctoral-educated lecturers are capable of guiding autonomously.
5. If the supervisor is unable to continue the guidance for any reason, the Head of the Study Program may designate another supervising lecturer.
6. Any issues relating to the planning and execution of research and thesis writing should be discussed with the supervisor.
7. The mentoring period is two semesters (1 year) starting from the moment the student submits a thesis proposal.

### **Article 6: The Board of Examiners**

1. The examiner board is the supervisors and lecturers chosen by the study program to assess the thesis.
2. Examiner board of thesis proposal consists of the main supervisor and second supervisor, or 1 supervisor based on the conditions mentioned in article 5 paragraph 4 with 1 thesis examiner.
3. The thesis examiner board consists of at least 3 (three) individuals, with 2 (two) professors chosen by the Study Program and a supervisor who is in line with the conditions of article 5 paragraph 4 or main supervisor and second supervisor.

## **CHAPTER IV ACADEMIC REQUIREMENT**

### **Article 7: Thesis and Thesis Proposal Requirement**

1. To take the Thesis Proposal Course, students must have a minimum of 100 (one hundred) credits and a Grade Point Average (GPA) of at least 2.00. (4.00 scale).
2. To be eligible for the Thesis, students must have at least 110 (one hundred and ten) credits with a GPA of at least 2.50 (4.00 scale) and no E grade.

## **CHAPTER V THESIS AND THESIS PROPOSAL SUBMISSION PROCEDURES**

### **Article 8: Thesis and Thesis Proposal Submission**

1. The Head of Study Program lists students who are allowed to take Thesis and Thesis Proposals.
2. The Head of Study Program and the Secretariat of Study Program will divide the thesis supervisor.
3. Students enrolled in the Thesis Proposal and Thesis Courses are gathered by the Head of Study Program for a briefing.
4. Students must submit a Letter of Application for Thesis Research Permit to the Chemistry Education Study Program, as well as a study location where they will conduct their thesis research.

## **CHAPTER VI THESIS AND THESIS PROPOSAL**

### **Article 9: Thesis Proposal**

Thesis proposal writing is prepared according to the applicable Thesis Proposal and Thesis Guidelines for Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia.

## **Article 10: Thesis**

Thesis writing is prepared according to the applicable Thesis Guidelines for Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia.

## **CHAPTER VII IMPLEMENTATION AND COSTS**

### **Article 11: The Implementation of Thesis Proposal and Thesis**

1. In line with the rules of Article 5 paragraph 4, a student is guided by 2 (two) supervisors or one supervisor.
2. The implementation period for thesis proposal and thesis is 1 (one) semester (six months).
3. A length of supervision that exceeds the requirements will result in a rise in the cost of tutoring that must be paid by students.
4. Students must record their activities throughout research and consultation on the Participant Card of Thesis Proposal and Thesis.  
(See **Appendix 1**)

### **Article 12: The Fee of Thesis and Thesis Proposal**

1. The fee for the thesis proposal is IDR 80.000,-.
2. The thesis charge is divided into two parts: a mentorship cost of IDR 350.000,- and a fee for the thesis examination of IDR 350.000,-.
3. The student is responsible for all expenditures associated with preparing the thesis proposal, doing research, and writing the thesis.
4. If the students do not finish their thesis in 1 (one) semester, they will be charged a penalty cost of IDR 350.000,-.

## **CHAPTER VIII THESIS WRITING**

### **Article 13: Thesis Writing**

Thesis writing is conducted according to the applicable Thesis Guidelines for Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia.



## CHAPTER IX

### THESIS PROPOSAL PRESENTATION, THESIS EXAMINATION, AND THESIS ASSESSMENT

#### Article 14: Thesis Proposal Presentation

1. Students who have completed the thesis proposal can apply for the Thesis Proposal Presentation application form by submitting 4 (four) thesis proposals to the Academic Division's Thesis Affairs Staff at least 1 (one) month before the end of the semester.
2. Thesis proposals must be presented to the Examiner Board, which consists of the main supervisor and second supervisor or a single supervisor and 1 (one) lecturer chosen as the examiner by the Head of Study Program.

#### Article 15: Thesis Examination

1. Students who have completed their thesis may take the Thesis Examination Registration Form (**Appendix 2**) by submitting 4 (four) thesis copies signed by the supervisor and Head of Study Program to the Thesis Affairs Staff of Academic Division at least 1 (one) week before the thesis examination.
2. The thesis must be presented to the Examiner Board consisting of the main supervisor and/or second supervisor, as well as 2 (two) lecturers appointed by the Study Program.
3. The thesis examination must be done at least one month before the graduation ceremony.

#### Article 16: Thesis Proposal and Thesis Assessment

1. After the thesis proposal presentation and/or thesis examination, examiners must promptly report their results to the Head of Study Program.
2. The Head of Study Program is required to report and provide the results of the Thesis Proposal Assessment/Thesis Examination with the Thesis Proposal Presentation Minutes Form (**Appendix 3**)/Thesis Examination (**Appendix 4**) to the academic staff of Thesis Division at the latest 1 (one) day after the presentation of the thesis proposal.
3. The staff of Examination Affairs will input the thesis scores in the SIMAK software no later than 3 (three) days after receiving the results of the Thesis Proposal Assessment/Thesis Examination from the Head of

#### Study Program.

4. The results of the Thesis Proposal Assessment consist of the combined scores of the main supervisor and second supervisor or single supervisor and 1 (one) examiner.
5. The results of the Thesis Examination Assessment consist of a combination of scores from the main supervisor and second supervisor, as well as examiners.
6. Assessment of Thesis Proposal Presentation and/or Thesis Examination Assessment, according to the forms in **Appendix 3** and **Appendix 4**, includes research weight, writing/grammar, presentation abilities, and material knowledge.
7. The examiner team provides the score of the thesis proposal presentation and/or thesis examination with the conversion grade according to the form in **Appendix 3** and **Appendix 4**.
8. Students are considered to have passed the exam if they receive a grade of C or above on the Thesis Proposal Presentation/Thesis Examination.
9. Students who do not pass the Thesis Proposal Presentation must retake it.
10. If students fail the thesis examination, they must retake it.



## THESIS PROPOSAL WRITING GUIDELINES

### CHEMISTRY EDUCATION PROGRAM FACULTY OF MATHEMATICS AND NATURAL SCIENCES UNIVERSITAS ISLAM INDONESIA

The thesis proposal consists of a cover page, approval page, and proposal content.

#### A. Cover Page

##### 1. Cover page

The cover page includes the thesis proposal's title, the Islamic University of Indonesia's emblem, the student's name and number, and the institution's name.

##### 2. The name and number of the student

The name should be typed in full and should not be shortened; the student number is given beneath the name.

##### 3. Institution

The target institution is Chemistry Education Study Program, FMIPA, Universitas Islam Indonesia.

An example of a thesis proposal cover page can be seen in **Appendix 5**.

#### B. Ratification Sheet

The ratification page contains the thesis proposal title, student name and student number, main supervisor, second supervisor, and Head of Study Program along with signature, place, and date of approval.

