

**DEVELOPING ENGLISH LEARNING MATERIALS FOR THE STUDENTS OF
MATHEMATICS EDUCATION STUDY PROGRAM AT IAIN PALOPO**

A THESIS

*Submitted to the English Education Program of Tarbiyah and Teachers Training Faculty
of State Islamic Institute of Palopo as Partial Fulfillment of
Requirements for S.Pd Degree in English Education*



By

JENNI RAMADHANI PUTRI AYU L

16 0202 0094

**ENGLISH EDUCATION STUDY PROGRAM
TARBIYAH AND TEACHERS TRAINING FACULTY
STATE ISLAMIC INSTITUTE OF PALOPO**

2020

IAIN PALOPO

**DEVELOPING ENGLISH LEARNING MATERIALS FOR THE STUDENTS OF
MATHEMATICS EDUCATION STUDY PROGRAM AT IAIN PALOPO**

A THESIS

*Submitted to the English Education Program of Tarbiyah and Teachers Training Faculty
of State Islamic Institute of Palopo as Partial Fulfillment of
Requirements for S.Pd Degree in English Education*



By

JENNI RAMADHANI PUTRI AYU L

16 0202 0094

Supervised By:

- 1. Wahibah, S.Ag., M.Hum**
- 2. Andi Tenrisanna Syam., S.Pd., M.Pd**

**ENGLISH EDUCATION STUDY PROGRAM
TARBIYAH AND TEACHERS TRAINING FACULTY
STATE ISLAMIC INSTITUTE OF PALOPO**

2020

IAIN PALOPO

THESIS APPROVAL

This thesis, entitled “**Developing English Learning Materials for the Students of Mathematics Education Study Program at IAIN Palopo**” written by **Jenni Ramadhani Putri Ayu Lestari, Reg. Number 16 0202 0094**, English Language Education S1 Study Program of Tarbiyah and Teacher Training Faculty at State Islamic Institute of Palopo, has been examined and defended in **MUNAQASYAH** session which is carried out on **Monday, December 21st 2020 M**, coincided with **Jumada I 6th 1442 H**. It is authorized and acceptable as partial fulfillment of requirement for S.Pd, degree in English language teaching.

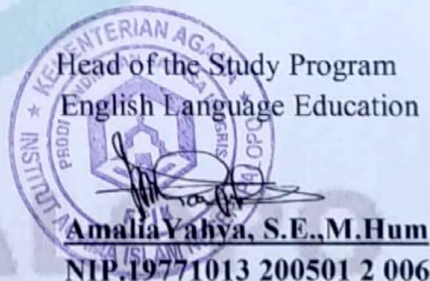
Palopo, December 21st 2020 M
Jumada I 6th 1442 H

COMMITTEE OF EXAMINATION

- | | | |
|--------------------------------------|-----------------|---------|
| 1. Wahibah, S.Ag., M.Hum | Trial Chairman | (.....) |
| 2. Andi Tenrisanna Syam, S.Pd., M.Pd | Trial Secretary | (.....) |
| 3. Amalia Yahya, S.E., M.Hum | Examiner I | (.....) |
| 4. Dr. Magfirah Thayyib, S.S., M.Hum | Examiner II | (.....) |
| 5. Wahibah, S.Ag., M.Hum | Consultant I | (.....) |
| 6. Andi Tenrisanna Syam, S.Pd., M.Pd | Consultant II | (.....) |

Approved by;

Rector of IAIN Palopo
p.p. The Dean of Tarbiyah and
Teacher Training Faculty



CONSULTANT APPROVAL

Thesis Entitled: **Developing English Learning Material for the Students of
Mathematic Education Study Program of IAIN Palopo**

Written By :

Name : Jenni Ramadhani Putri Ayu Lestari
Reg. Number : 16 0202 0094
Faculty : Tarbiyah and Teacher Training
Study Program : English Education

Has been corrected and approved to be examined.

Palopo, September 2020

Consultant I



Wahibah, S.Ag., M.Hum

NIP. 19690504 200312 2 002

Consultant II



Andi Tenrisanna Syam, S.Pd., M.Pd

NIP. 19860423 201503 2 005

IAIN PALOPO

NOTA DINAS PEMBIMBING

Lamp : - Palopo, September 2020

Hal : Skripsi

Kepada Yth.

Dekan Fakultas Tarbiyah dan Ilmu Keguruan

Di-

Tempat

Assalamu'alaikum Wr. Wb

Setelah melakukan bimbingan, baik dari segi isi, bahasa, maupun teknik penulisan terhadap skripsi mahasiswa tersebut di bawah ini :

Nama : Jenni Ramadhani Putri Ayu Lestari

Nim : 16 0202 0094

Prodi : Pendidikan Bahasa Inggris

Fakultas : Tarbiyah dan Ilmu Keguruan

Judul : Developing English Learning Material for the Students of Mathematic Education Study Program of IAIN Palopo

Menyatakan bahwa skripsi tersebut sudah layak diajukan untuk diujikan.

Demikian untuk diproses selanjutnya.

Wassalamu'alaikum Wr. Wb

Pembimbing I



Wahibah, S.Ag., M.Hum

NIP. 19690504 200312 2 002

IAIN PALOPO

NOTA DINAS PEMBIMBING

Lamp : - Palopo, September 2020

Hal : Skripsi

Kepada Yth.

Dekan Fakultas Tarbiyah dan Ilmu Keguruan

Di-

Tempat

Assalamu'alaikum Wr. Wb

Setelah melakukan bimbingan, baik dari segi isi, bahasa, maupun teknik penulisan terhadap skripsi mahasiswa tersebut di bawah ini :

Nama : Jenni Ramadhani Putri Ayu Lestari

Nim : 16 0202 0094

Prodi : Pendidikan Bahasa Inggris

Fakultas : Tarbiyah dan Ilmu Keguruan

Judul : Developing English Learning Material for the Students of Mathematic Education Study Program of IAIN Palopo

Menyatakan bahwa skripsi tersebut sudah layak diajukan untuk diujikan.

Demikian untuk diproses selanjutnya.

Wassalamu'alaikum Wr. Wb

Pembimbing II



Andi Tenrisanna Svam, S.Pd., M.Pd

NIP. 19860423 201503 2 005

IAIN PALOPO

EXAMINER APPROVAL

Thesis Entitled: **Developing English Learning Material for the Students of
Mathematic Education Study Program of IAIN Palopo**

Written By :

Name : Jenni Ramadhani Putri Ayu Lestari
Reg. Number : 16 0202 0094
Faculty : Tarbiyah and Teacher Training
Study Program : English Education

Has been corrected and approved to be Munaqasyah examined.

Palopo, 15th December 2020

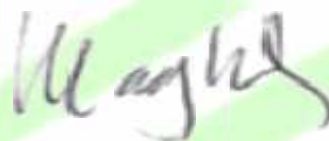
Examiner I



Amalia Yahya, S.E., M.Hum

NIP. 19771013 200501 2 006

Examiner II



Dr. Maghfira Thayyib, S.S., M.Hum

NIP. 19850719 201801 2 001

IAIN PALOPO

PRONOUNCEMENT

Signature by:

Name : Jenni Ramadhani Putri Ayu Lestari

Reg. Number : 16 0202 0094

Study Program : English Language Education

Faculty : Tarbiyah and Teacher Training

With all awareness and consciousness, the research who signed below, pronounces that this is literary work of research herself. If it is proven that this Thesis is duplicated, copied or made by other people as whole or partially, it causes this thesis is invalid for law.

Palopo, 21st Desember 2020



Researcher

Jenni Ramadhani Putri A.L
16 0202 0094

IAIN PALOPO

ACKNOWLEDGEMENT

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Alhamdulillah Rabbil Alamin, all praises and thankful to Almighty God Allah SWT who has been given us mercies and blessing so that the researcher could finish this thesis which is entitled of “Developing English Learning Material for Mathematics Students of IAIN Palopo”. This research becomes one the partial fulfillment of requirements for S.Pd degree in English Education of IAIN Palopo. To the prophet Muhammad SAW may peace always be with him.

The researcher also would like to express her respect and thankful toward her father Hasan Basri and her mother Bachria Kasim for all the sacrifices, prayers, motivation, and financial-supports so that the researcher could finish her thesis in time.

Furthermore, the researcher realizes that the existence of this thesis receiving much advice, guidance, encouragements and comments from many people. Therefore, the researcher would like to express thankful to:

1. Dr. Abdul Pirol, M.Ag as the rector of IAIN Palopo who always support the researcher during the year of study at IAIN Palopo.
2. Dr. Nurdin K, M.Pd as the dean of Tarbiyah who has given his support in writing this thesis.
3. Amalia Yahya, S.E. M.Hum, as the head of English Study Program of (IAIN) Palopo
4. Wahibah, S.Ag., M.Hum, as the researcher’s first consultant who has taught, helped, advised, and guided the researcher during her study at IAIN Palopo.

5. Andi Tenrisanna Syam, S.Pd.,M.Pd, as the second consultant who has given suggestions, explanations, corrections, guidance, and some ideas until this thesis finish.
6. All the lecturers in IAIN Palopo especially the lecturers of English Department who have given the researcher knowledge, motivation, and attention in learning language. And also for all staffs in IAIN Palopo who have given help to the researcher.
7. All my validators of this research, Mr. Yuda Satria N., S.Pd., M.Si.P, Mrs. Lisa Aditya D.M., M.Pd, Mrs. Dr.Magfirah Thayyib, M.Hum, and Mrs. Fadliyah Rahmah Muin, S.Pd., M.Pd who has given the researcher many positives input, motivation, correction , and social values during the process of this research.
8. Special thanks to the researcher's siblings. Her sister Dewi Sartika HB and her brother Budi Utomo Satria Putra, S.M as the motivator and reminder for researcher during her study.
9. Special thanks to the researcher's friends, her "24/7" team *Ikaatmi, Anissa'ul, Ulvia ramadhani, Tirta , and Ira septiani* who always help, support, give jokes and smiles to the researcher in every place and every situation.
10. Special thanks to all her classmates, her "BIG Solidarity" *Bahrul, Arman, Rahadi, Ica, Wahida, Vera, Ikaa, Tirta, Nuya*, and all of her friends in English Department 16'.
11. Biggest thankful to her communities and organization during her study such as English students association (HMPS-BIG), Iain Palopo English Debating Society (IPEDS), Peace Generation, Ikatan Mahasiswa Bahasa dan Sastra Inggris Indonesia (IKAMABSII), Himpunan Pramuwisata Indonesia wilayah

Sulawesi Selatan, and Ikatan Ana'Dara Kalolo Kota Palopo (TANRALOLO), E-YouC who has improved her leadership and soft skill so that the researcher experienced many things during the year.

12. All of support from the researcher's junior, students of mathematic study program and all of the researcher's seniors who cannot be mentioned one by one.

13. Special for everybody who has given the researcher's spirit, motivation, support, and encourage finishing this thesis till this time. Finally the researcher hopes this research will be useful for the readers. Then, the researcher also expects some suggestion and critics to improve this thesis.

Palopo, 4 Desember 2020

Jenni Ramadhani Putri Ayu Lestari

IAIN PALOPO

TABLE OF CONTENTS

TITLE PAGE	i
THESIS APPROVAL.....	ii
CONSULTANT APPROVAL.....	iii
NOTA DINAS PEMBIMBING	iv
EXAMINER APPROVAL	vi
PRONOUNCEMENT	vii
ACKNOWLEDGEMENT	viii
TABLE OF CONTENT.....	xi
LIST OF FIGURE	xiv
LIST OF CHARTS	xv
LIST OF TABLE	xvii
LIST OF APPENDIXES	xviii
ABSTRACT	xix
CHAPTER I. INTRODUCTION	
A. Background	1
B. Research Question	4
C. Objective of the Study	4
D. Significance of the Study	4
E. Scope of the Research	5
F. Operational Definition	5
CHAPTER II. REVIEW OF RELATED LITERATURE.....	
A. Review of Related Research Findings	6
B. Some for Pertinent Ideas	9
1. English for Specific Purposes	9

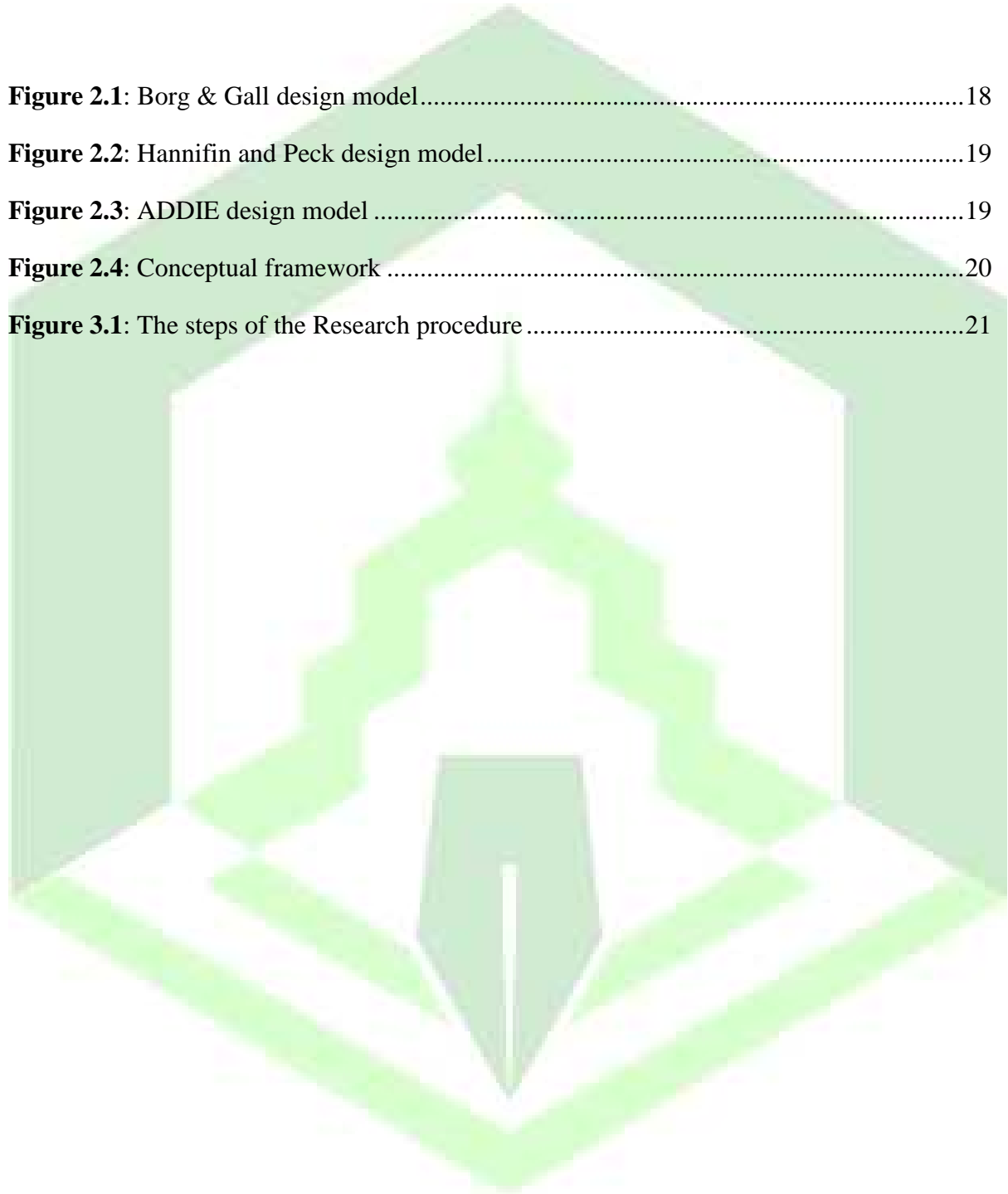
2. The Curriculum of Mathematics Study Program of IAIN Palopo.....	12
3. Syllabus Design	12
4. Syllabus of Mathematics Study Program Curriculum	14
5. Objectives	15
6. Competency	15
7. Indicator	15
C. Materials Development.....	15
D. Task-Based Language Teaching (TBLT)	16
E. Instructional Design Models	17
a. Borg & Gall Design Model.....	17
b. Hannifin and Peck Design Model.....	18
c. ADDIE	19
F. Conceptual Framework.....	20
CHAPTER III. RESEARCH METHOD.....	
A. Development Model.....	22
B. Research Procedures	22
C. Population and Sample	24
D. Instrument of the Research	24
a. Questionnaire	24
b. Documentation list	24
c. The Expert Judgment Questionnaire	24
d. For The Evaluation Questionnaire	25
E. Technique of Data Analysis.....	25
1. Data Analysis in Documentation list	25
2. Data Analysis in Questionnaire	25
3. Data Analysis of Expert Judgment and Students' Perception	26
CHAPTER IV: FINDINGS AND DISSCUSSIONS.....	
A. Research Findings	26
1. Result of Need Analysis.....	28
1) Result of Questionnaires.....	28
a. Target need	28
1. Necessities.....	28