A sample of the thesis proposal ratification sheet can be found in **Appendix 6**.

#### C. The Content of Thesis Proposal

##### C.1. Quantitative Research

Title Page

Ratification Sheet

Acknowledgement

Table of Content

List of Tables

List of Figures

List of Appendices

CHAPTER I INTRODUCTION



1.1 Background of the Study

1.2 Identification of the Problems

1.3 Limitation of the Problems

1.4 Problem Formulation

1.5 Objectives of the Study

1.6 Significance of the Study

## CHAPTER II LITERATURE REVIEW

2.1 Theoretical Review

2.2 Relevant Studies

2.3 Research Hypothesis

## CHAPTER III RESEARCH METHODOLOGY

3.1 Type of the Research

3.2 Setting and Time of the Research

3.3 Research Population and Sample

3.4 Definition of Variable Operation

3.5 Technique and Instrument of Data Collection

3.6 Instrument Validation

3.7 Data Analysis Technique

## REFERENCES

### C.1. Development Research

Title Page

Ratification Sheet

Acknowledgement

Table of Content

List of Tables

List of Figures

List of Appendices

## CHAPTER I INTRODUCTION

1.1 Background of the Study

1.2 Identification of the Problems

1.3 Limitation of the Problems

1.4 Problem Formulation

1.5 Objectives of the Development

1.6 Significance of the Development

1.7 Developed Product Specification

1.8 Limitation of the Development

CHAPTER II LITERATURE REVIEW

2.1 Review on Theory

2.2 Relevant Studies

CHAPTER III RESEARCH METHODOLOGY

3.1 Development Model

3.2 Development Procedures

3.3 Technique and Instrument of Data Collection

3.4 Data Analysis Technique

REFERENCES

**D. References**

See **Appendix 14**.

**E. The thesis proposal is written in 3 (three) copies, two of which are sent to the Academic Division's Thesis Affairs Staff and one of which is kept by the individual who is working on it.**

**F. The thesis proposal is bound with light blue plastic for the front and back covers.**





## THESIS WRITING GUIDELINES

### CHEMISTRY EDUCATION PROGRAM FACULTY OF MATHEMATICS AND NATURAL SCIENCES UNIVERSITAS ISLAM INDONESIA

The following major points are the guidelines for writing a thesis:

#### A. Title Page

Title page or front cover includes:

1. Thesis Title

The title of the thesis does not have to be precisely the same as the thesis proposal, because, in its implementation, numerous modifications may occur from the original plan throughout execution.

The thesis title should be concise, descriptive, and accurately reflect the substance of the whole essay.

2. Thesis Objective

The thesis is submitted to fulfill one of the requirements in obtaining a Bachelor of Education (S.Pd.) at the Faculty of Mathematics and Natural Sciences Universitas Islam Indonesia.

3. The Symbol of Universitas Islam Indonesia

4. Student's Name and Number

The student's name and number who submits the thesis are written in full (no abbreviations may be used). The student number is listed below the student's name.

5. Institution.

The institution in question is the Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia Yogyakarta

6. Year of Thesis Completion

The year in which the thesis was completed corresponds to the year in which the final examination was held, and it is listed under the word Yogyakarta.

A sample of the thesis cover page can be seen in **Appendix 7**.

#### B. Ratification Sheet

This page contains the signatures of the Dean of the Faculty of Mathematics and Natural Sciences, Supervisors, Thesis Examiners, and the date of the examination.

A sample of the ratification sheet **before the thesis exam** can be seen in **Appendix 8**.

A sample of the ratification sheet **after the thesis exam** can be seen in **Appendix 9**.

### C. Acknowledgment

This article includes aphorisms and words of giving. This is not a required page. **Appendix 10** illustrates an example of an acknowledgement page.

### D. Preface

1. The objective of the preface is to assist and prepare the reader for a better understanding of the subsequent description's goals and advantages. The preface should be able to give a general summary of the work.
2. The preface must be written in an official/formal language.
3. The preface may also be written to something that has no relation to science such as gratitude or changes from the initial goal.
4. Writing a thank you note starts with a person with a higher position, teaching staff, and so on.

A sample of the preface can be found in **Appendix 11**.

### E. Summary

1. The summary includes a brief and clear overview of the background, study objectives, research methodology, results, and conclusions that are written no longer than 200 words. The summary that incorporates the items listed above will be instructive, allowing the reader to rapidly gain a clear image of the study that has been conducted. Although the reader has not read the article, he or she should be assumed to have a sufficient understanding of the subject of the research. There should be no need for additional explanations in the summary.
2. Information from the main article should not be included in the summary. A list of tables, figures, or references should not be included in the summary because the reader will need to view those items in the full thesis.
3. The summary is formatted with 1 (one) space between lines and includes important terms. **Appendix 12** provides an example of a summary.

### F. Abstract

An abstract is a summary that is translated into English. An example of an abstract is presented in **Appendix 13**.

## **G. Contents of the Thesis**

### **G.1. Quantitative Research**

Title Page

Ratification Sheet

Acknowledgement

Table of Content

List of Tables

List of Figures

List of Appendices

Summary

Abstract

#### **CHAPTER I INTRODUCTION**

1.1 Background of the Study

1.2 Identification of the Problems

1.3 Limitation of the Problems

1.4 Problem Formulation

1.5 Objectives of the Study

1.6 Significance of the Study

#### **CHAPTER II LITERATURE REVIEW**

2.1 Review on Theory

2.2 Relevant Studies

2.3 Research Hypothesis

#### **CHAPTER III RESEARCH METHODOLOGY**

3.1 Type of the Research

3.2 Setting and Time of the Research

3.3 Research Population and Sample

3.4 Definition of Variable Operation

3.5 Technique and Instrument of Data Collection

3.6 Instrument Validation

3.7 Data Analysis Technique

#### **CHAPTER IV RESEARCH RESULTS AND DISCUSSION**

4.1 Description of Research Results

## 4.2 Discussion

## CHAPTER V CONCLUSIONS AND SUGGESTIONS

### 5.1 Conclusion

### 5.2 Suggestions

## REFERENCES

## APPENDICES

### **C.1. Development Research**

Title Page

Ratification Sheet

Acknowledgment

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## CHAPTER I INTRODUCTION

### 1.1 Background of the Study

### 1.2 Identification of the Problems

### 1.3 Limitation of the Problems

### 1.4 Problem Formulation

### 1.5 Objectives of the Development

### 1.6 Significance of the Development

### 1.7 Developed Product Specification

### 1.8 Limitation of the Development

## CHAPTER II LITERATURE REVIEW

### 2.1 Review on Theory

### 2.2 Relevant Studies

## CHAPTER III RESEARCH METHODOLOGY

### 3.1 Development Model



### 3.2 Development Procedures

### 3.3 Technique and Instrument of Data Collection

### 3.4 Data Analysis Technique

## CHAPTER IV RESEARCH RESULTS AND DISCUSSION

### 4.1 Description of Research Data

#### 4.1.1 Results of Material and Media Expert Assessment

#### 4.1.2 Teacher Assessment Results

#### 4.1.3 Student Assessment Results

### 4.2 Development Results

#### 4.2.1 Product Revision Results from Material and Media Experts

#### 4.2.2 Teachers' Product Revision Results

#### 4.2.3 Students' Product Revision Results

## CHAPTER V CONCLUSIONS AND SUGGESTIONS

### 5.1 Conclusion

### 5.2 Suggestions

## REFERENCES

## APPENDICES

### G. References

See **Appendix 14**.

### H. Appendices

1. The appendix provides additional material needed to complete the thesis mentioned in the thesis document.
2. The appendix provides a collection of data, research instruments, calculation results, images, and other things that help to round out the thesis.
3. The institution's research permission.
4. The validator's instrument validation findings





## THESIS WRITING TECHNIQUES

### CHEMISTRY EDUCATION PROGRAM FACULTY OF MATHEMATICS AND NATURAL SCIENCES UNIVERSITAS ISLAM INDONESIA

The following items must be addressed during the thesis writing process:

#### A. Cover

- a. The thesis's front cover is made in a bold dark blue hardcover with the following text:
  1. The thesis title must be written in **font 14 and single space**
  2. The word **"THESIS"** should be in **font 12**
  3. The text "Presented as Partial Fulfilment of the Requirements to Obtain Bachelor of Education (S.Pd.) Degree at the Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia Yogyakarta" should be written in **font 12 and single space**.
  4. The symbol of the Universitas Islam Indonesia is put with a height of **5 cm** and a width of **4 cm**
  5. The thesis author's name and student number are written in **font 14**
  6. The name of the study program is written in **font 14 and single space**
  7. The name of the faculty is written in **font 12 and single space**
  8. The name of the university is written in **font 14 and single space**
  9. The word "Yogyakarta" is written in **font 14 and single space**
  10. The year of thesis completion is written in **font 14 and single space**
- b. The writing on the cover is printed in gold ink.
- c. A sample of the cover page can be seen in **Appendix 7**

#### B. Materials and Size

The thesis is printed in the HVS 80 grams paper. The paper used is **quarto** (21 cm x 28 cm) or A4 size that is typed and bounded well.

#### C. Typing

##### 1. Fonts

The thesis is written in Times New Roman font size 12 for all manuscripts. Italics are only used to denote foreign phrases, Latin names, plants or animals, book titles, or official magazine abbreviations.

##### 2. Line Spacing

Line spacing is made in 2 spaces, except direct quotation, the title of the tables and figures that have more than 1 line, and bibliography can be

typed in a single space format.

### 3. Margins

The following are the typing margins from the paper's edge:

- a. Top margin : 4 cm
- b. Left margin : 4 cm
- c. Bottom margin : 3 cm
- d. Right margin : 3 cm

### 4. Space-Filling

The space on the thesis manuscript page must be filled up, which means typing must begin on the left margin and end on the right margin.

### 5. New Chapter

- a. A new chapter begins on a new page that is symmetrical in the center and written in bold.
- b. Chapter numbers are written in roman letters
- c. The title is written under each chapter

### 6. New Paragraph

The new paragraph starts from the 6th typewriting from the left margin.

### 7. New Sentence

The first number or mathematical formula in a statement must be spelled out.

For example:

Ten students (not number such as 10 students)

### 8. Chapter, Sub-chapter, and so on.

- a. The title of each chapter must be written in all capital letters and positioned symmetrically at a distance of 4 cm from the top margin without a full stop.
- b. Chapter title must be written in bold format.
- c. Sub-chapters are written from the left margin symmetrically. All words begin with a capital letter except for conjunctions and prepositions. All words are bolded without a period. A new paragraph begins after the first sub-chapter sentence.
- d. Sub-chapters are written in bold from the left margin without a full stop. Only the first letter is capitalized. The first sentence after the sub-chapter begins with a new paragraph.
- e. The sub-chapter is written starting from the left margin and ended in a full stop and bold. The sentence that follows is then typed backward in one line with the sub-chapter unless the sub-chapter can be written directly in the form of a sentence. However, those that function as sub-chapters are placed at the front and are in bold.

For example:

## CHAPTER II LITERATURE REVIEW

### 2.1 Review on Theory

#### 2.1.1 Studying and Learning

Learning is a process that results in prospective and actual behavioral changes in people as a result of their conscious effort in interacting with their surroundings. As a result of learning, behavior reveals a wide range of knowledge. etc...

#### a. Learning in Constructivism Theory

Constructivism is a philosophy founded on the concept that everyone develops their perspective on the universe as a result of their own experiences. Constructivism is based on the idea that knowledge is created through experience. Knowledge is formed as a result of active people forming cognitive structures as a result of their interactions with the environment. Environmental circumstances and demands need constant changes and adaptations in cognitive architecture. Etc.

#### 1) Project Learning

The development of constructivism philosophy provides the foundation for project learning. Through the projects they work on, students can create knowledge. etc.

a) ...

(1) ...

(a) ...

### 9. Details

It should be noted that placing a hyphen (-) in front of the information is not permitted. Numbering using Arabic numerals and typing from the ninth typewriting can be used as a replacement.

### 10. Symmetrical Layout

Pictures, tables (lists), equations, titles, and subtitles are written symmetrically to the left and right margin.

### 11. Numbers and Units of Measurement

- Numbers are written with numbers except at the beginning of sentences. numbers must be written in full (spelled).

For example:

A teacher assessed **10** students' mathematical abilities.

**Ten** students' mathematical abilities are assessed.

- Decimal numbers are marked with a comma, not a period.
- The units of measurement used must be official units that apply without a period behind them, for example, mg, mk, cal, cm, m, etc

## 12. Chemical name and others

- Common names of chemicals are written in lower case letters, for example, tolbutamisa, chloramphenicol, morphine, sulfuric acid, and so on.
- Chemical names and terms that already have Indonesian names are written in the Indonesian alphabet. Chemical names that do not have an Indonesian equivalent are italicized.

For example:

**Foreign term:** Ethylene **Indonesian term:** Etilena - It should be written Etilena

**Foreign term:** Cracking **Indonesian term:** Perengkahan – it should be written perengkahan.

**Foreign term:** Hydrocracking **Indonesian term:** there is no term in Indonesian – It should be written *hydrocracking*

- The complete scientific terms for plants and animals consist of a genus name that begins with a capital letter and a species name that begins with a lower case letter (underlined per word or written in italics) and followed by the abbreviation of the name of the person who first used the scientific name and was recognized.

For example: Abrusprecatorius L. or *Abrus precatorius L.*

- The names of sub-species, variations, sub-varieties, forms, and sub-forms are also italicized or underlined.

For example:

Andropogonternatus subsp. Macrothrix

Saxifragaaizoon var izoon subvar brevifolia forma multicaulis  
subforma surculosa

Or

Andropogon ternatus subsp. Macrothrix

*Saxifraga aizoon* var. *izoon* subvar. *Brevifolia* forma *milticaulis*  
subforma *surculosa*.

## D. Pagination

### 1. Page

- The thesis is numbered with small roman numerals (**font 12**) in the bottom center, starting from the title page to the list of figures.
- Other thesis pages are numbered (**font 12**) and placed on the top right, except for the chapter pages, which are put at the bottom center.