2. Lacks	30
3. Wants	33
b. Learning Need	35
e. Input	35
f. Activity	41
g. Setting	44
h. The Role of Lecturer	46
i. The Role of Students.....	47
2. The Course Grid.....	48
3. The First Draft of Material.....	48
4. Material Validations.....	50
5. The Second Draft of Material	54
6. Students' Perception on Learning Material	55
B. Discussions	57
CHAPTER V: CONCLUSIONS AND SUGGESTIONS	
A. Conclusions	62
1. Result of Book Quality.....	62
2. The Appropriate English Learning Material for Mathematic	62
B. Suggestions	61
a. To The Lecturer	61
b. To The Other Researchers.....	62
BIBLIOGRAPHY	64

IAIN PALOPO

LIST OF FIGURE

Figure 2.1: Borg & Gall design model.....	18
Figure 2.2: Hannifin and Peck design model.....	19
Figure 2.3: ADDIE design model	19
Figure 2.4: Conceptual framework	20
Figure 3.1: The steps of the Research procedure	21



IAIN PALOPO

LIST OF CHARTS

Chart 4.1. Result of the Students' Purpose in Learning English	27
Chart 4.2. Result of the Students' Necessities after graduated.....	28
Chart 4.3. Result of the Students' Level Ability	29
Chart 4.4. Result of the Students' Lacks in Speaking Skill.....	30
Chart 4.5. Result of the Students' Lacks in Reading Skill	31
Chart 4.6. Result of the Students' Lacks in Writing Skill	31
Chart 4.7. Result of the Students' Lacks in Listening Skill	32
Chart 4.8. Result of the Students' Wants on the Most Wanted Skill	33
Chart 4.9. Result of the Students' Wants in Writing Skill	34
Chart 4.10. Result of the Students' Wants in Speaking Skill	35
Chart 4.11. Result of the Students' Input in Listening Skill	36
Chart 4.12. Result of the Students' Input in Speaking Text.....	36
Chart 4.13. Result of the Students' Input in Reading Skill	37
Chart 4.14. Result of the Students' Input in writing Skill	38
Chart 4.15. Result of the Students' length of the texts in Speaking Text.....	38
Chart 4.16. Result of the Students' length of the texts in Reading Text	39
Chart 4.17. Result of the Students' Input in Mathematic Topics	40
Chart 4.18. Result of the Students' activity in Speaking Skill	40
Chart 4.19. Result of the Students' Activity in Reading Skill.....	41
Chart 4.20. Result of the Students' Activity in writing Skill	42
Chart 4.21. Result of the Students' Activity on Vocabulary Aspect.....	43
Chart 4.22. Result of the Students Most Do Exercise	43
Chart 4.23. Result of the Students' setting about Teaching Media	43
Chart 4.24. Result of the Students Most favorite Place.....	44

Chart 4.25. Result of the Lecturer' Role45

Chart 4.26. Result of the Students' Role46



IAIN PALOPO

LIST OF TABLE

Table 4.1. Result of the instrument material validation	27
Table 4.2. Result of the instrument language validation.....	27
Table 4.3. Result of the expert design on material validation.....	28
Table 4.4. Result of the expert material on material validation	28
Table 4.5. Result of the expert language on material validation.....	28
Table 4.6. Result of material expert correction.....	29
Table 4.7. Result of language expert correction.....	29
Table 4.8. Result of lay-out expert correction.....	29
Table 4.9. Result of the Students' Perception	30



IAIN PALOPO

LIST OF APPENDIXES

APPENDIX I: Research Product of designed Materials

APPENDIX II: Blueprint of Need Analysis

APPENDIX III: Need Analysis Questionnaire

APPENDIX IV: Expert Judgment Questionnaire

APPENDIX V: Syllabus of English for Mathematics

APPENDIX VI: The Result of Expert Judgments of Materials

APPENDIX VII: Students' Perspective Questionnaire



IAIN PALOPO

ABSTRACT

JENNI RAMADHANI PUTRI AYU LESTARI, 2020. “Developing English Learning Materials for Mathematics Education Study Program at Iain Palopo”. A Thesis of English Study Program, Tarbiyah and Teacher Training Faculty, State Islamic Institute of Palopo. Under supervisor Wahibah, S.Ag., M.Hum as the first consultant and Andi Tenrisinna Syam S.Pd., M.Pd as the second consultant.

This research aims to develop the English Learning Materials for Mathematics Education Study Program at Iain Palopo. Then, the researcher involved 29 students of the sixth-semester student in Mathematics study program as the subject of this research. Furthermore, the researcher applied Research and Development (R&D) method with the ADDIE Model to analyze the students' problems toward their English learning materials and their learning needs. The data were analyzed qualitative descriptive approach. Besides, the instruments of the research were four questionnaires applied to collect the data they are: 1) Questionnaire of Need Analysis. 2) Questionnaire of Expert Judgment. 3) Questionnaire of Students' Validating. 4) Questionnaire of Students' Perception Furthermore, the findings indicated that all students were at the basic level. Then, the researcher designed English for Mathematic book that contains three chapters. The value from expert's validation showed that the layout expert was 4.72, the material expert was 4.70 and language expert was 3.85. So, the average of the mean is 4.42, and this category was very good. The result of the questionnaire in students' perception answered *Strongly Agree* 4.30, and *Agree* 4.13.

Keywords: *Basic English, English learning material, mathematic students*



IAIN PALOPO

CHAPTER I

INTRODUCTION

A. Background

This study was English for Specific Purposes, which refers to teaching English for specified learners who study for an absolute majority. It provided teaching and learning English led related to learners' need in the majority to make it easy to study English lessons. Likewise, English for Specific Purposes is an umbrella term that conveys the teaching of English to students who are learning the language for a particular work or study-related reason. Meanwhile, English for Specific Purposes was more emphasis on students who learned a specific skill in learners' study and gave a significant contribution to learning English for a particular skill¹. Additionally, English for specific purposes was not a product. Rather, it was an approach to language learning which is based on and directed by learners' specific a real reason of learning identified from need analysis².

That is why having proper learning materials helped the students to be more focused on their majority. In this case, it needed to increase proficiency in English, especially for the students who are studying mathematics. However, the primary goal of the students is they expected to the materials' preferences, terms of Mathematics in English, ways of talking and writing (word problem, writing a solution, giving an explanation) and general English, such as vocabulary and

¹ Brian Tomlinson, *Developing Material for Language Teaching* (New York: Cromwell Press, 2003).

² irene rahmaniar, "designing esp learning materials for eleventh grade students of accounting program at vocational high schools based on hutchinson and waters'(1987) learning-centered approach" (n.d.).

grammar are more preferred. When the researcher observed the students of mathematics, the researcher found that there were some difficulties faced by the students in understanding English for mathematics. Besides, the students were not able to express their idea and have limited words in English.

Furthermore, the composing of English material from the basic low up to the specific purpose for mathematic must be considered by the lecturer. The students are very limited in speaking and writing skills. The reason why this research was essential, the lecturers and the students of the mathematics study program who have been teaching and learning in Indonesia expected to be able to perform effectively in English. Both lecturers and students mostly used textbooks in which the content of the explanation is in English. It means that they need to learn English first to understand the mathematics subject. On the one hand, students must learn mathematics in English, and on the other hand, the lecturer must teach mathematics in English. According pointed out what teachers know and can do, affect all the teaching practice³.

Those conditions described above give an overview that the students of mathematics education need the suitable learning materials of English for them that can support the students' learning and teaching process in the classroom. These reasons attract the researcher to develop the learning material to support the learning process of mathematics education students of IAIN Palopo.

IAIN PALOPO

³ Ambigapathy Pandian and Revathi Ramiah, "Mathematics and Science in English: Teacher Voice," *The English Teacher* 33, no. 11 (2004).

There are some theses same to the researcher in Hamid, Jabu, and Saliya. The thesis that showed some critical aspects have revealed through need analysis which was very beneficial for designing the course such as The needs of the students comprise of learning need and target need. Learning needs include; English language skills, learning wants, learning activities, materials preferences in terms of approaches and strategies in learning English for Specific Purposes in the classroom setting. In terms of language skills, the four language or integrated skills; listening, speaking, reading, and writing sometimes used in the classroom. This method, the same as the researcher does. Another thesis was Ali about designing learning material of English at Pilot international standard school (RSBI) Bantul Manunggal elementary school. It also found that the students used English for mathematics vocabulary and expression when they communicate their ideas with their teacher and friend in the classroom. However, the students were lack of vocabulary and terms of English for mathematics subjects to express their opinions. It same with the researcher's problem is Mathematic students.

The students of mathematics education have to master Basic English since it is needed for mathematics education as well as the development of terms of mathematics in English. There are several problems that the researcher found. First, there are some misunderstandings about the use of Basic English vocabulary. In this case, those vocabularies are not relevant toward their communicative purpose, and also it makes they don't understand the meaning of the text. Second, the error speaking terms English in the mathematic subject, which makes the students have an incorrect way of pronouncing the word. The

last, all students viewed that the English materials are too difficult for the beginner. Therefore, they cannot have a full understanding of their material well. Besides, there are still aspects that to developed, as the references for English for mathematics education book and another.

B. Research Question

The identification of the problems led the researcher to formulate the problem as a research question as follows:

"What are the appropriate and valid English learning materials for the mathematics education study program of IAIN Palopo?"

C. The objective of the Research

The objective of the research were to develop the appropriate and valid English learning materials for mathematics education students of IAIN Palopo.

D. Significance of the Research

This result of this Research expected to be useful as follows:

1. Theoretically, this research contributed to the Development of ESP (English for Specific Purpose), mostly English materials for Mathematics education study Program.
2. Practically, This Research is useful for :
 - a) The lecturer, it was expected manage and arrange an appropriate class and make it simple to teach.

- b) Students would be able to have a students' book that helps them to increase their English for mathematics skills.
- c) The researcher would be able to make useful students book appropriate for mathematic students of IAIN Palopo that can be referenced for the next researcher in designing the next product.

E. Scope of the Research

The researcher has developed English learning mathematics materials for mathematic Students of IAIN Palopo. The researcher used Research and Development method to establish the materials on students' task books. Besides that, the researcher will use the ADDIE model.

F. Operational Definition

English Specific Purpose: developing English materials for Mathematics education study Program.

English learning material: the whole materials are needed by the teacher instructor or lecturer in implementing teaching and learning activity. It could be written and spoken materials. The written materials consist of analyzing the content of the article, task, vocabulary, expressing an idea through the text, and so forth. Meanwhile, the spoken materials consist of dialogue and explaining some lessons.

IAIN PALOPO

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Review Of Related Research Findings

There are some relevant researcher related to the learning material design that is explained here. They were:

- 1) Hamid, Jabu, and Saliya (2018) Need Analysis of English Learning Materials for International Class Program (ICP) of the Mathematics Department at State University of Makassar⁴.

The finding of the research showed that the results of the research were preliminary observations show that there are some problems faced by students when they learn mathematics through English. Based on this research, these may be: lack of materials related to English for mathematics, some lecturers do not use English in the teaching and learning process, mathematics' technical terms which could be problematic including homonyms and synonyms, etc. The word has a similar meaning. It needs deep understanding to decide the correct word for a specific context.

The relevant of this research was researcher have the same techniques of data collections, such as a questionnaire. The difference between Jabu's research and this research is Jabu talked about need analysis, which the research employed quantitative and qualitative research method in analyzing learning needs, target

⁴ Indah Zulfitri Hamid, Baso Jabu, and Kisman Saliya, "Need Analysis of English Learning Materials for International Class Program (ICP) of Mathematics Department at State University of Makassar" (n.d.).

needs, and suggested syllabus. Jabu researched the third-semester student of the mathematics department, which consists of 30 students, lecturer, and graduates of International Mathematics Education.

- 2) Istiandaru, Istihapsari, Setyawan (2018) Developing English learning device for the subject of English for Mathematics at Ahmad Dahlan University⁵.

The results of this research showed that the developed a learning device for the subject of English for Mathematics, which is valid and practical. The validity refers to the compatibility of the learning device with the expected students' competence while the practicality is related to the successful implementation of the device. The tool developed here were syllabus, mathematics dictionary, and test. This research adopted the R&D model by Plomp, which consists of stages: (1) initial investigation, (2) design, (3) construction, (4) test, Evaluation, and revision. In the initial investigation stage, the research found that the device needed for the subject shall accommodate the integration of reading, writing, listening, and speaking ability in the field of mathematics education. Therefore in the design and construction stages, this research successful in producing the prototype of the syllabus, mathematics dictionary, and test.

Furthermore, this research addressed the prototype to the valuator and got feed that the aspect of reading needs to strengthen in the scope of mathematics education. The results of the rest of the elements are excellent and can be tested.

⁵ Afit Istiandaru, Vita Istihapsari, and Fariz Setyawan, "Pengembangan Perangkat Perkuliahan English for Mathematics Bagi Mahasiswa Pendidikan Matematika," in *Prosiding Seminar Nasional Pendidikan Matematika Etnomatnesia*, 2018.