## 2. Table

- Tables and appendices are numbered in order, with the first number denoting the chapter number and a period after it.
- The table is symmetrically written and positioned on top of the table. If the table sentence has two or more lines, it must be created in **1 (one) space**.

For example: Table in Chapter 4

Table 4.1 The Comparison of learning achievement of control and experimental class

No	Control Class Scores	Experiment Class Scores

## 3. Appendices

Appendices are written from the left margin inward. If a sentence in the appendix spans two or more lines, it must be made in **1 (one) space**.

For example:

Appendix 4.1 The data of experiment result of students' psychomotor assessment

## 4. Figures

- Figures are numbered in order, with the first number denoting the chapter number and a period after it.
- The figure is symmetrically written underneath the picture. If the sentence in the image is two or more lines long, it must be made in **1 (one) space**.
- Figures should be proportionately positioned in the center of the text, not too far to the left or right.

For example:



Figure 1.1 A teacher is teaching in the class

## 5. Equation

The serial number of equations in the form of mathematical formulae, chemical processes, and other types of equations is written in Arabic numerals in brackets () and positioned at the right margin of the page.

## E. Table and Figures

### 1. Table

- The table title is centered above the table and does not stop with a period. The table's title should be concise, straightforward, and in subject form, rather than flawless phrases. If required, the letters' form and size might change from the script.
- The table is typed symmetrically and cannot be cut off unless it is long, so it is difficult to type it on one page. Therefore, it must be included in the appendix by including the table's head on the next page.
- Columns are titled (sub-headings) and organized in such a way so that the column separation is quite clear. If the column contains quantitative data, the units used (eg: %, mg) are entered as part of the sub-headings.
- The table must be created elongated if it is larger than the paper size, and the top of the table must be positioned on the top left.
- The table's top and bottom must be bordered to distinguish them from the main description.

### 2. Figures

- Figures include charts, graphs, maps, and photos.
- Figure numbering starts with an Arabic numeral that denotes the chapter and is followed by a sequential number.
- The image's title is symmetrically positioned below the image, without a period.
- The figure is laid up in such a way that it is symmetrical and shouldn't be cut off.
- Captions for images are provided below the image title. The letters' form and size may change from the script if required.
- The figure is written wide along with the height of the paper, and the figure's top is positioned to the left of the paper.
- The figure's dimensions (width and height) should be kept constant (not too small or big).
- The scale on the graph must be made so that it is easy to interpret.

## **F. Language**

### **1. Language used**

The language used is the standard Indonesian (which consists of a subject and a verb) with the addition of objects and descriptions to make it ideal.

### **2. Sentence from**

The first or second person should not be used in sentences (I, we, we, you, etc.).

The term "I" should be changed to "author" in the acknowledgement section of the introductory chapter.

### **3. Terms**

- The term used is the term that has been translated into Indonesian.
- If foreign terms are forced to use, the terms should be underlined and italicized.

### **4. Common mistakes.**

- Conjunctions such as *so*, *while*, should not be used to start a sentence.
- The preposition *at*, for example, is frequently misused. For example, it is used in front of the subject so that it can break up the sentence structure.
- The words *where* (*di mana*) and *from* (*dari*) are frequently misused and used interchangeably with the words *where* and *of* in English. This is not a conventional form in Indonesian and should not be used.
- It is important to separate the prefixes *ke-* and *di-* (in Indonesian passive voice sentence) from the prepositions *ke* and *di* (in the Indonesian language).
- Punctuation must be appropriately applied.

## **G. Name writing**

### **1. The author's name mentioned in the description.**

The author whose writings are referred to in the description is only mentioned by his last name, whereas if there are more than two authors, only the last name of the author is mentioned, followed by *et al.*

For example:

- According to Arikunto (1990)
- Sugarcane waste pyrolysis (Othmer and Fernstorm, 1943)

### **2. Author's name and bibliography**

All authors' names must be included in the bibliography, not only the first author's name followed by *et al.*

**3. Author's name that has more than two words**

If the author's name is longer than two words, the last name is written first, followed by a comma, then the abbreviation of the first name, middle name, and others are written after a period.

Example:

Tatang Shabur Julianto is written: Julianto, T.S.

Donald Fitzgerald Othmer is written: Othmer, D.F.

**4. Names with dashes (-)**

If the author's name in the original source is written with a dash between two words, then the two are considered as one word.

For example:

Sulastin-Sutrisno is written: Sulastin-Sutrisno

**5. Name followed by abbreviations**

Names that are preceded by abbreviations are regarded as ones with the words in front of them.

For example:

Mawardi A.I. is written Mawardi A.I.

William D. Ross Jr. is written: Ross Jr., W.D.

**6. Academic Title**

The academic title may not be stated.

- H. Three copies of the thesis are printed. One copy is sent to the Chemistry Education Study Program, one copy is sent to the school/research institution, and the author keeps the other copy. The thesis in softcopy (CD) is made in 3 (three) copies, 1 (one) CD is given to the UII Central Library, and 2 CDs are given to the main supervisor and second supervisor.**

## APPENDICES OF GUIDEBOOK OF PROPOSAL THESIS AND THESIS

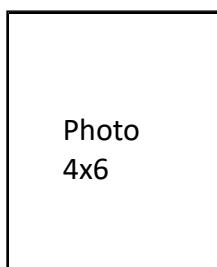
<b>Appendix 1.</b>	<b>The Card of Thesis and Thesis Proposal Participant</b>
<b>Appendix 2.</b>	<b>Thesis Examination Registration Form</b>
<b>Appendix 3.</b>	<ul style="list-style-type: none"><li>- Minutes of Thesis Proposal Presentation</li><li>- List of Thesis Proposal Presentation Participant</li><li>- Assessment of Thesis Proposal Presentation</li><li>- Score Conversion of Thesis Proposal Presentation from Number to Letter</li></ul>
<b>Appendix 4.</b>	<ul style="list-style-type: none"><li>- Minutes of Thesis Examination</li><li>- Attendance List of Thesis Examiners</li><li>- Assessment of Thesis Examination</li><li>- Score Conversion of Thesis Presentation from Number to Letter</li></ul>
<b>Appendix 5.</b>	<b>A Sample of the Thesis Proposal Cover Page</b>
<b>Appendix 6.</b>	<b>A Sample of the Thesis Proposal Ratification Sheet</b>
<b>Appendix 7.</b>	<b>A Sample of the Thesis Cover Page</b>
<b>Appendix 8.</b>	<b>A Sample of the Thesis Ratification Sheet before Thesis Examination</b>
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<b>Appendix 10.</b>	<b>A Sample of a Dedication Page</b>
<b>Appendix 11.</b>	<b>A Sample of an Acknowledgment Page</b>
<b>Appendix 12.</b>	<b>A Sample of a Summary</b>
<b>Appendix 13.</b>	<b>A Sample of an Abstract</b>
<b>Appendix 14.</b>	<b>A Sample of the Bibliography Writing Guidelines</b>



**Appendix 1. Student's Thesis and Thesis Proposal Supervision Card**

**STUDENT'S THESIS AND  
THESIS PROPOSAL SUPERVISION CARD**

Name : .....  
Student Number : .....  
Study Program : Chemistry Education  
Academic Year : .....