Further, overall the device got a score of 4.64, which means valid. The students' response shows that 66.7% response positively, which means that the tool was practical.

The related of this research was the researcher has the same subject for mathematic students. It is developing an English learning device, especially in mathematics, but the purpose is different. It is creating an English learning device. The research designed was syllabus, mathematics dictionary, and test. The subject accommodates the integration of reading, writing, listening, and speaking ability in the field of mathematics education are things that the researcher will conduct for student's books. Istiandaru used the Plomp method and researched on second and the sixth-semester student of mathematics.

- 3) Ali (2013) Designing learning material of English for mathematics for the fourth-grade students of Pilot international standard school (RSBI) Bantul Manunggal elementary school.

The result of this research was Research and Development (R&D). This research consisted of a need survey, designing the materials, evaluating the first draft, revising the first draft, implementing the second draft, and writing the final draft of materials. The instruments of the data collection were questionnaires, interviews, and observation, which data were qualitative and quantitative.

The result of the research showed that the target of the students in learning English for mathematics was to pass the examination of the subject. Automatically, the students have to understand vocabulary and expressions related to English for mathematics. It also found that the students used English for

mathematics vocabulary and word when they communicate their ideas with their teacher and friend in the classroom. However, the students were lack of vocabulary and expression of English for mathematics subjects to share their thoughts. They got difficulties in finding the most appropriate vocabulary to express their ideas and expressing their ideas in a written text.

In this previous study, the researcher has the same purpose as this research as those two researchers' purposes. It is Developing material, especially in mathematics, but the materials are different. The research about need analysis in English learning materials to designs a syllabus for mathematic study programs. But for the second research, they point out some developing English material describe that is useful to become the source for another analysis. The instruments of the data collection were questionnaires, interviews, and observation to know the student's needs. The difference between Ali's research and the researcher is objective the research for elementary school.

B. Some Pertinent Ideas

1. English for Specific Purposes

ESP (English Specific Purpose) as a type of ELT (English Language Teaching) defined it as: Goal-oriented language learning that means the student has a specific goal that is going to be attained⁶.

Additionally, learners know modifying why they are learning a language, "which means a great advantage on both sides of the process

⁶ Pauline C. Robinson, *Working with Language: A Multidisciplinary Consideration of Language Use in Work Contexts* (Hywel Coleman, 1989).

learning. The group of ESP learners is going to achieve the same goal in the field of studying branch, learners' motivation, in the form of the same aims, enables the teacher to meet learners' needs and expectations easier. Learners and the way of learning (acquiring language) considered to be the main factors in the whole process⁷. Likewise, ESP be an approach, not product that means language learning, not language use highlighted. They draw the attention to a 'learning-centered approach' in which all decisions as to content and method based on the learner's reason for learning⁸.

Furthermore, do not emphasize any concrete limits of students' level or age, and they underline learners' individual needs and specialist knowledge of using English for specific purposes. Although there exist several aims and different objectives of why learning English, the way of learning may be the same⁹. Though the content of learning may vary, there is no reason to suppose that the processes of learning should be any different for the ESP learner than for the General English learner. They add that ESP methodology could just as well have been used in the learning of any kind of English¹⁰

a. Target Need Analysis

Target needs as an analysis conducted to know what the learner needs to do in the target situation. The study of target needs analyze 1) *Necessities*,

⁷ Waters. Hutchinson, T.Y.A., *English for Specific Purposes: A Learning-Centered Approach* (Cambridge: Cambridge university press, 1992).

⁸ Waters Hutchinson, T.Y.A., *English for Specific Purposes: A Learning-Centered Approach* (Cambridge: Cambridge university press, 1992).

⁹ Ibid.

¹⁰ Ibid.

the type of condition determined by the demands of the target situation to know what the learner has to learn to function effectively in the target situation; 2) *Lack*, refers to the analysis to understand what the learners know already; and 3) *Wants*, to understand what the learner wants to learn¹¹.

Related to designing learning material for a mathematics study program, the three aspects of the target need closely associated with the Nunan's (2004) necessities of the student, setting of the student, and lack of analysis of mathematic' student.

Another theory, Chambers (1980) in Basturkmen (2010: 17) state that needs analysis should be concerned with the establishment of communicative needs resulting from an analysis of the communication in the target situation¹².

b. Learning Need Analysis

The learning need is closely related to activities which the learners need to do to achieve the abilities which are required by the learners able to perform the needed degree of competence in the target situation¹³.

It was essential to analyze the student need. Analyze the student' learning needs. Four components are applied. They are: 1) An analysis to find an activity, 2) research to find the setting, 3) an analysis to find learners' role, and last 4) an analysis to find teacher' role

¹¹ Nation & Macalister, *Language Curriculum Design* (New York: Routledge, 2010).

¹² F Chambers, "A Re-Evaluation of Needs Analysis in ESP," *the ESP Journal 1, no. 1* (1980): 25–33.

¹³ Nation & Macalister, *Language Curriculum Design*.

2. The Curriculum of Mathematics Study Program of IAIN Palopo

According, Sukmadinata's research (2006:102-112) states that the component of the curriculum consists of six parts. Those are Purpose (*Tujuan*), Tools of learning (*Bahan ajar*), Teaching strategy (*Strategi Mengajar*), Media of study (*Media Mengajar*), Teaching Evaluation (*Evaluasi Pengajaran*), and Fixing (*Penyempurnaan Pengajaran*). In comparison, Sukirman (2014:20) states that the component in the curriculum consists of theory, concept, generalization, principle, fact, source, example, and definition.

The current curriculum applied in the mathematic Department was adopted from the competence of the Mathematic study program, which has developed from their vision and mission according to standard in a mathematic study program. However, since the development of technology, the students of math have to fulfill the standard of the content and basic competence of English for math students. So that's why the students should be given a proper learning material as well.

3. Syllabus Design

Syllabus design as a matter of specifying the content that needs to be taught and then organizing it into a teaching syllabus of appropriate learning units. It includes the criteria consisting of (a) progress from known to unknown matter, (b) appropriate size of teaching units, (c) an appropriate variety of

activity, (d) teachability, and (e) creating a sense of purpose for students¹⁴. In the process of syllabus design, the choice of the syllabus is the primary decision in language teaching, and it should be made as consciously and with as much information as possible. To this, teachers' and syllabus designers' belief in language learning theory plays an essential part in determining which type of syllabus will be adopted. Further, design a syllabus was to decide what gets taught and in what order. Syllabus design is understood as the organization of the selected content is ordered and practical sequence for teaching purposes. Once a particular type of syllabus is selected, then all variables to which teachers and syllabus designers have to pay attention. By Halim (1976) who categorized them into two:

1. Linguistic variables, which include the linguistic relation between the language to taught and the language or languages which students use in their daily activities, and
2. Non-linguistic variables range from policy to social, cultural, technological, and administrative variables.

Especially for the ESP program in which both language and content are taught within the classroom, such an analysis of students' needs and interests of learning gains primarily concern and precedes all stages of the syllabus design procedure. Besides the needs analysis result, the critical factor which affects the selection and organization of syllabus content is the kind of reference that teachers and syllabus designers may make to the

¹⁴ J. Munby, *Communicative Syllabus Design* (Cambridge: Cambridge university press, 1987).

general language ability of students. In this organization stage, collaboration with content teachers needed to provide valuable inputs regarding instructional objectives, materials, methods, and Evaluation.

Meanwhile, it concluded that syllabus design involves a logical sequence of three main stages: 1) needs analysis, 2) content specification, and 3) syllabus organization. This formulation itemized into: (1) need research; (2) formulation of objectives; (3) selection of content; (4) organization of content; (5) selection of learning activities; (6) organization of learning activities; (7) decisions about what needs evaluating and how to evaluate¹⁵.

4. Syllabus of Mathematics Study Program Curriculum

In this part, the researcher presented the syllabi of the mathematic Department Curriculum used in IAIN Palopo. Basic English is one of the subjects of the sixth semester of mathematic Department students at IAIN Palopo. At the end of the course, the students expected to have the ability to (1) Understanding the structure of the grammar used in math, (2) Speaking with a good structure of grammar, (3) Understanding the kinds and grammatical concept, (4) Understanding the structure and vocabulary of basic English or English for mathematic, (5) Writing based on the grammatical concept, and (6) Speaking with good pronunciation.

IAIN PALOPO

¹⁵ H Taba, *Curriculum Development: Theory and Practice* (New York: NY: Harcourt, Brace & World, 1962).

5. Objectives

English for mathematic students was adopted from *General English*, which includes Basic English knowledge. It taught by the lecturer to give the skill and to know English for mathematic.

6. Competency

The standard of competence of this subject was to understand the meaning of the text in English. The students also are expected to express the importance of the book in spoken and written materials.

7. Indicator

The students expected to identify the main idea of the paragraph, look for the meaning words mathematic in English, and identify the meaning of the text. Besides that, the students are expected to be able to use the correct grammar, vocabulary, punctuation, and so forth.

C. Materials Development

Materials development was both a field of study and a practical undertaking. As a field, it studied the principles and procedures of the design, Implementation, and Evaluation of language teaching materials¹⁶. As a worthwhile undertaking, it refers to anything which is done by writers, teacher, or learners to provide a source of language input, to exploit those sources

¹⁶ Brian Tomlinson, *Introduction: Principles and Procedures of Materials Development* (na, 2011).

in ways which maximize the likelihood of intake and to stimulate purposeful output. Materials developers might write textbooks, vocabulary, text material about mathematic, and exercises.

Similarly, materials are anything which used to help language learners to learn. Materials can be in the form, for example, of a textbook, a workbook, a cassette, a CD-ROM, a video, a photocopied handout, a text, a paragraph written on a whiteboard: anything which presents or informs about the language being learned¹⁷.

D. Task-Based Language Teaching (TLBT)

TBLT is not linked to a single model of language but instead draws on the structural, functional, and interactional model of language. Structurally, in discussing the criteria of determining the linguistic complexity of the tasks, language is simply seen as the less-to-more complex is reasonably traditional ways¹⁸. Furthermore, in recent assumptions underlying TBLT, vocabulary has been considered to play a more central role in second language learning. Vocabulary here does not only mean the word as significant units of linguistic, lexical analysis, and language pedagogy, but also the consideration of lexical phrases, sentence stems, prefabricated routines, and collocation. The last, Task-based shared the nature of the language learning underlying communicative language teaching¹⁹. It is activities involving real communication, carrying out

¹⁷ Brian Tomlinson, "Materials Development," *The encyclopedia of applied linguistics* (2012): 1–7.

¹⁸ T.S Richard, J. & Rodgers, *Approaches and Methods in Language Teaching* (New York: Cambridge university press, 2006).

¹⁹ Ibid.

meaningful tasks, and using language, which is significant to the learner to promote learning²⁰.

Furthermore, In Task-based language teaching, the roles of teachers are selector and sequencer of tasks, preparing learners for tasks, and consciousness-raising. As selectors and sequences of tasks, the teacher has the central role of selecting, adapting, and creating the tasks then forming them into an instructional series based on the learner's need, interest, and language skill level²¹.

The teachers also need to raise the students' consciousness by employing a variety of form-focusing techniques, including attention-focusing, pre-task activities, text exploration, guided exposure to parallel tasks, and use of highlighted materials. So, researches use In Task-based language teaching to increase student ability.

E. Instructional Design Models

In the literature, there are models of instructional design that are often implemented in the field of research. Among them are Borg and Gall's and Hannafin and Peck's design models.

a. Borg & Gall design model

Borg & Gall (1987: 775) develops a procedure containing tens of steps in developing learning materials. These steps can be grouped into three stages. The first step is pre-study: *research and information*

²⁰ D Nunan, *Task-Based Language Teaching* (Cambridge: Cambridge university press, 2004).

²¹ Richard, J. & Rodgers, *Approaches and Methods in Language Teaching*.

collection. Then, the second step is developing the product, which contains six steps. They are *planning, developing the preliminary product, preliminary field testing, main product revision, main field testing, and operational product revision*. The last steps of validation of the product were *operational field testing, final product revision, and dissemination and implementation*.

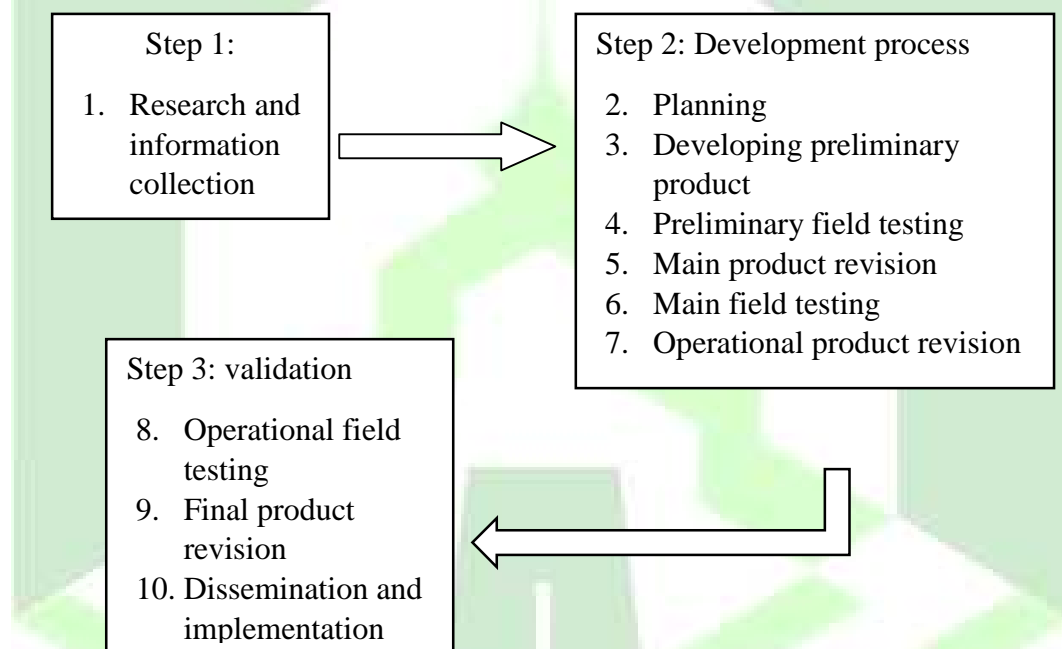


Figure 2.1. Borg & Gall design model

b. Hannafin and Peck design model

The Hannafin and Peck design model differs from those of the previous design model in that it uses a three phases approach. Phase one involves a need assessment being performed. A design phase follows assessment, and phase three, where the Development and Implementation

of the instructions are completed. All stages include a process of Evaluation.

Hannafin and Peck design model of materials development can be seen on the chart as follows:

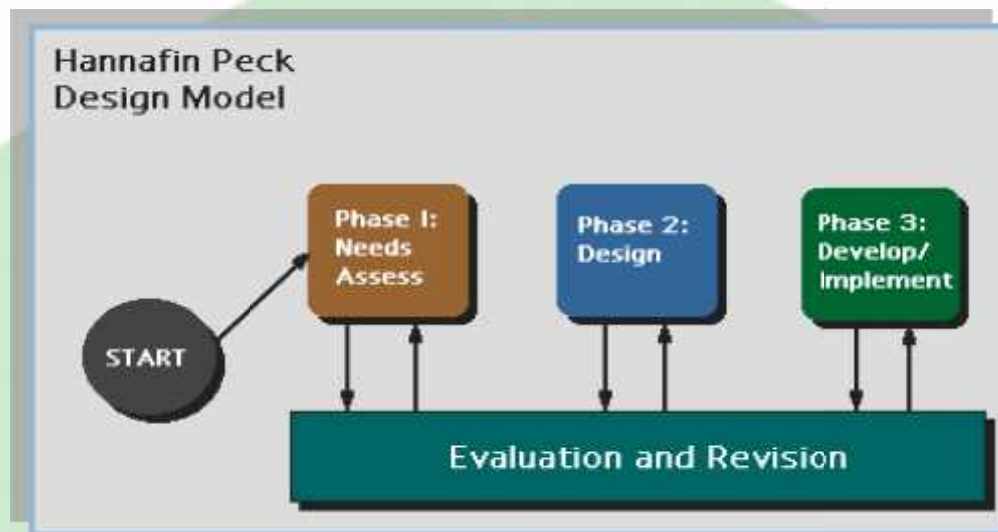


Figure 2.2. Hannafin and Peck design model

c. ADDIE

This model of developing the product (ADDIE: 1990 by Raiser & Mollenda) is stand for five words. They are **a**nalysis (needs, requirement, tasks, and participants' current capabilities) **d**esign (learning objectives delivery format, activities, and exercises), **d**evelopment (create a prototype, develop course materials, review, pilot session), **i**mplementation (training implementation, tools in place and observation), and **E**valuation (awareness, knowledge, behavior, and result).



Figure 2.3. ADDIE design model

F. Conceptual Framework

The English learning material for mathematics education students has developed into some criteria. The researcher uses six components of the task, which is suggested by Nunan (2004). They are *goal, input, procedure, teacher, learner role, and setting*. Lastly, to know the proper design material which has to fulfill the students need, the researcher evaluated on at the end of the design²².

This research was started by defining the need analysis. Need analysis is divided into two, which are target needs and learner needs. Need analysis is done by collecting information from students by giving a questionnaire. After define, the researcher will design the material based on the need analysis and also by collecting data from syllabi of English for math material. Next, the researcher will develop the textbook based on the need analysis and syllabi of math. In this step,

²² Nunan, *Task-Based Language Teaching*.

the first design validation is done by doing some expert validation to evaluate the text. The last step was disseminated. In this research, the researcher only has researched expert validation.

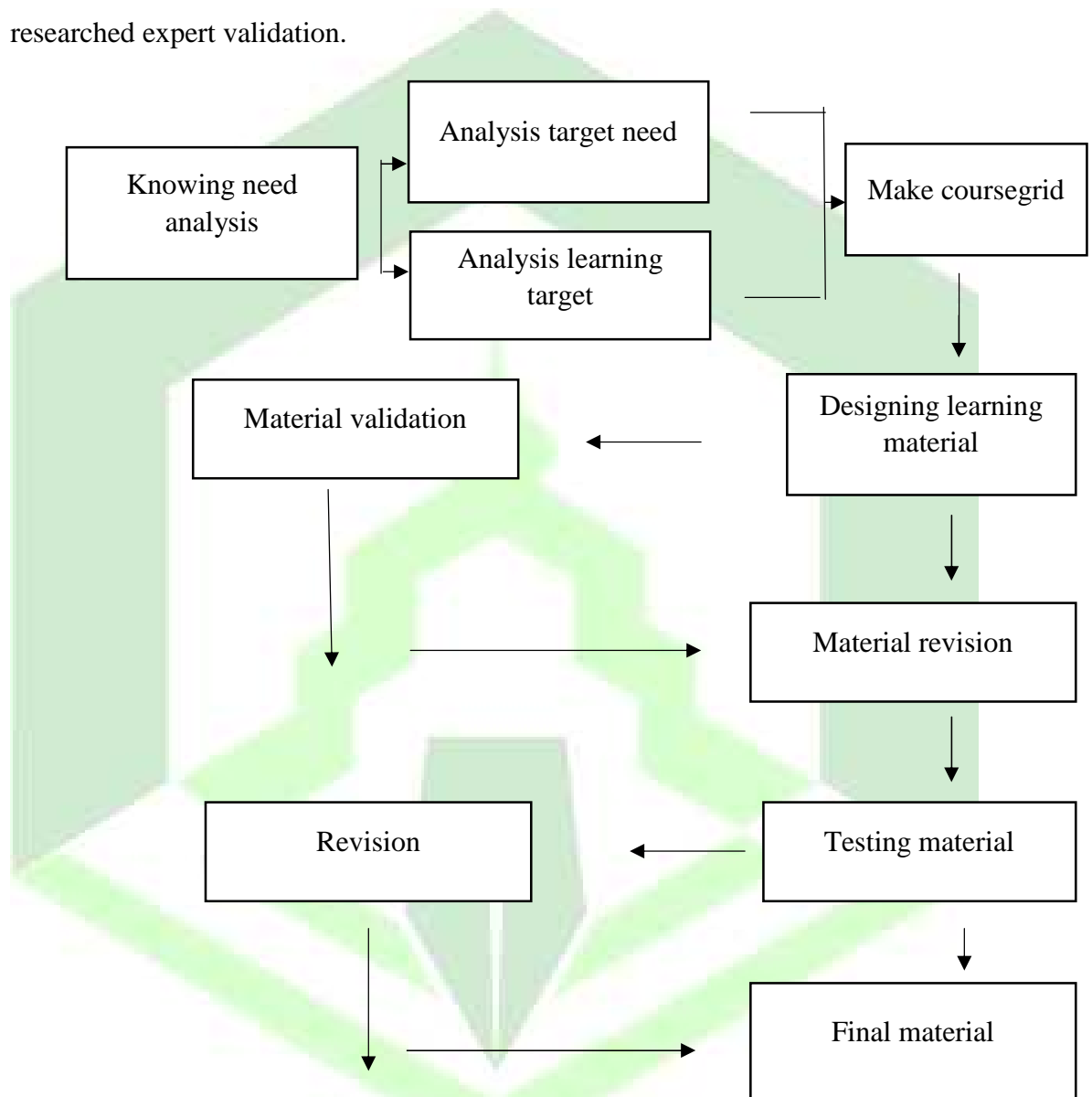


Figure 2.4. Conceptual Framework

CHAPTER III

RESEARCH METHOD

This chapter dealt with the development model, research procedure, population and sample, instrument of research, and technique of data analysis.

The researcher was utilized Research and Development (R&D) in developing English learning material for Mathematic Students of State Islamic Institute of Palopo.

A. Development Model

In this research, there were five steps in developing the English material for mathematic students adopted from the ADDIE model, which became the researcher's guide in developing the student's book. ADDIE stands for analysis, design, Development, Implementation, and Evaluation.

B. Research Procedures

The researcher used the ADDIE Model used to develop the English learning material for math students.



Figure 3.1.The steps of the Research procedure.

Analysis: The researcher has to know students' lack, want, necessity, and also a setting. Therefore, the researcher put those three components in the questionnaire to analyze the student of mathematic study programs. Besides, the questionnaire also aimed to know about students' competence, students' learning capability, and students' previous knowledge about English for math.

Design: The researcher designed a course grid as the planning of learning study in English for math. The course grid contained learners' needs and targets of the learners. The specific skills desired by the students were how the materials were delivered and how they knew about English.

Development: In this step, the researcher focused on developing the material. The product here consists of 1. Collecting material, 2. Arranging the English for math materials, 3. Arranging the design by using TBLT (Teaching Based on Language Teaching) approach. The exercises are designed from the lowest to the highest level. 4. Validating. The validation used two ways, the first way was using experts, and the second ways were students' perception.

Implementation: students' books had been validated by experts. The students' book had been implemented in a small number of students through a google form. This way aimed to know the effectiveness and interest of the test book.

Evaluation: here, the researcher used two kinds of assessments. They were formative and summative assessments. Formative Evaluation was conducted to collect the data in each step while doing this research. This aimed to have robust

data to fix the problems that appeared in this case. Summative Evaluation is an evaluation conducted in the last of research. This aimed to know the effectiveness of the students' books.

C. Population and Sample

1. Population

The population of this research was the 90 students of the mathematics study program

2. Samples

The research took 29 students as the data.

D. The instrument of the Research

a. Questionnaire

It conducted the research, the data collected by using a questionnaire. The researcher shared the questionnaire with the students and collected information about lacks, wants, and necessities. The students asked to answer 26 questions related to their characteristics and needs in learning English by choosing one or more options from several options provided.

b. Documentation list

In this research, the researcher took documentation such as a questionnaire need analysis, course grid, questionnaire student expert judgment, and student perception.

c. The Experts' Judgments Questionnaire

IAIN PALOPO

The questionnaire was the expert judgment. It was to propose a material expert to know their opinion and suggestions about the development materials. There were 40 items in the questionnaire.

d. For the Evaluation Questionnaire

A questionnaire evaluation proposed in developing a better English material. There were 12 items in a questionnaire.

E. The technique of Data Analysis

The researcher used four techniques. They were: 1) validating the questionnaire of need analysis. In this step, the researcher used two experts. 2) giving a questionnaire to the student. After validated the questionnaire, the researcher shared the questionnaire 3) giving questionnaire of expert judgment. The product validated by three experts, and last 4) giving questionnaires for student perception to know the effects of the product.

1. Data analysis of documentation

Data analysis of documentation explained the result of data questionnaires such as questionnaire need analysis, questionnaire expert judgment, and student perception—the data collected by Google form.

2. Data Analysis in Questionnaire

Data analysis used quantitative descriptive, which was analyzed by calculating the percentage of the answer. The result of the need analysis from the questionnaire used patterns below:

$$X = \frac{x}{N} \times 100\%$$

$$X = \text{Score}$$

$$x = \text{The same answer of students}$$

$$N = \text{Total number of students}$$

Students' choices (Necessity, lack, and want) became the researcher's background in designing the students' book. Below was the table of need analysis.

No.	The Item of Questions	Respond	Percentage (%)

3. Data Analysis of expert judgment and Students' perception

This analysis used Likert-Scala as the measurement. The result of the questionnaires used a pattern proposed by Suharto (2006:52-53)

$$R = \frac{Xh - Xl}{5}$$

R = Range

Xh= The highest score

Xl = The lowest Score

5 = The Range of Likert-Scale

Then, the result of data converted in descriptive analysis. The indicator in measuring the result was the Mean (X). The Mean used by using conversion pattern data:

$$Mn (X) = \frac{fx}{N}$$

Data Conversion Table (Suharto, 2006:52-53)

IAIN PALOPO

Scales	Interval	Descriptive Categories
1	$1.0 < X \leq 1.7$	Very Poor
2	$1.8 < X \leq 2.5$	Poor
3	$2.6 < X \leq 3.3$	Fair
4	$3.4 < X \leq 4.1$	Good
5	$4.2 < X \leq 5.0$	Very Good

The example of table Expert Judgment

No.	Indicators	Score	Expert Suggestion

The example of table Students' perception

No.	Indicators	Score	Categories

IAIN PALOPO

CHAPTER IV

FINDING AND DISCUSSION

In this chapter consist of the finding of the research show of the result of the data analysis then discuss them into the discussion section research.

A. Research findings

1. The Result of Need Analysis

In this need analysis, the researcher did observation about the material in mathematic by asking the maths lecturer. Then, the researcher established a questionnaire and researched through Google form. It provided the result of need analysis of Mathematic students of IAIN Palopo consisting of necessities, lack, want, and learning need.

a. Target Need

1) Necessities

The data shows that the final purpose of the students in learning English can be seen in this following chart as follow:

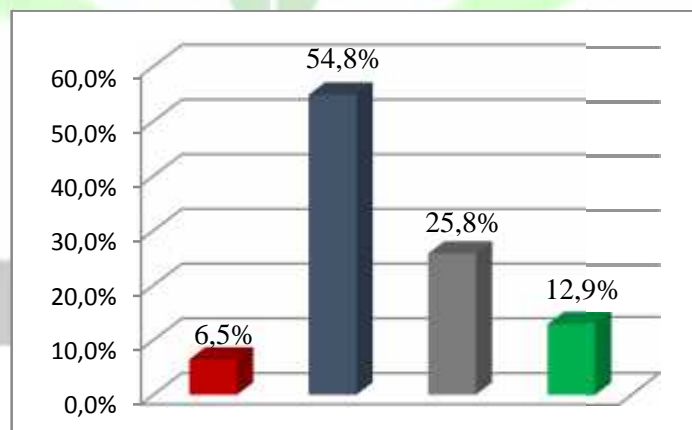


Chart 4.1. The Percentage of the Students' Purpose in Learning English

The chart above shows that the final purpose of the students in learning English is to make them pass the English course (6.5%), to make them get information about English for mathematic(54.8%), to communicate and access the English information that relevant toward their majority (25.8%), and other option (12.9%).

Furthermore, the students answered the questionnaire related to the advantages of learning English after they graduated. The answer result as follows:

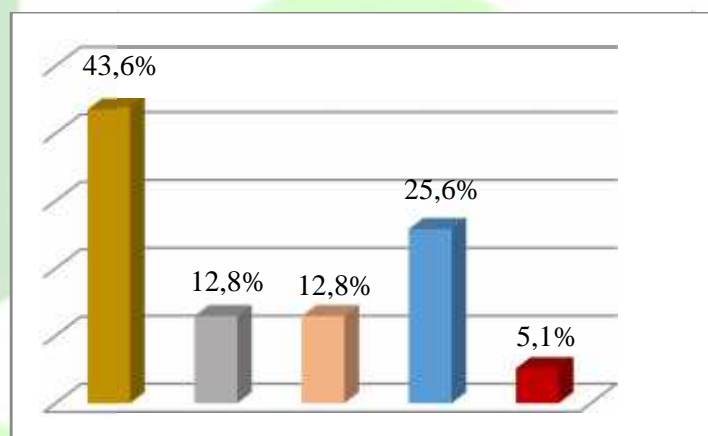


Chart 4.2. The Percentage of the Students' Necessities after They Graduated

The chart above shows that the answer of the students' necessities is easy to communicate in English (43.6%), to access the English information about mathematics, and 12.8% of students wanted to study English for mathematics efficiently, to make it as their career-support (25.6%), other option (5.1%).