Yogyakarta.....  
Academic Division

( ..... )

Thesis Title:

.....  
.....  
.....  
.....

Main Supervisor : .....

Second Supervisor : .....

Supervision starts from:

.....

Head of Chemistry Education Study  
Program

(.....)

*Note: This card must be provided to supervision, and the supervisor has the authority to deny students who do not bring it.*

No	Date	Number of Supervision	Notes	Signature	
				Supervisor I	Supervisor II

**Appendix 2. Thesis Exam Registration Form**

**REGISTRATION FORM OF THESIS EXAMINATION  
CHEMISTRY EDUCATION STUDY PROGRAM**

To.

**The Head of Chemistry Education Program  
Faculty of Mathematics and Natural Sciences  
Universitas Islam Indonesia**

*Assalamualaiukum Wr. Wb.*

I, the undersigned, am a student of Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia:

Name : .....

Student Number : .....

Thesis Title :  
.....  
.....  
.....

Main Supervisor : .....

Second Supervisor : .....

Day and Date of Thesis Examination : .....

Time of Thesis Examination : .....

Submitting a thesis examination registration form for the exam period that will be conducted in ..... (month)

Along with this letter, I enclose the requirements for the thesis exam.

Thank you very much for your attention.

*Wassalamualaikum Wr. Wb.*

Yogyakarta, .....  
Student

Main Supervisor

( ..... )

Second Supervisor

( ..... )

( ..... )

Head of Chemistry Education  
Study Program

(.....)

**Appendix 3.**

- Minutes of Thesis Proposal Examination
- List of Thesis Proposal Presentation Participants
- Thesis Proposal Presentation Assessment
- Conversion Score of Thesis Proposal Presentation from Number to Letter

**MINUTES OF THESIS  
PROPOSAL PRESENTATION**

*Bismillahirrahmanirrahim*

Today: ..... Date: .....

A thesis proposal seminar has been held at the Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia Yogyakarta on behalf of:

Name : .....  
Student Number : .....  
Study Program : Chemistry Education  
Thesis Proposal Title :

Main Supervisor : ..... (.....)

Second Supervisor : ..... (.....)

Declared : **SUCCESSFUL/NOT SUCCESSFUL**

Score :

*Alhamdulillahirabbil'alamin*

Main Supervisor

Second Supervisor

( ..... )

( ..... )

Head of Chemistry Education Study Program

( ..... )

## LIST OF THESIS PROPOSAL PRESENTATION PARTICIPANTS

Name : .....  
Student Number : .....  
Study Program : Chemistry Education  
Day/ Date : .....  
Thesis Proposal Title :

No	Student Name	Student Number
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		

Yogyakarta, .....  
Head of Chemistry Education  
Study Program

( ..... )

## THE ASSESSMENT OF THE THESIS PROPOSAL PRESENTATION

Name : .....  
 Student Number : .....  
 Study Program : Chemistry Education  
 Title of Proposal Seminar :

Assessment Material:

No	Assessment Criteria	Maximum Score	Score
1	Content of Research Proposal	30	.....
2	Presentation	30	.....
3	Question and Answer	40	.....
<b>Total</b>		<b>100</b>	.....

No	Letter Score	Weight	Score Range	No	Letter Score	Weight	Score Range
1.	A	4.00	80.00-100	9.	C+	2.25	62.50-64.99
2.	A	3.75	77.50-79.99	10.	C	2.00	60.00-62.49
3.	A/B	3.50	75.00-77.49	11.	C-	1.75	55.00-59.99
4.	B+	3.25	72.50-74.99	12.	C/D	1.50	50.00-54.99
5.	B	3.00	70.00-72.49	13.	D+	1.25	45.00-49.99
7.	B	2.75	67.50-69.99	14.	D	1.00	40.00-44.99
8.	B/C	2.50	65.00-67.49	15.	E	0.00	< 40.00

Yogyakarta, .....  
 Supervisor I/ Supervisor II

( ..... )

## SCORE CONVERSION OF THESIS PROPOSAL PRESENTATION FROM NUMBER TO LETTER

Name : .....  
 Student Number : .....  
 Study Program : Chemistry Education  
 Thesis Proposal Title :

No	Assessment	Number Score	Total Score	Average Score	Letter score
1					
2					

### SCORE CONVERSION RULES FROM NUMBER TO LETTER

No	Letter Score	Weight	Score Range	No	Letter Score	Weight	Score Range
1.	A	4.00	80.00-100	9.	C+	2.25	62.50-64.99
2.	A-	3.75	77.50-79.99	10.	C	2.00	60.00-62.49
3.	A/B	3.50	75.00-77.49	11.	C-	1.75	55.00-59.99
4.	B+	3.25	72.50-74.99	12.	C/D	1.50	50.00-54.99
5.	B	3.00	70.00-72.49	13.	D+	1.25	45.00-49.99
7.	B-	2.75	67.50-69.99	14.	D	1.00	40.00-44.99
8.	B/C	2.50	65.00-67.49	15.	E	0.00	< 40.00

Yogyakarta, .....  
 Head of Chemistry Education  
 Study Program

( ..... )



**Appendix 4.**

- Minutes of Thesis Examination
- List of Thesis Presentation Participants
- Thesis Proposal Presentation Assessment
- Conversion Score of Thesis Presentation from Number to Letter

**MINUTES OF THESIS PRESENTATION**

*Bismillahirrahmanirrahim*

Today: ..... Date: .....

A thesis seminar has been held at the Faculty of Mathematics and Natural Sciences,  
Universitas Islam Indonesia Yogyakarta on behalf of:

Name : .....  
Student Number : .....  
Place/Birthday : .....  
Study Program : Chemistry Education  
Thesis Title :

Main Supervisor : .....  
Second Supervisor : .....  
Declared : **SUCCESSFUL / NOT SUCCESSFUL**  
Score :

Board of Examiners

Chairperson : ..... (.....)  
First Examiner : ..... (.....)  
Second Examiner : ..... (.....)  
Third Examiner : ..... (.....)

*Alhamdulillahirabbil alamin*

Yogyakarta, .....

Head of Chemistry  
Education Study Program

Head of Board Examiners,

( ..... )

( ..... )

**ATTENDANCE LIST OF BOARD EXAMINERS  
CHEMISTRY EDUCATION STUDY PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA**

Name : .....

Student Number : .....

Study Program : Chemistry Education

Day/Date : .....

Thesis Title :

No	NAME OF LECTURER	SIGNATURE
1.		1.
2.		2.
3.		3.
4.		4.