2) Lacks

The data that is related to the students' lack of showed that the English proficiency of mathematic students is: 20% of students at Low level, 48.3% of students are at a basic level, 24.1% of students are at an intermediate level, and 6.9% are in advanced level. The results showed in the chart below:

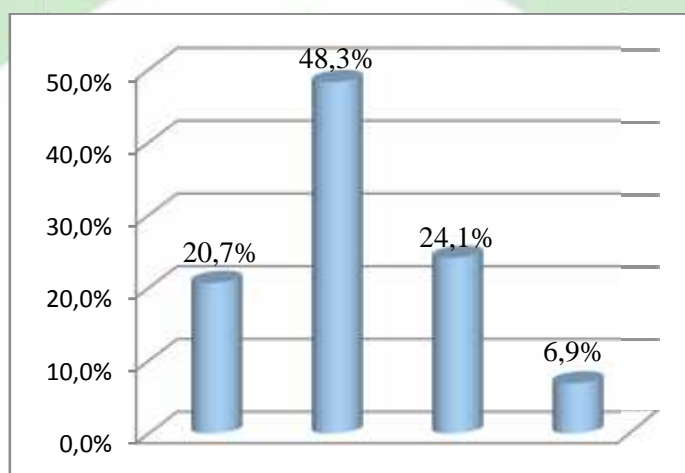


Chart 4.3. The Percentage of the Students' Level Ability

While the lack of learning speaking skills, students are difficult to pronounce the English words 23.7%. They are difficult to understand their conversation cause lower in English for math, 21.1%. They are difficult to use the correct grammar 23.7%, and they are complicated in expressing their ideas because of the lack of vocabulary about mathematic 26.3%, other option 5.3%. Look at the chart follow:

IAIN PALOPO

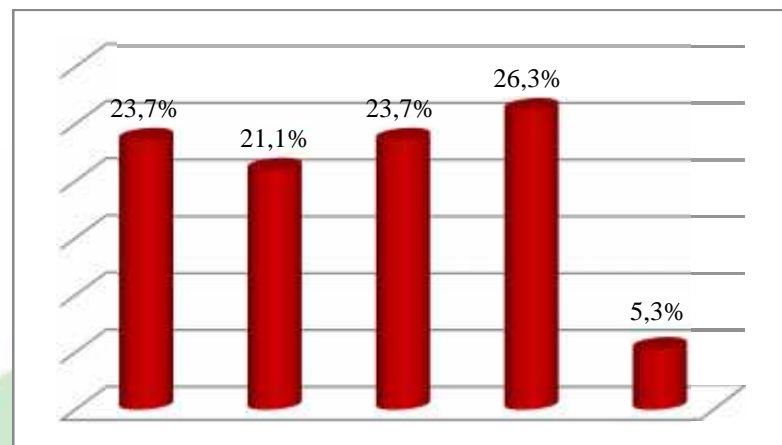


Chart 4.4. The Percentage of the Students' Lacks in Speaking Skill

Furthermore, the difficulties faced by the students in reading English shows that the students are difficult to find the main idea in the text 25.7%, the students difficult to understand English vocabulary in mathematics exercise text 22.9%. The students are difficult to understand the text because of the lack of vocabulary, 31.4%. They are complicated in understanding the meaning of each word in the text because of the lack of vocabulary about English for Math 20.0%. The result can saw as follow:

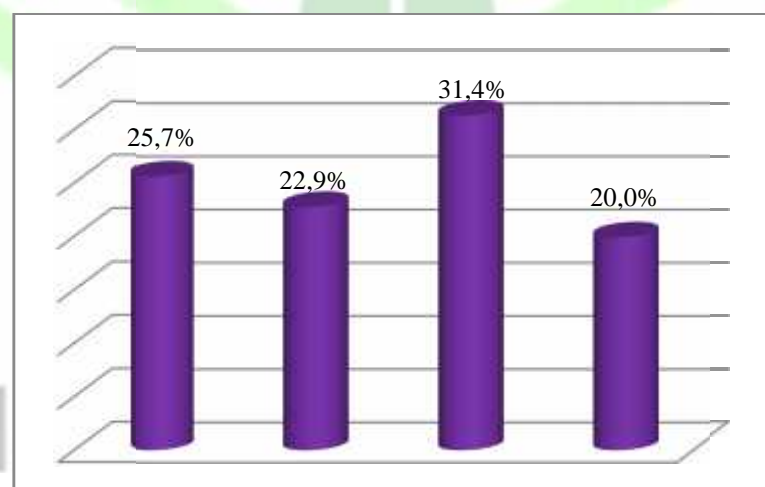


Chart 4.5. The Percentage of the Students' Lacks in Reading Skill

After that, the difficulties faced by the students in writing English passages can be seen as follows:

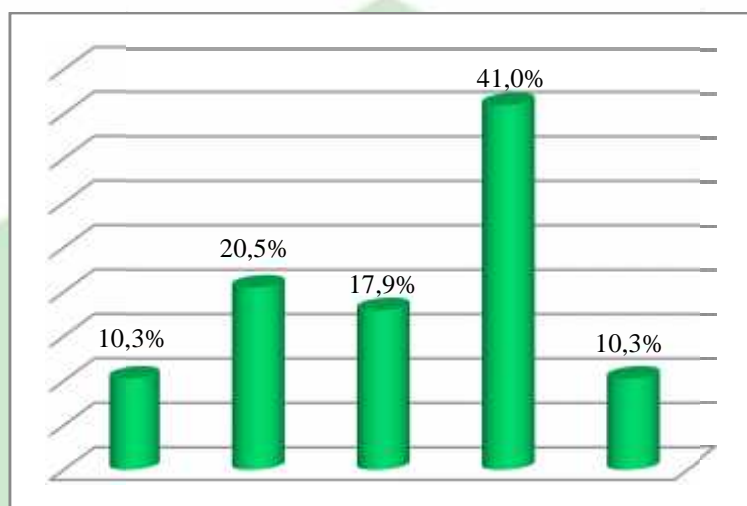


Chart 4.6. The Percentage of the Students' Lacks in Writing Skill

The chart above shows that most of the students of mathematics answered that they are difficult to use the punctuation 10.3%, they are difficult to express the correct idea 20.5%, the students are difficult to use the right words 17.9%, they are difficult to arrange the sentence, clause, or paragraph 41.0%, and they are difficult to find an idea for writing material 10.3%.

Meanwhile, the difficulties faced by the students in listening skill can be seen as follows:

IAIN PALOPO

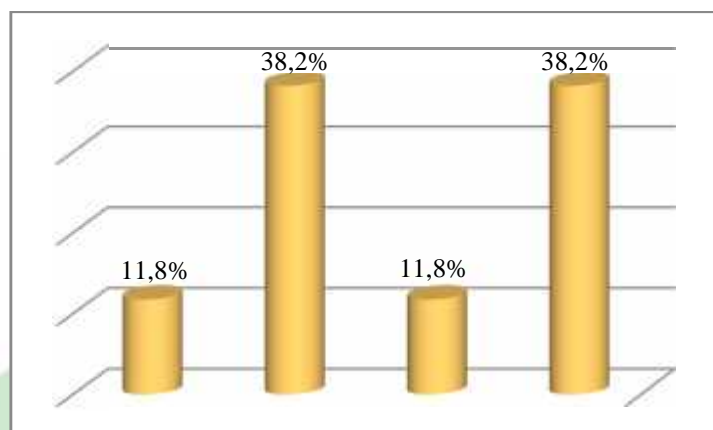


Chart 4.7. The Percentage of the Students' Lacks in Listening Skill

The chart above explains the Mathematic students answered that they are difficult to identify keywords in a conversation 11.8%; they are complicated in understanding the information they heard 38.2%. They are difficult in understanding oral instruction 11.8%, and they are difficult to understand what they have listened to the native speaker's pronunciation because of the lack of vocabulary 38.2%.

3) Wants

The aspects of target need in the questionnaire are the students answered about what skill they need most in their majority. It can saw as follow:

IAIN PALOPO

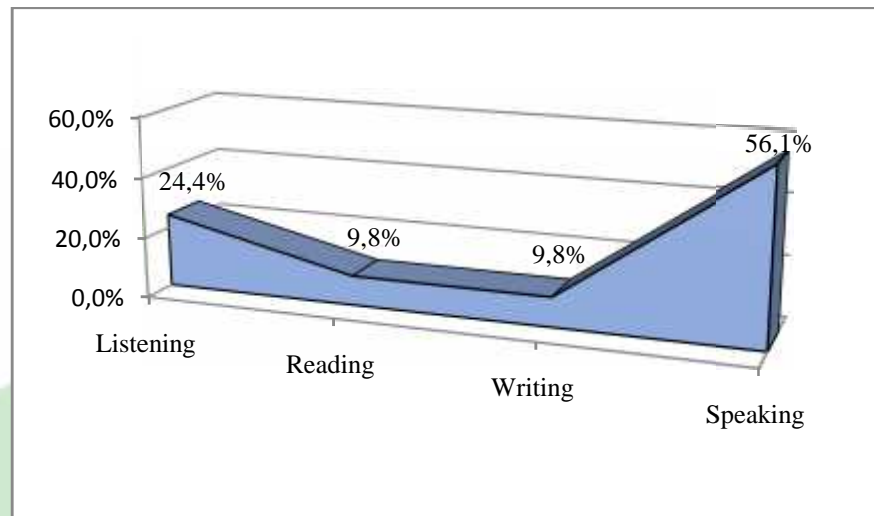


Chart 4.8. The Percentage of the Students' Wants on the Most Wanted Skill

The chart shows that most of the students choose to listen 24.4%, reading 9.8%, writing 9.8%, and speaking 56.1%.

Next, the competency in English shows that the students wanted to have writing skills. The chart below shows that most of the students answered that grammar competency 39.5%, vocabulary competency 44.7%, and pronunciation 15.8%. It can saw as follows:

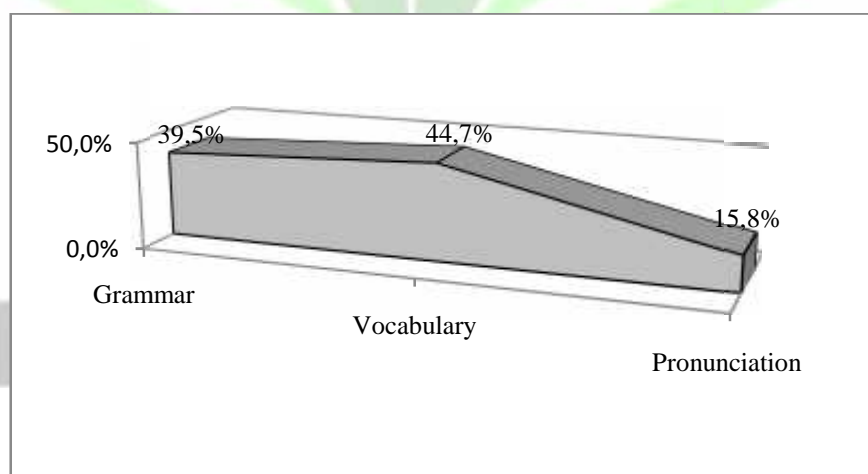


Chart 4.9. The Percentage of the Students' Wants in Writing Skill

Meanwhile, The students also answered about what competency they wanted to have in speaking skills. The chart shows that most of the students answered that grammar competency 35.6%, vocabulary competency 37.8%, and pronunciation 26.7%. Look at the chart as follows:

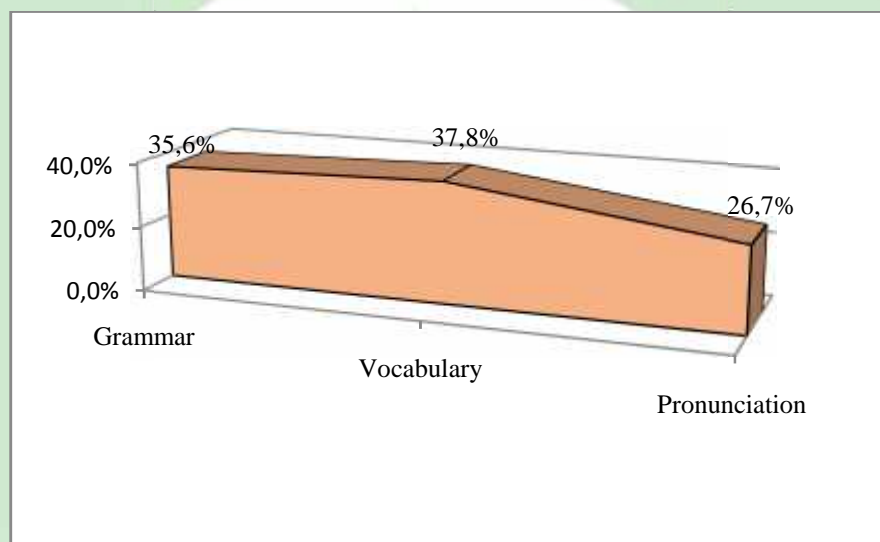


Chart 4.10. The Percentage of the Students' Wants in Speaking Skill

b. Learning Need

1) Input

Based on the questionnaire's result of need analysis, the students also answered about what competency they wanted to have in listening skills. It can saw as follows:

IAIN PALOPO

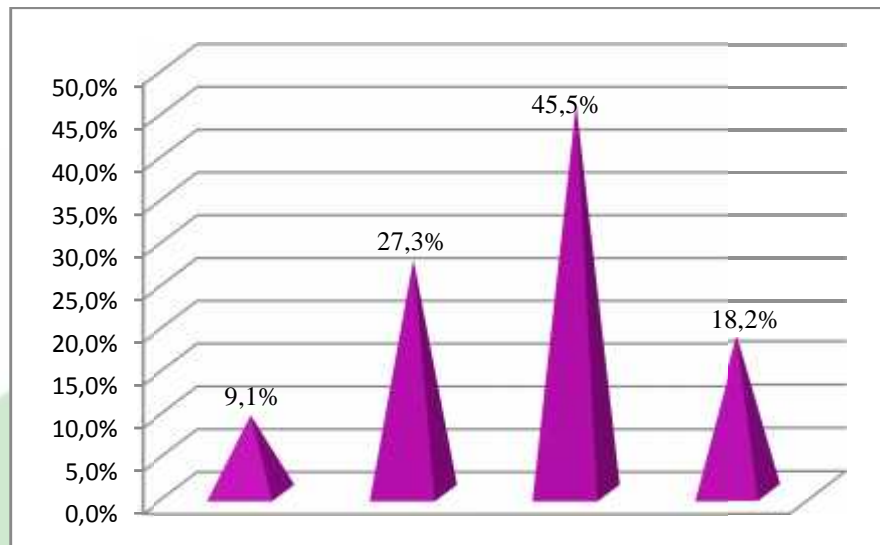


Chart 4.11. The Percentage of the Students' Input in Listening Skill

The chart shows that most of the students wanted are monologue and dialogue 9.1%, the students wanted is monologue and dialogue with picture 27.3%, the students wanted are monologue and dialogue with vocabulary list 45.5%, and heard the text who lecturer read 18.2%.

After that, the competency of speaking skills that the students wanted to have in speaking skills.