Yogyakarta, .....  
Head of Chemistry  
Study Program

( ..... )

**ATTENDANCE LIST OF BOARD EXAMINERS  
CHEMISTRY EDUCATION STUDY PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA**

Name : .....  
 Student Number : .....  
 Study Program : Chemistry Education  
 Day/Date : .....  
 Thesis Title :

No.	Component	Score Range	Score
1.	Research Weight	0-20	
2.	Structure/Grammar	0-20	
3.	Presentation Ability	0-10	
4.	Knowledge Mastery	0-50	
<b>Total</b>		<b>100</b>	

No	Letter Score	Weight	Score Range	No	Letter Score	Weight	Score Range
1.	A	4.00	80.00-100	8.	C+	2.25	62.50-64.99
2.	A-	3.75	77.50-79.99	9.	C	2.00	60.00-62.49
3.	A/B	3.50	75.00-77.49	10.	C-	1.75	55.00-59.99
4.	B+	3.25	72.50-74.99	11.	C/D	1.50	50.00-54.99
5.	B	3.00	70.00-72.49	12.	D+	1.25	45.00-49.99
6.	B-	2.75	67.50-69.99	13.	D	1.00	40.00-44.99
7.	B/C	2.50	65.00-67.49	14.	E	0.00	< 40.00

Yogyakarta, .....  
 Main Supervisor/Second Supervisor

( ..... )

**SCORE CONVERSION OF THESIS  
EXAMINATION FROM NUMBER TO LETTER  
CHEMISTRY EDUCATION STUDY PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVESIRSITAS ISLAM INDONESIA**

Name : .....  
 Student Name : .....  
 Study Program : Chemistry Education  
 Day/Date : .....  
 Thesis Title :

No	Assessor	Number score	Total Score	Average Score	Letter Score
1.					
2.					
3.					
4.					

No	Letter Score	Weight	Score Range	No	Letter Score	Weight	Score Range
1.	A	4.00	80.00-100	8.	C+	2.25	62.50-64.99
2.	A-	3.75	77.50-79.99	9.	C	2.00	60.00-62.49
3.	A/B	3.50	75.00-77.49	10.	C-	1.75	55.00-59.99
4.	B+	3.25	72.50-74.99	11.	C/D	1.50	50.00-54.99
5.	B	3.00	70.00-72.49	12.	D+	1.25	45.00-49.99
6.	B-	2.75	67.50-69.99	13.	D	1.00	40.00-44.99
7.	B/C	2.50	65.00-67.49	14.	E	0.00	< 40.00

Head of Chemistry  
Education Study Program

Yogyakarta, .....  
Head of Board of Examiners

( ..... )

( ..... )

**THE APPLICATION OF INQUIRY LEARNING TOWARDS  
STUDENT'S LEARNING ACHIEVEMENT ON MAIN MATERIAL  
OF SALT HYDROLYSIS FOR GRADE XI OF SMAN 2 PATI  
THE ACADEMIC YEAR 2017/2018**

**A THESIS PROPOSAL**



Presented by:  
**Widya Prasasti Utami**  
**Student Number: 15614017**

**CHEMISTRY EDUCATION STUDY PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA  
YOGYAKARTA  
2018**

**THE APPLICATION OF INQUIRY LEARNING TOWARDS  
STUDENT'S LEARNING ACHIEVEMENT ON MAIN MATERIAL  
OF SALT HYDROLYSIS FOR GRADE XI OF SMAN 2 PATI  
THE ACADEMIC YEAR 2017/2018**

**A THESIS PROPOSAL**

Presented by:

**Widya Prasasti Utami**  
**Student Number: 15614017**

Has been approved by:

Main Supervisor

( ..... )  
Second Supervisor

Date: .....

( ..... )

Date: .....

Head of Chemistry Education Department  
Faculty of Mathematics and Natural Sciences  
Universitas Islam Indonesia

( ..... )

**THE APPLICATION OF CONTEXTUAL TEACHING LEARNING  
(CTL) BY USING PROJECT AND GUIDED INQUIRY METHODS  
TOWARDS STUDENTS' LEARNING ACHIEVEMENT ON ACID,  
BASE, AND SALT SUBJECT FOR GRADE VII OF SMPN 2  
KARANGANYAR  
THE ACADEMIC YEAR 2017/2018**

Presented to Chemistry Education Study Program as partial fulfillment of requirements to  
obtain Bachelor of Education (S.Pd.) degree at the Faculty of Mathematics and Natural  
Sciences, Universitas Islam Indonesia

**A Thesis**



By:

**Widya Prasasti Utami**  
**Student Number: 15614017**

**CHEMISTRY EDUCATION STUDY PROGRAM  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
UNIVERSITAS ISLAM INDONESIA  
YOGYAKARTA  
2018**



**THE APPLICATION OF CONTEXTUAL TEACHING LEARNING  
(CTL) BY USING PROJECT AND GUIDED INQUIRY METHODS  
TOWARDS STUDENTS' LEARNING ACHIEVEMENT ON ACID,  
BASE, AND SALT SUBJECT FOR GRADE VII OF SMPN 2  
KARANGANYAR  
THE ACADEMIC YEAR 2017/2018**

**A THESIS**

Presented by:

**Widya Prasasti Utami**  
**Student Number: 15614017**

Has been approved by:

Main Supervisor

( ..... )  
Second Supervisor

Date: .....

( ..... )

Date: .....

Head of Chemistry Education Department  
Faculty of Mathematics and Natural Sciences  
Universitas Islam Indonesia

( ..... )

**THE APPLICATION OF CONTEXTUAL TEACHING LEARNING  
(CTL) BY USING PROJECT AND GUIDED INQUIRY METHODS  
TOWARDS STUDENTS' LEARNING ACHIEVEMENT ON ACID,  
BASE, AND SALT SUBJECT FOR GRADE VII OF SMPN 2  
KARANGANYAR  
THE ACADEMIC YEAR 2017/2018**

by:

**Widya Prasasti Utami**  
**Student Number: 15614017**

Has been defended in front of the Board of Thesis Examiners  
Chemistry Education Study Program  
Faculty of Mathematics and Natural Sciences  
Universitas Islam Indonesia

Date: .....

Board of Examiners

Signature

1. ....	.....
2. ....	.....
3. ....	.....
4. ....	.....

Dean of the Faculty of Mathematics and Natural Sciences  
Universitas Islam Indonesia

( ..... )

## DEDICATION



*The most valuable humans are those who are useful to others*

*(H.R. Bukhari)*

*"Verily this knowledge is religion, therefore think about who you get your religious information from." (HR. Imam Ahmad)*

*Gratefully and thankfully, I dedicate this thesis to:*

- 1. The Almighty God, Allah SWT. Please accept it as an act of my devotion.*
- 2. My parents, Ngadirun and Sumi'ah. I thank them for their love and for constantly praying, encouraging, and supporting me throughout my life, and for being true heroes in the world.*
- 3. My brother Syaiful Munir, my younger siblings Zunita Istimrorur Ismah and Syahrul Mubarak, and my families who are the source of my spirit and motivation.*
- 4. All of my friends of Chemistry Education batch 2015, who have so far offered assistance. May this friendship never end forever.*
- 5. The Chemistry Education Study Program of Universitas Islam Indonesia, as well as all other contributors.*
- 6. UII, my alma mater, that has provided me with knowledge, teaching, facilities, experience, and family throughout my study.*

***Jazakumullahu Khairan Katsiran***

## ACKNOWLEDGEMENT

*Assalamu'alaikum Wr. Wb.*

All praises and gratitude be to Allah, the Almighty God, for His grace and guidance in helping the author to finish the thesis with the title ..... Peace be upon the beloved the last prophet Muhammad SAW, his family, friends, and followers until the end of time.

This thesis was written as one of the requirements for obtaining a Bachelor of Education (S.Pd.) at the Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia. On this occasion, the author would like to express his gratitude to all those who have helped, guided, and provided useful suggestions and information. The author's gratitude goes to:

1. .... as the Dean of the Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia.
2. .... as the Head of Chemistry Education Study Program, Faculty of Mathematics and Natural Sciences, Universitas Islam Indonesia.
3. .... as the main Supervisor who has offered assistance and supervision to the author throughout the preparation of this thesis.
4. .... as the second Supervisor who has offered assistance and supervision to the author throughout the preparation of this thesis.

The author recognizes that there are still numerous flaws in this thesis and that it is far from excellent. As a result, the author welcomes constructive criticism and ideas for improving this thesis. Hopefully, the author and others who need it will profit from this thesis. Amien.

*Wassalamu'alaikum Wr. Wb.*

Yogyakarta, December 2018

The Author

**PENERAPAN MODEL PEMBELAJARAN *PROBLEM BASED LEARNING* (PBL) BERWAWASAN *RICH CONTEXT* TERHADAP KEMAMPUAN METAKOGNITIF DAN PRESTASI BELAJAR SISWA KELAS XI SMA NEGERI 2 SLEMAN YOGYAKARTA**

**Ismatul Khaliyah<sup>1</sup>,**

<sup>1</sup>Mahasiswa Prodi Pendidikan Kimia, Universitas Islam Indonesia, Yogyakarta  
(ismaaliya1@gmail.com)

**INTISARI**

Penelitian ini bertujuan untuk mengetahui perbedaan 1) kemampuan metakognitif 2) prestasi belajar siswa ranah pengetahuan 3) prestasi belajar siswa ranah sikap 4) prestasi belajar siswa ranah keterampilan laboratorium dengan penerapan model pembelajaran *Problem Based Learning* berwawasan *Rich Context* di SMA kelas XI. Penelitian ini merupakan penelitian eksperimen. Populasi penelitian adalah seluruh siswa kelas XI SMA Negeri 2 Sleman tahun pelajaran 2017/2018 yang berjumlah 4 kelas. Sampel diambil dengan teknik *purposive sampling* sebanyak 2 kelas. Teknik pengumpulan data melalui metode tes yaitu tes tertulis objektif untuk variabel prestasi belajar ranah pengetahuan dan metode non tes meliputi observasi untuk variabel prestasi belajar ranah keterampilan laboratorium dan angket untuk variabel kemampuan metakognitif dan prestasi belajar ranah sikap. Teknik analisis data menggunakan Statistika *Non Parametric* uji *Mann-Whitney* untuk variabel prestasi belajar ranah pengetahuan, prestasi belajar ranah keterampilan laboratorium dan kemampuan metakognitif sedangkan variabel prestasi belajar ranah sikap menggunakan Statistika *Parametric* uji *Independent Sample T-Test*. Berdasarkan hasil penelitian dapat disimpulkan bahwa: (1) Terdapat perbedaan yang signifikan pada kemampuan metakognitif antara siswa yang mengikuti model pembelajaran PBL berwawasan *Rich Context* dengan siswa yang mengikuti pembelajaran konvensional (2) Tidak terdapat perbedaan yang signifikan pada prestasi belajar siswa ranah pengetahuan antara siswa yang mengikuti model pembelajaran PBL berwawasan *Rich Context* dengan siswa yang mengikuti pembelajaran konvensional (3) Terdapat perbedaan yang signifikan prestasi belajar ranah sikap antara siswa yang mengikuti model pembelajaran PBL berwawasan *Rich Context* dengan siswa yang mengikuti pembelajaran konvensional (4) Tidak terdapat perbedaan yang signifikan pada prestasi belajar siswa ranah keterampilan antara siswa yang mengikuti model pembelajaran PBL berwawasan *Rich Context* dengan siswa yang mengikuti pembelajaran konvensional.

**Kata kunci : *Problem Based Learning* (PBL), Kemampuan Metakognitif, Prestasi Belajar**

**THE IMPLEMENTATION OF PROBLEM-BASED LEARNING (PBL) MODEL  
WITH *RICH CONTEXT* CONCEPT TO METACOGNITIVE ABILITY AND  
LEARNING ACHIEVEMENT OF STUDENTS  
CLASS XI SMA NEGERI 2 SLEMAN  
YOGYAKARTA**

**Ismatul Khaliyah<sup>1</sup>,**

<sup>1</sup>Student Of Chemitry Education, Universitas Islam Indonesia, Yogyakarta  
(ismaaliya1@gmail.com)

**ABSTRACT**

This study aims to determine differences of 1) metacognitive ability and 2) student learning achievement on knowledge domain 3) student learning achievement on attitude domain 4) student learning achievement on skill domain with the implementation of Problem Based Learning learning model with Rich Context concept in class XI. This research was experimental research. The study population was all students of class XI SMA Negeri 2 Sleman in the academic year 2017/2018 that consist of 4 classes. Samples were taken by purposive sampling technique i.e. 2 classes IIS. The data were collected with test method, i.e. objective test for achievement on knowledge domain. Non-test methods were used to i.e. observation was used to collect laboratory skills data and questionnaire for of metacognitive ability and attitude domain. The data were analyzed with the Non-Parametric Statistic Mann-Whitney test for learning achievement on knowledge, laboratory skills domain, and metacognitive ability, while the attitude domain was analyzed with Parametric Statistic Independent Sample T-Test. From the result, it can be concluded that: (1) There was a significant difference in metacognitive ability between students that followed the PBL learning model with Rich Context concept with students that followed conventional learning (2) There was a significant difference in the knowledge domain of student learning achievement between students that followed PBL learning model with Rich Context concept with students that followed conventional learning (3) There was a significant difference on attitude domain of student learning achievement between students that followed PBL learning model with Rich Context concept with students that followed conventional learning (4) There was a significant difference on skills domain of student learning achievement between students that followed PBL learning model with Rich Context concept with students that followed conventional learning.