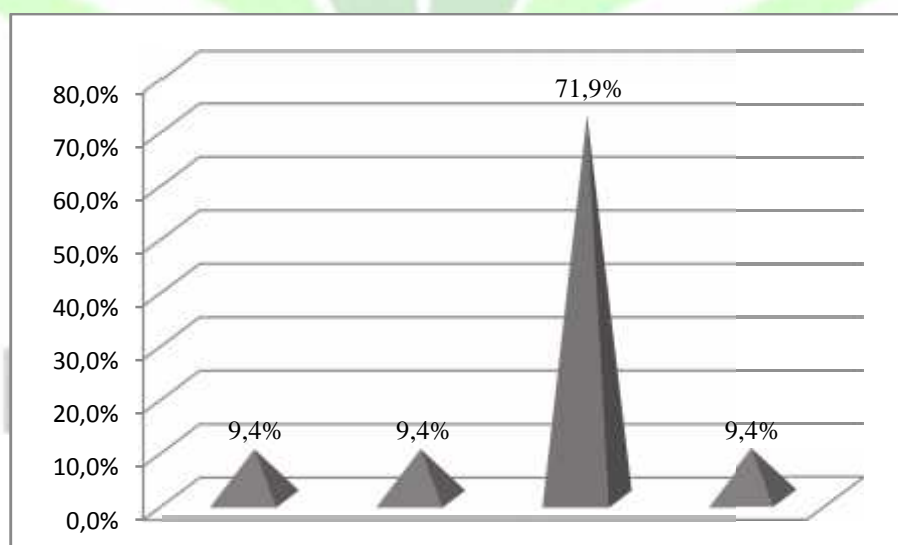


Chart 4.12. The Percentage of the Students' Input in Speaking Skill

The chart above shows that most of the students answered are monologue and dialogue model 9.4%, the students answered are monologue and dialogue model with picture 9.4%. The students answered are monologue and dialogue model with a new vocabulary list with pronounce 71.9%, the students answered are authentic material in mathematics lesson 9.4%.

Furthermore, the students answered about what competency they wanted to have in reading skills. The charts show that most of the students wanted to authentic material, which is easy to find in daily such as answer the exercise, and compare the picture with sentences 47.1%. The text describes content about their job 20.6%, the text with new vocabulary list 26.5%, and the text with picture 5.9%. It saw as follows:

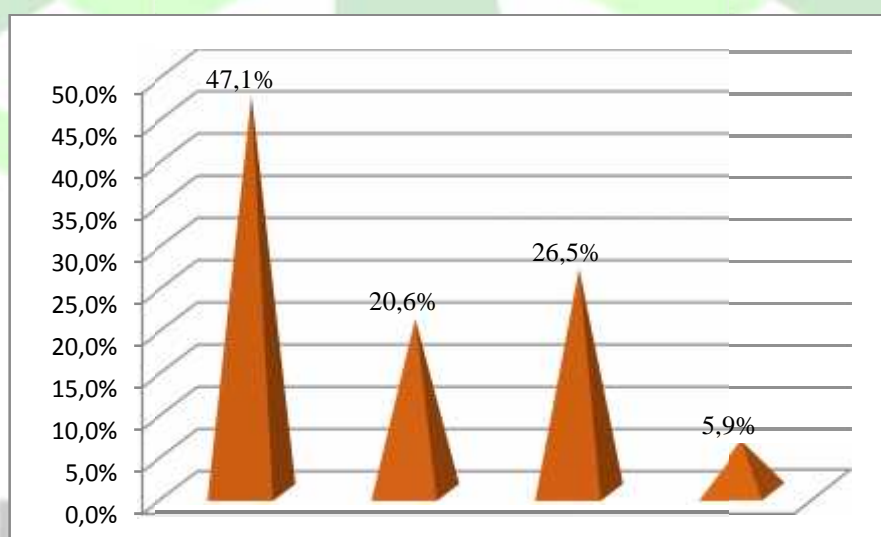


Chart 4.13. The Percentage of the Students' Input in Reading Skill

After that, the students answered about what input they wanted to have in writing skills. It can saw as follows:

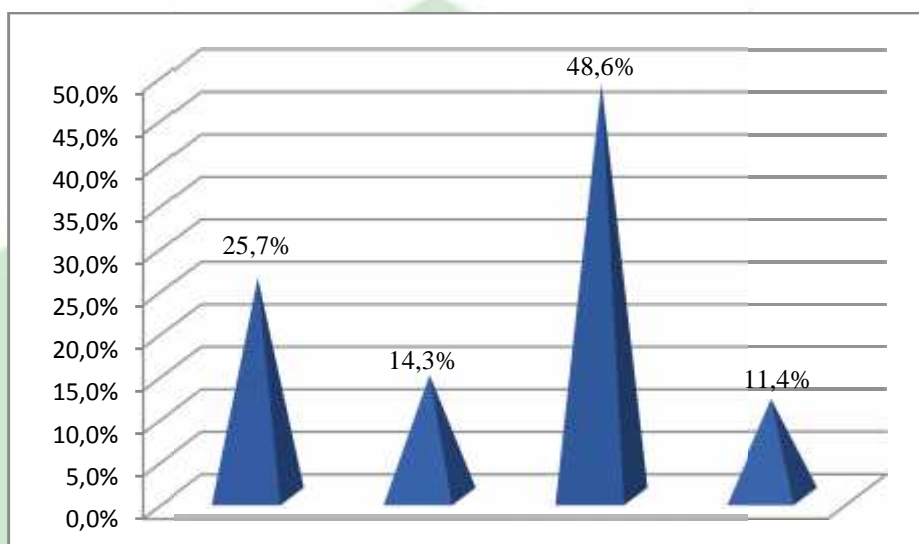


Chart 4.14. The Percentage of the Students' Input in Writing Skill

The chart below shows that most of the students are wanted to take the example text in which their lesson 25.7%, vocabularies are related to the text in writing 14.3%, explain sentence structure associated with text in writing 48.6%. Pictures are related to the text in writing 11.4%.

Next, the students answered about the ideal text of speaking skill. It can saw as follow:

IAIN PALOPO

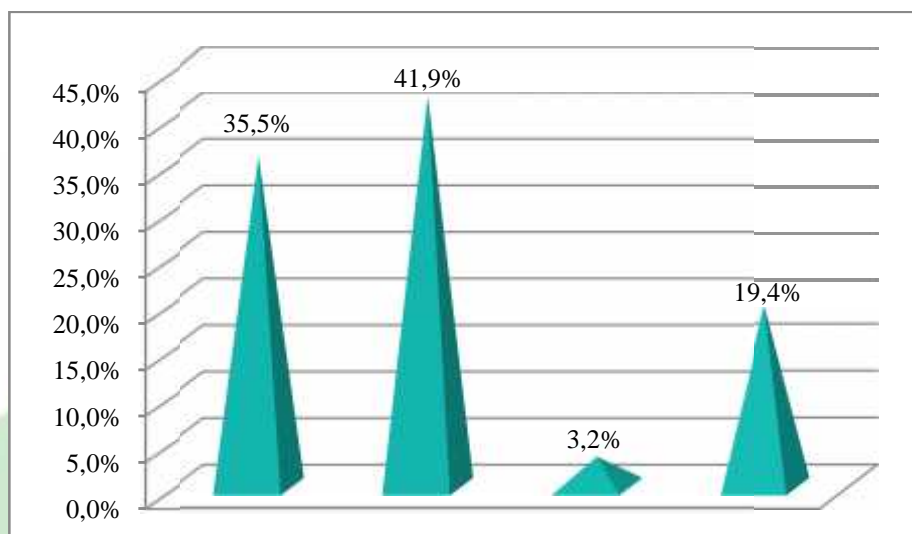


Chart 4.15. The percentage of the Students' length of the texts in Speaking Text

The chart shows that the students choose the text consisting 150 up to 200 words 35.5%, they choose 150-200 words includes a picture or video 41.9%, they choose the text consisting 200 up to 250 words 3.2%, it some with the result they choose 200 up to 250 words includes a picture or video 19.4%.

Meanwhile, the students answered about the extension of the text, which is suitable for English reading skill. The chart shows that the students choose the text consisting 150 up to 200 words 31.0%, they choose 150-200 words includes a picture or video 27.6%, they choose the text consisting 200 up to 250 words 20.7%, it some with the result they choose 200 up to 250 words includes a picture or video 20.7%. It can saw as follow:

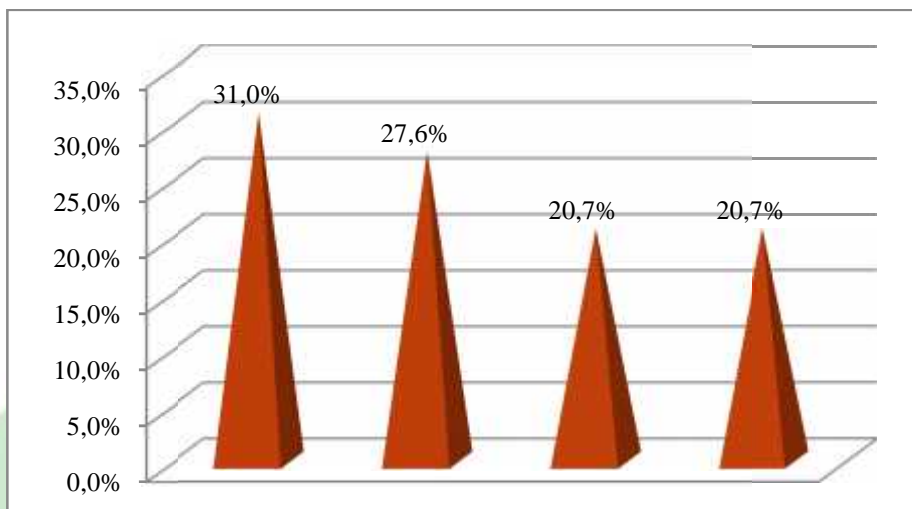


Chart 4.16. The percentage of the Students' length of the texts in Reading Skill

Lastly, the students answered what's topics do the students need to improve in Mathematic. It can saw as follow:

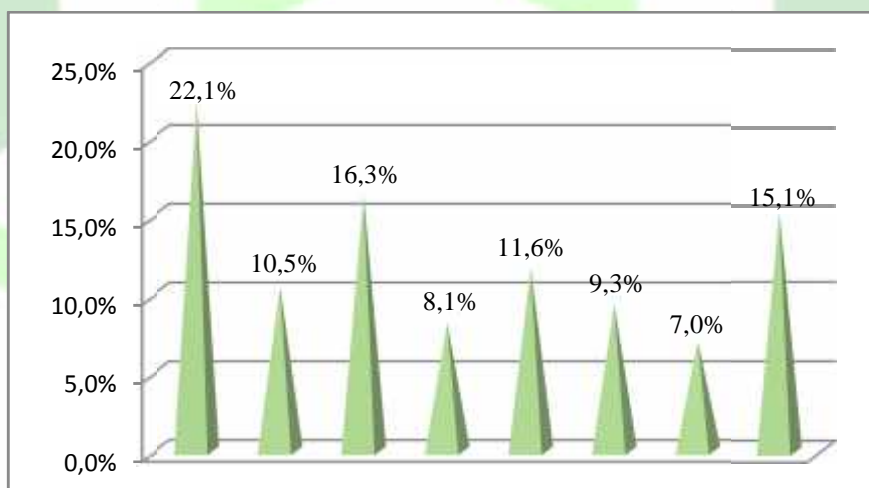


Chart 4.17. The Percentage of the Students' Input in Mathematics Topics

The chart above shows that the students wanted to have topics about Mathematical Logic 22.1%, they wanted to have topics about Equation and

Inequality Linear 10.5%, they wanted to have topics about Relation and Function 16.3%. They wanted to have topics about Quadratic Equation 8.1%. They wanted to have topics about Number Sequence 11.6%, and they wanted to have topics about Geometry 9.3%. The student wanted to have topics about Permutation and Combination 7.0%, and they wanted to have issues about the probability of 15.1%.

2) Activity

The data shows that most activities by the students to improve their speaking skill can be seen as follows:

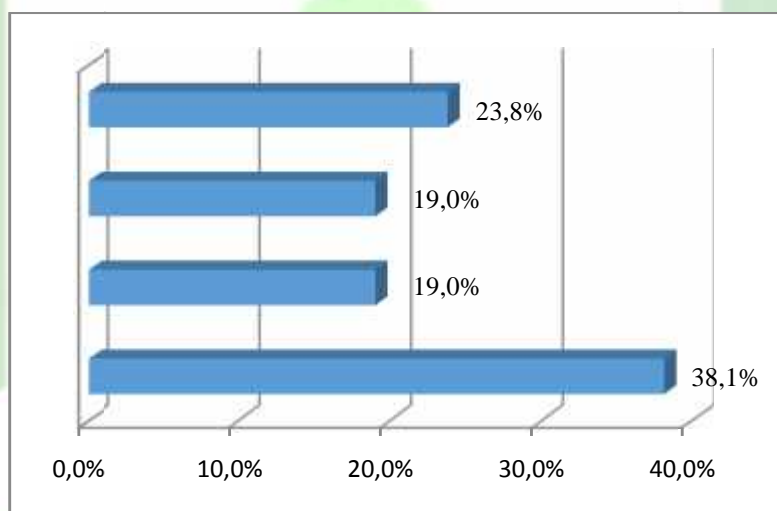


Chart 4.18. The percentage of the Students' activity in Speaking skill

The chart above shows that most of the students answered that they practice the conversation with their friend in front of class 38.1%, they used role play 19.0%, it is the same with they get information each other in a group 19.0%. The student answered they discuss mathematics problem topic, 23.8%.

Meanwhile, the most wanted activities by the students to improve their reading skill can saw as follow:

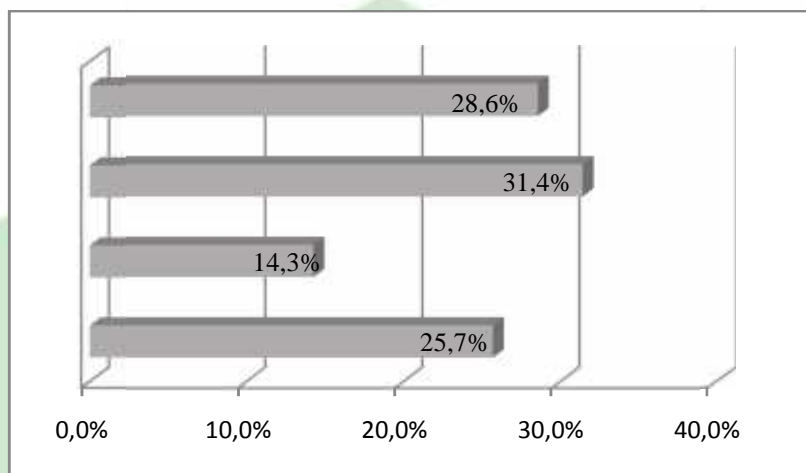


Chart 4.19. The Percentage of the Students' Activity in Reading Skill

The data shows that most of the students wanted to improve their reading skill are reading the text with correct pronounce and intonation 25.7%, reading the exercise text and answer the question about the text 14.3%. Discuss and understand the main idea text in a group 31.4%, and analyze new vocabulary meaning according to context 28.6%.

The next one, the students answered the activity that they wanted to have in writing skill. The data shows that most of the students wanted to improve their writing skill. The students' wants are: (15)38.5 % of students wanted to arrange the sentences into a correct paragraph, (8) 20.5% of students want to identify, and correct mistakes on grammar, (7) 17.9%of students want to identify and corrects punctuation mistakes in the text, and (9)

23.1% of students want to write an exercise with an example from the lecturer. The percentage can be seen as follows:

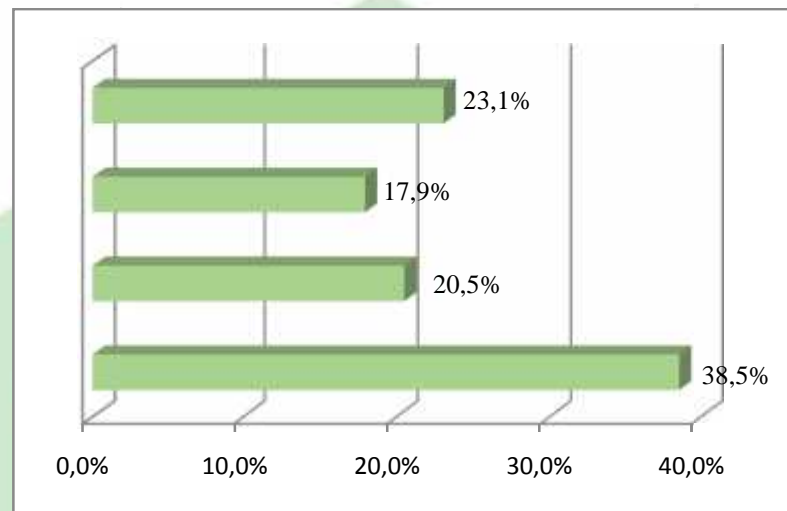


Chart 4.20. The Percentage of the Students' Activity in writing skill

Besides, students want to improve their vocabulary. The percentage of students' wants can be seen as follows:

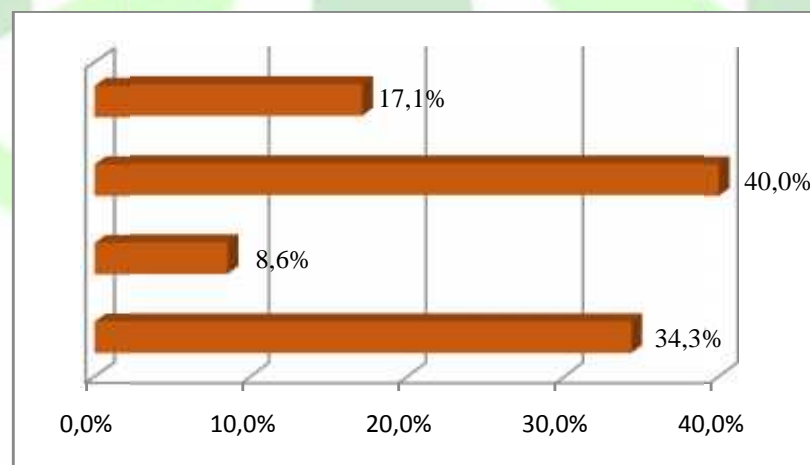


Chart 4.21. The Percentage of the Students' Activity on Vocabulary Aspect

The charts show that the students' activities are wanted to compare words or expression with the meaning 34.3%, they wanted to compared words or phrase with the picture 8.6%, completing the sentences or paragraph with the available words 40.0%, and completing the sentences or paragraph section with the term words as you know 17.1%,

3) Setting

Based on the questionnaire's result of need analysis, the students answer activities that students will do the tasks in learning English are the students answered as an individual 13.80%, to work in pairs 24.10%, small group (two until three people) 55.20%, and big group (five until eight people) 6.90%. It can saw as follow:

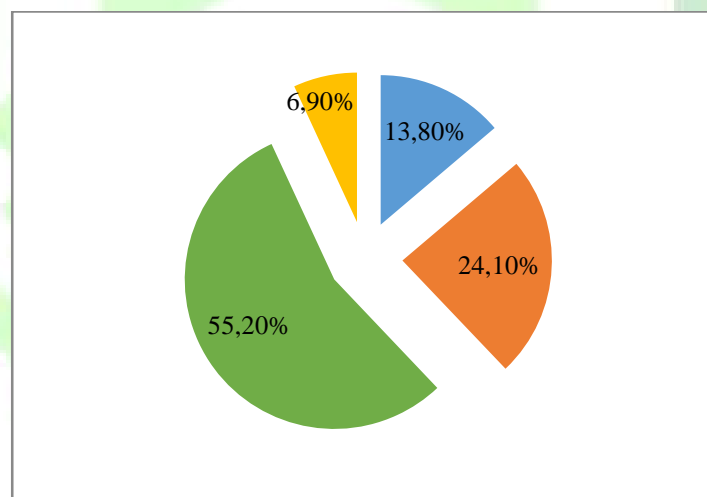


Chart 4.22. The Percentage of Students Most do exercise

The question about what's the teaching media that could support the students in the learning process. The chart shows that the students answered audio (audio recording, etc.) 8.3%, the students answered visual (pictures,

writing text, LCD, etc.) 18.3%, audio-visual (TV news, video, talk show, film, etc.) 38.3%. The students answered printed media (book text, newspaper, module, etc.) 18.3%, some of them answered reality (real or fake object) 16.7%. It can saw as follow:

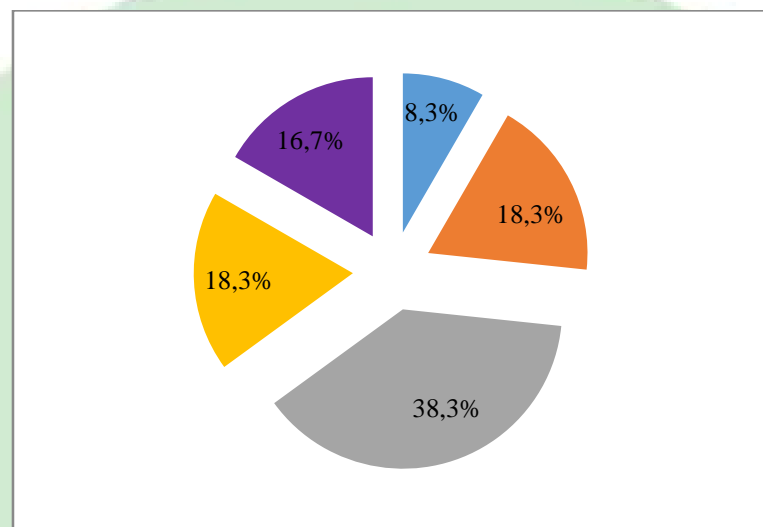


Chart 4.23. The percentage of the Students' setting about Teaching Media

Last setting aspect, the students answered the most favourite places in learning English. It can saw as follow:

IAIN PALOPO

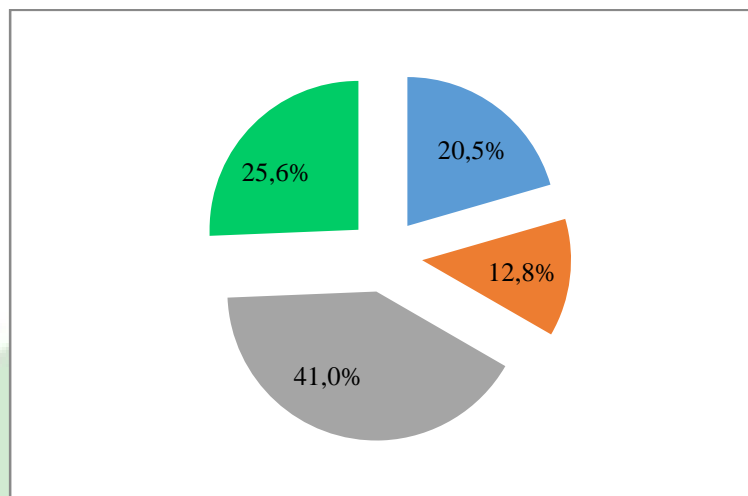


Chart 4.24. The Percentage of Students Most favourite Place

The chart above shows that most of the students are like to study in the classroom at 20.5%. Some of the students are like to study in the library at 12.8%. Another student like to learn in outdoor 41.0% and some of the students are like to explore in the laboratory 25.6%.

4) The Role of Lecturer

Based on the questionnaire's result of need analysis, the students answered about what's the lecturer role in the learning process. It can saw as follow:

IAIN PALOPO

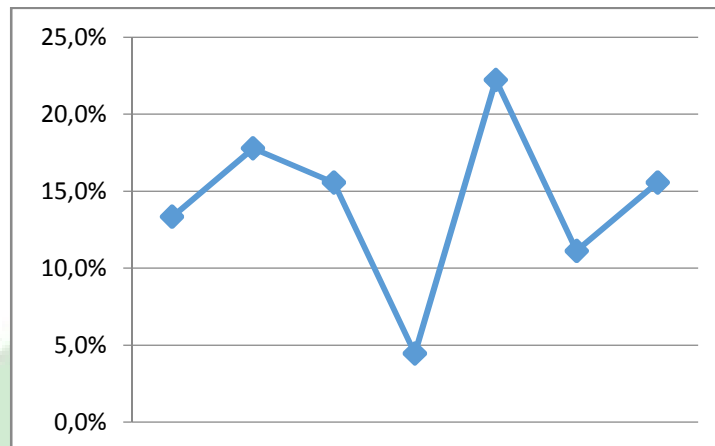


Chart 4.25. The Percentage of the Lecturer' Role

The chart above shows that the students answered they prefer English as learning guide 13.3%, lecturer as an organizer that implicate students and teaching activities 17.8%, lecturer as prompter who gives chunks 15.6%, lecturer as an assessor that note and value students work 4.4%. Lecturer implicates students in controlling learning activities 22.2%, lecturer as feedback provider in giving feedback 11.1%, and lecturer as resources in providing facilities and improving students works 15.6%.

5) The Role of Students

The role of students in learning English can saw as follow:

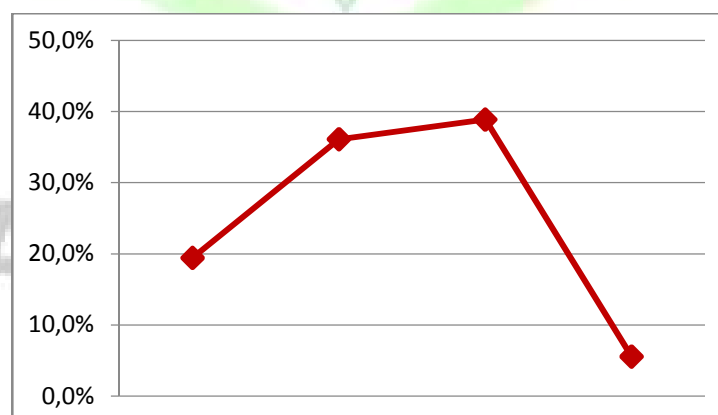


Chart 4.26. The Percentage of the Students' Role

According to the chart, can be concluded that the students wanted to heard explain lecturer and do instruction from lecturer 19.4% wanted to be active responsive in communication 36.1%, analyze the material English for Mathematics 38.9%, and presentation at the end of course 5.6 %.

1. The Course Grid

The coarse grid is made based on the previous need analysis. The material designed by taking up the highest percentage of students' learning needs and target needs from the questionnaire. This course grid is made as the guidance to develop English learning material for Mathematic Students of IAIN Palopo.

The coarse grid was also consisting of three units which are integrated four skills in English such as speaking, reading, writing, and listening. The researcher arranges the course grid based on TBLT (Task-Based Language Teaching), which designed from the easiest part to the most challenging test. For the details, the course grid appeared in the appendix.

2. The First Draft of Material

The material made by the researcher based on the Course Grid, that consisted of ten tasks in every unit. Here, the researcher use teaching technique in designing the material. The method contains an explanation about the materials, for example, the material and last exercise to know how far they understand about the material. Each of the parts has different activities.

However, this Task Book consists of three units. Each unit was composed of ten tasks which classified into some different study based on the skill. Besides, the goals of each unit are:

a. Unit 1 (The Introduction of Mathematical logic)

Unit 1 consists of Mathematics material and English material. Mathematic material such as logical connectives and math wordlist. English material such as conjunctions, tenses, conditional sentences and practice time. Students are needed to know the word in conjunction, Mathematical logic words, pronounce the common words and improve their ability through exercises.

b. Unit 2 (Relation and Functions)

Unit 2 consisted of Mathematics material and English material. Mathematic material such as relation, function, domain, range, types of function and math wordlist. English material such as cardinal number, tag question and practice time. Students are needed to know the word in numbers, define relation and function, mapping the function material, pronounce the common words and improve their ability through exercises.

c. Unit 3 (Probability)

Unit 3 consists of Mathematics material and English material. Mathematic material such probabilities, ordinal number and math wordlist. English material such as modal possibility and practice time.

Students are needed to know to analyze the short article, know modal probability in English, pronounce the common words and improve their ability through exercises.

3. Material Validation

a. Expert Judgment

Five experts validated the instrument and learning material. Those experts are *Layout*, *language* and *material Expert*.

1) Expert's Judgment on Instrument

a. Material Expert

Based on an expert assessment by overall material, the students' worksheet got a total score of 47 with an average of 3.92, which included as a "Good" category.

Table 4.1. Average score by expert material on every aspect

Question Number	Score	Question Number	Score
1	3	7	4
2	4	8	2
3	5	9	5
4	3	10	4
5	4	11	4
6	4	12	5
Total Score			47

$$\text{Mean} = \frac{47}{12} = 3.92$$

b. Language Expert

The table below shows that the instrument designed by the researcher is already qualified to take the sample in the Mathematic class. It proved from the score of the *Language Expert* gave score 59, and the average mean is **4.91**. In the interval, this classified as "**Very Good**". The result can saw as follow:

Table 4.2. Average score by expert language on every aspect

Question Number	Score	Question Number	Score
1	5	7	5
2	5	8	4
3	5	9	5
4	5	10	5
5	5	11	5
6	5	12	5
Total Score			59

$$\text{Mean} = \frac{59}{12} = 4.91$$

12

2) Expert's Judgment on Learning Material

a. Layout Expert

Based on the experts' assessment, the overall designed of the students' worksheet got a total score of 184 an average of 3.62, which included as a "Good" category.

Table 4.3. Average score by expert design on every aspect

Question Number	Score	Question Number	Score	Question Number	Score	Question Number	Score
1	5	11	5	21	5	31	5
2	5	12	5	22	4	32	4
3	5	13	5	23	5	33	5
4	4	14	4	24	5	34	4
5	5	15	5	25	4	35	5
6	4	16	5	26	5	36	5
7	5	17	4	27	4	37	5
8	4	18	5	28	5	38	5
9	5	19	5	29	5	39	5
10	5	20	4	30	5		
Total Score							184

$$\text{Mean} = \frac{184}{39} = 4.72$$

b. Material Expert

Based on the experts' assessment, the overall material of the students' worksheet gets a total score of 183 with an average of 4.70, which included as "Very Good" category.