**Keywords** : *Problem Based Learning (PBL), Rich Context, Metacognitive Ability, Learning Achievement*

Book (Printed and Online)	Writing in Text	References Writing Guidelines
Single Author  Full Name: Suharsimi Arikunto Book Title: Research Procedure - A Practical Approach Publication Year: 2013 Publisher: Rineka Cipta City of Publication: Jakarta	(Arikunto, 2013)  If the argument refers to several sources: (Arikunto, 2013; Purwanto, 2015; Sudjana, 2017)	Arikunto, S., 2013, <i>Research Procedure: A Practical Approach</i> , Jakarta: Rineka Cipta.  Arikunto, S., 2013. <i>Research Procedure: A Practical Approach</i> , Jakarta: Rineka Cipta. <a href="https://www.belajarakuntansi.com/fullbook/artsb129">https://www.belajarakuntansi.com/fullbook/artsb129</a> . Accessed on 23rd of October 2017 at 22.00 WIB.  <b>The E-book must contain a URL that can help in finding the location of the book source</b>
2 Authors	(Borg and Gall, 1983)	Borg, W.R., and Gall, M.D., 1983, <i>Educational Research: An Introduction</i> , Fifth Edition, New York: Longman.  Benny, A.P., and Dewi, P.P., 2005. <i>Ragam Media dalam Pembelajaran</i> , Jakarta: PAU-PPAI Universitas Terbuka.
3 Authors or more	(Gorman, et al., 2017)	Gorman, G., Hanlon, D., dan King, W., 2017, <i>Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-Year Literature Review</i> , New York: Longman.
Translated book	(Slavin, 2008)	Slavin, R.E., 2008, <i>Cooperative Learning: Theory, Research, and Practice</i> , Translated by Nurulita Yusron, Second Edition, Bandung: Nusa Media.



Book (Printed)	Writing in Text	References Writing Guidelines
Several articles from the same author	(Arikunto, 2013)  (Arikunto, 2016)	Arikunto, S., 2013, <i>Prosedur Penelitian Suatu Pendekatan Praktik</i> , Jakarta: Rineka Cipta.  _____, 2016, <i>Prosedur Penelitian Suatu Pendekatan Teoritis</i> , Jakarta: Rineka Cipta.

Book (Printed and Online)	Writing in Text	References Writing Guidelines
Several articles that are published in the same year	(Rahmad, 2014a).  (Rahmad, 2014b).  According to Rahmad (2014b).....	Rahmad, F., 2014a, <i>Akuntansi dalam Pandangan Umum</i> , Bandung: Sarjana Press.  _____, 2014b, <i>Akuntansi Berbasis IFRS</i> , Bandung: Sarjana Press.
Thesis, Dissertation, and Research Report	Education is important ... (Adyaksa, 2016)	Adyaksa, F., 2014, Analisis Moral dan Spiritual terhadap Perilaku Kecurangan, <i>Skripsi</i> , Prodi Ekonomi dan Akuntansi, Universitas Islam Indonesia.
Proceedings	(Adyaksa, 2016).  According to Adyaksa (2016).....	Adyaksa, F., 2016, Analisis Moral dan Spiritual terhadap Perilaku Kecurangan, <i>Prosiding</i> , Simposium Nasional Akuntan XVIII, Lampung, Indonesia, 23-25 <sup>th</sup> of August 2016.

Journal (Printed and Online)	Writing in Text	References Writing Guidelines
Single Author	(Prabowo, 2016)	Prabowo, H.Y., 2016, Sight Beyond Sight: Foreseeing Corruption in the Indonesian Government through Behavioral Analysis, <i>Journal of Financial Crime</i> , 23(2): 289–316.
2 Authors	(Kholid and Bachtiar, 2015)  Kholid and Bachtiar (2015) stated that ...	Kholid, M.N., and Bachtiar, A., 2015, Good Corporate Governance dan Kinerja Maqasid Syariah Bank Syariah di Indonesia, <i>Jurnal Akuntansi dan Auditing Indonesia</i> , 19(2): 126–136.
3 Authors or More	(Cahaya, et al., 2016)	Cahaya, F.R., Porter, S., and Tower, G., 2016, Coercive Media Pressures on Indonesian Companies' Labour Communication, <i>International Journal of Critical Accounting</i> , 8(2): 95–117.  <b>Notes:</b> <b>The journals selected are those that have been published in the previous ten years.</b>

The Government Publication	Writing in Text	References Writing Guidelines
National Education Department (Depdiknas)  Constitution	(Depdiknas, 2009)  According to the Law No. 5 on Public Accountant 2011, it stated that...	Depdiknas, 2009, <i>Analisis Butir Soal</i> , Jakarta: Depdiknas.  The Law of the Republic of Indonesia No.5, 2011 on Public Accountant.

Website	Writing in Text	References Writing Guidelines
Article taken from the website <a href="http://www.bsnp-indonesia.org">www.bsnp-indonesia.org</a>	(BSNP, 2018)	BSNP, 2018, Penyelarasan Standar Nasional Pendidikan dan Sistem Akreditasi, accessed from <a href="http://www.bsnp-indonesia.org/2018/10/10/penyelarasan-standar-nasional-pendidikan-dan-sistem-akreditasi/">www.bsnp-indonesia.org/2018/10/10/penyelarasan-standar-nasional-pendidikan-dan-sistem-akreditasi/</a> on 12 <sup>th</sup> of December 2018.

## REFERENCES

- Adyaksa, F., 2014, Analisis Moral dan Spiritual terhadap Perilaku Kecurangan, *Skripsi*, Prodi Ekonomi dan Akuntansi, Universitas Islam Indonesia.
- \_\_\_\_\_, 2016, Analisis Moral dan Spiritual terhadap Perilaku Kecurangan, *Prosiding*, Simposium Nasional Akuntansi XVIII, Lampung, Indonesia, 23-25 Agustus 2016.
- Arikunto, S., 2013, *Prosedur Penelitian Suatu Pendekatan Praktik*, Jakarta: Rineka Cipta.
- BSNP, 2018, Penyelarasan Standar Nasional Pendidikan dan Sistem Akreditasi, diakses dari [www.bsnp-indonesia.org/2018/10/10/penyelarasan-standar-nasional-pendidikan-dan-sistem-akreditasi/](http://www.bsnp-indonesia.org/2018/10/10/penyelarasan-standar-nasional-pendidikan-dan-sistem-akreditasi/) tanggal 12 Desember 2018.
- Borg, W.R., dan Gall, M.D., 1983, *Educational Research: An Introduction*, Fifth Edition, New York: Longman.
- Cahaya, F.R., Porter, S., dan Tower, G., 2016, Coercive Media Pressures on Indonesian Companies' Labour Communication, *International Journal of Critical Accounting*, 8(2): 95–117.
- Depdiknas, 2009, *Analisis Butir Soal*, Jakarta: Depdiknas.
- Gorman, G., Hanlon, D., dan King, W., 2017, *Some Research Perspectives on Entrepreneurship Education, Enterprise Education and Education for Small Business Management: A Ten-Year Literature Review*, New York: Longman.
- Kholid, M.N., dan Bachtiar. A., 2015, *Good Corporate Governance dan Kinerja Maqasid Syariah Bank Syariah di Indonesia*, *Jurnal Akuntansi dan Auditing Indonesia*, 19(2): 126–136.
- Rahmad, F., 2014a, *Akuntansi dalam Pandangan Umum*, Bandung: Sarjana Press.
- \_\_\_\_\_, 2014b, *Akuntansi Berbasis IFRS*, Bandung: Sarjana Press.
- Slavin, R.E., 2008, *Cooperative Learning: Teori, Riset, dan Praktik*, Diterjemahkan oleh Nurulita Yusron, Edisi Kedua, Bandung: Nusa Media.
- Undang-Undang Republik Indonesia No.5 Tahun 2011 tentang Akuntan Publik.