Table 4.4. Average score by expert material on every aspect

Question Number	Score	Question Number	Score	Question Number	Score	Question Number	Score
1	4	11	5	21	5	31	5
2	4	12	5	22	5	32	4
3	5	13	5	23	5	33	4
4	4	14	5	24	5	34	4

5	4	15	5	25	5	35	4	
6	4	16	5	26	5	36	5	
7	4	17	5	27	5	37	5	
8	5	18	5	28	5	38	5	
9	5	19	5	29	4	39	4	
10	5	20	5	30	5			
Total Score							183	

$$\text{Mean} = \frac{183}{39} = 4.70$$

39

c. Language Expert

Based on the experts' assessment. The overall language of students' worksheet gets a total score of 150 is an average of 3.85, which included a "Good" category.

Table 4.5. Average score by expert language on every aspect

Question Number	Score	Question Number	Score	Question Number	Score	Question Number	Score	
1	4	11	4	21	4	31	4	
2	4	12	4	22	4	32	4	
3	4	13	4	23	3	33	4	
4	4	14	4	24	4	34	4	
5	4	15	4	25	4	35	4	
6	4	16	3	26	4	36	3	
7	3	17	4	27	4	37	3	
8	4	18	4	28	3	38	4	
9	4	19	4	29	4	39	4	
10	4	20	4	30	4			
Total Score							150	

$$\text{Mean} = \frac{150}{39} = 3.85$$

39

2) The Second Draft of Material

Validation for the second draft of material, then the researcher obtained some corrections from the experts. These are the correction from Learning Material Experts. Therefore, the final product of material can saw in the appendix.

a. Material Expert Correction

Table 4.6. Revision on the inconsistency of the material

	Part of the unit	Point to revise	Revision
Unit 1, unit 2, and unit 3	Basic material	Basic math material	Cardinal and ordinal number should be the first task before another task
	List of material	The arrange of material in math	The material should be more accessible to difficult

b. Language Expert Correction

Table 4.7. Revision on the grammar mistake in material for mathematics

	Part of the unit	Point to revise	Revision
Unit 1	Mathematical logic	The language used has been appropriate with the level of the students	It should change mathematics logic into mathematical logic
Unit 1	Task 9	The activity about tenses	It should change "arrange... to be.."

			became "arrange... into"
Unit 1,2,and 3	Task 10	The practice time	It should change "how to understand you are" became "how well you know after..."

c. Layout Expert Correction

Table 4.8. Revision on the design book in material for mathematics

	Part of the unit	Point to revise	Revision
Unit 1,2, and 3	Book design	The size of the book	Better reduced by the size of the book
	Cover book	Adding cover book	Give cover book and bibliography
	Material design	Font, space and punctuation mark	It should consider the font, space and punctuation mark
	Picture	Layers of colour and shape	The colour should avoid colourfully
	Glossary	Punctuation mark	It should change semicolon into point two

3) Students' Perception of Learning material

The students' perception conducted to make sure that the material is genuinely appropriate to apply to the student of mathematics majority. The result of students' perception can saw as follow:

Table 4.9 Result of student perception of designed materials of English for

Mathematic

No	Statement	Means	Description of Agreement
1	The materials are suitable for basic lower level	4.04	Agree
2	The materials based on students' need in Mathematics majority	4.13	Agree
3	The materials can improve students' English Skill in Mathematic	4.08	Agree
4	The input materials are varied	4.13	Agree
5	The materials are engaging and understandable	4.13	Agree
6	The topics of the material based on Mathematic majority	4.30	Strongly agree
7	The length and materials' sources based on student's need in Mathematic	4	Agree
8	The learning activities are varied	4.17	Agree
9	The exercises arranged from the easiest to the most challenging task	4.30	Agree
10	The materials instructions are understandable	4.04	Agree
11	The exercises consisting of Individual, pairs, and group assignment	4.17	Agree
12	The activities make the students active in the classroom	4.17	Strongly agree

The data above showed that the English learning material designed by the researcher is already qualified to apply in the class. It proved from the score of the students' perception, which answered *Strongly Agree* 4.30 and *Agree* 4.13. Then, the average of Mean is **4.21**. In the interval, this category got "**Good**".

B. Discussions

This research focused on developing English learning material for mathematics students, and English learning materials developed by using the ADDIE model. It consisted of five steps. The researcher does the first step was analysis with conducting need analysis which presented in the form of a questionnaire with contains students' necessities, lack, input and wants.

The next stage is designing the product. According to Nation and Macalister (2010: 24-25), an analysis conducted to know what the learner needs to do in the target situation. So, the researcher used need analysis result to design materials, activity and setting of the learning material.

The researcher made the course grid to construct English for mathematics material. The targets needs of the students are to make them get information about English for mathematic, so in the course grid vocabulary about mathematic almost available in every units. Furthermore, they want to have a good competency in speaking skill and vocabulary, so in the course grid the practice speaking through dialogue or conversation. For example, they are able to make daily conversation that are related to English for Mathematic wordlist. The students also in low level, so that the vocabulary and the exercise in the course grid still basic.

The learning needs, most activities that the students want in learning process is practice the conversation with their friend or small group in front of class, so thats why in the end of the unit have to explain the material

in front of class with their friend and still controlling learning activities by the lecturer.

The next stage is developing the product. In this step, the researcher created the book through several measurements such as English proficiency level, interesting topic, students' target, activities, setting and input materials. Students' book has three units consisted of many tasks. Long (1985) states that task is the ideal unit for specifying the content of a specific purpose course because it most closely reflects what the learning to do with the language.

After constructing the students' book, the next stage was conducting a product validation the product validation completed by three experts of design, language and material. The purpose of validation is to see the quality of the students' books based on the aspect of validity. A subject matter expert did the first validation. In this process of validation, the expert conducted an assessment on the questionnaires. Questionnaire for subject matter experts composed of five aspects, namely the precision of the content, accuracy aspects of the scope, the content, and aspect of the understanding—the elements used of language and the element of completeness of the component. It elaborated on Kane's (2006) argument based to approach to validation research. Construct a significant validation claim: score can be trusted, and the score is generalizable to a universe of items or task.

After being revised by the experts, the further assessment made by the expert of design. In this validation process, the experts assessed the questionnaire provided. Questionnaire for the expert of the book consists of

three aspects, namely Layout, language of the students' book and learning materials.

After being revised by the experts, a further assessment conducted by the experts of media. In this validation process, the expert assessed the assessment tools of the questionnaire provided. Questionnaire for an expert of media consists of six aspects was the Layout is clear, the Layout is impressive, the font size is proper, the font face is accurate, and the space is suitable. Finally, the draft result showed the score of the *Lay-Out Expert* gives 184, *Material Expert* gives 183 and *Language Expert* gives 150. Then, the average of Mean is **4.42**. In the interval, this category gets “*Very Good*” although there are still some revisions need to be improved to get a better task book before applying the English material to the classroom.

The next stage is the Implementation and Evaluation of the product. In this stage, the revised students' book based on the assessment of the experts has to be tested or student perception. The trial conducted to determine the quality of the students' almost student perceptions of the design translated into Indonesia.

The next stage is a small group trial. The object of this field trial was 29 students of the sixth semester who have different learning ability of high, medium and low—the assessment conducted in the mathematics classroom. The researcher asked students as respondents to provide an evaluation of the students' book by filling out a questionnaire that provided. According to the student perception of assessment questionnaire (SPAQ, Wadrip et al. 2009)

assesses congruence with planned learning, authenticity, student consultation, transparency, and diversity. The next stage is a field trial. This stage is the last in the assessment process of the students' book. The object of the field trial was 23 students. At this stage, the researcher asked the students to assess the students' book by filling out a questionnaire that provided. The questionnaire of students perception used consisted of 12 statements. The purpose of the field trial is to look at the quality of the students' book based on the aspects of validity.

The data above showed that the English learning material designed by the researcher is already qualified to apply in the class. Then, the average of Mean is **4.21**. In the interval, this category got "*Good*".

This research is line with Zulyadaini (2017) who found that the students' worksheet for mathematics students that has been developed by her declared practical and valid, so it used as the learning equipment of mathematics.

The design of the learning material of English for Mathematics causes absence basic book English material, and there was no material of English for Mathematic specifically. As a result, the students were not proficient communicating English for Mathematics while the student needs in the future.

The limitations of the study are:

1. Test implementation and Evaluation of the students' book only performed on six semesters that is Mathematics study program of IAIN Palopo.

2. Almost the researcher used Google form.
3. The student perception used Google form and only 23 subjects of the research..



IAIN PALOPO

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

The purpose of this research is to develop the English learning material for Mathematic students of IAIN Palopo. The researcher used the ADDIE Model consists of analysis of the students' needs, Design the course grid, Develop, Implementation and last Evaluation the English material books. The English for Mathematics book quality based on student perception showed that strongly *Agree* 4.30, and *Agree* 4.13 so, the average of mean was 4.21 got category '*Good*'. Then, the average of Mean is **4.42** on expert judgment. In the interval, this category gets "*Very Good*". So this the English for Mathematics book was valid and it used as the learning equipment of mathematics.

The appropriate English learning material for Mathematic students must be consisting of: 1) Students' need analysis 2) Having explanations about mathematics material 3) having an example to did some exercise 4) having many supporting pictures and vocabulary 5) Arranging from the easiest to the most difficult 6) Consisting of individual, pairs, and group assignment and last 7) Integrating the four skills of language

B. Suggestions

1. To The Lecturer

The researcher hopes it will motivate the teacher to make a better learning material ahead, which is relevant to the students' needs. Otherwise, the lecturer can use this product for learning and teaching English for mathematics.

2. To The Other Researchers

The other researchers expected to design the English material, which has more exciting topics, and the researchers should be able to develop appropriate English learning material more creative.



IAIN PALOPO

BIBLIOGRAPHY

- Basturkmen, H. *Developing Course in English for Specific Purposes*. New York: Palgrave Macmillan.2010.
- Borg & Gall. *Education Research: an introduction*. London. Longman. 1983
- Borg & Gall. *Education Research: an introduction*. London. Longman. 2003.
- Borg, W.R & Gall, M.G. *Educational Research: an introduction* (4th edition).New York: Longman inc.2003
- Brown, H.D. *English of Language Teaching and Learning*. (5th ed). New York. Pearson Education. 2007.
- Chambers, F. “A Re-Evaluation of Needs Analysis in ESP.” *the ESP Journal 1, no. 1* (1980): 25–33.
- Halim, A. Decision-making in Language Course Design ‘in Wilson, G. H. (ed.) *Curriculum Development and Syllabus Design for English Teaching Singapore*. SEAMEO Regional English Language Center. . 1976.
- Hamid, Indah Zulfitri, Baso Jabu, and Kisman Salija. “Need Analysis of English Learning Materials for International Class Program (ICP) of Mathematics Department at State University of Makassar” (n.d.).
- Hutchinson, T.Y.A., Waters. *English for Specific Purposes: A Learning-Centered Approach*. Cambridge: Cambridge university press, 1992.
- Hutchinson, T. & waters, A. *English for Specific Purpose*. London:Cambridge university press. 1987.
- Istiandaru, Afit, Vita Istihapsari, and Fariz Setyawan. “Pengembangan Perangkat Perkuliahan English for Mathematics Bagi Mahasiswa Pendidikan Matematika.” In *Prosiding Seminar Nasional Pendidikan Matematika Etnomatnesia*, 2018.
- Munby, J. *Communicative Syllabus Design*. Cambridge: Cambridge university press, 1987.
- Nation & Macalister. *Language Curriculum Design*. New York: Routledge, 2010.
- Nunan, D. *Task-Based Language Teaching*. Cambridge: Cambridge university press, 2004.
- Pandian, Ambigapathy, and Revathi Ramiah. “Mathematics and Science in English: Teacher Voice.” *The English Teacher* 33, no. 11 (2004).
- Rahmaniar, Irene. “Designing Esp Learning Materials For Eleventh Grade Students of Accounting Program at Vocational High Schools Based On Hutchinson And Waters’(1987) Learning-Centered Approach” (N.D.).
- Richard, J. & Rodgers, T.S. *Approaches and Methods in Language Teaching*.

New York: Cambridge university press, 2006.

Robinson, Pauline C. *Working with Language: A Multidisciplinary Consideration of Language Use in Work Contexts*. Hywel Coleman, 1989.

Taba, H. *Curriculum Development: Theory and Practice*. New York: NY: Harcourt, Brace & World, 1962.

Tomlinson. B. *Material Development in Language Teaching*. London:Cambridge University Press. 1998.

Tomlinson, Brian. *Developing Material for Language Teaching*. New York: Cromwell Press, 2003.

Tomlinson. B. *English Language Learning Materials*. London. Continuum.2008.

Tomlinson, Brian. *Introduction: Principles and Procedures of Materials Development*. na, 2011.

Tomlinson, Brian. "Materials Development." *The encyclopedia of applied linguistics* (2012): 1–7.



IAIN PALOPO



APPENDIXES

IAIN PALOPO

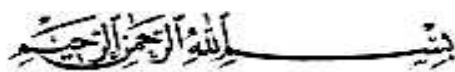
ENGLISH *for* Mathematics



Jenni Ramadhani

Palopo State Islamic Institute

ACKNOWLEDGEMENT



Alhamdulillah Rabbil Alamin, praise and thanks to the Almighty God, Allah SWT. Without His blessing and mercy, the researcher would have never been able to start and finish this textbook at the Institute State for Islamic Studies (IAIN) Palopo on the title “*English for Mathematics*”. To our beloved prophet, the chosen one Muhammad saw. Safety and peace be upon him.

The writer thanks to mam Wahibah, S.Ag., M.Hum and Andi Tenrisanna Syam, S.Pd., M.Pd, as the consultant who has given suggestions, explanations, corrections, guidance, and some ideas until this book finish. The writer also thanks to her validators of this book, Mr. Yuda Satria N., S.Pd., M.Si.P, Mrs. Lisa Aditya D.M., M.Pd, Mrs. Dr.Magfirah Thayyib, M.Hum, and Mrs. Fadliyah Rahmah Muin, S.Pd., M.Pd who has given the researcher many positives input, motivation, correction , and social values during the process of this product..

The writer hopes this book can give some values to the students of Mathematic Departement. The writer admits that this book is not perfect, so that the writer will accept suggestion from the readers in order to make better. The writer hopes that this book would be beneficial to everyone.

IAIN PALOPO
Palopo, September 2020

The writer

Key to Pronunciation



Scan this QR code!



Huruf	Phonetic Symbol	Huruf	Phonetic Symbol
A	/ei/	N	/en/
B	/bi:/	O	/ou/
C	/si:/	P	/pi:/
D	/di:/	Q	/kju:/
E	/i:/	R	/a:(r)/
F	/ef/	S	/es/
G	/dʒi:/	T	/ti:/
H	/eitʃ/	U	/ju:/
I	/ai/	V	/vi:/
J	/dʒeɪ/	W	/'dʌblju:/
K	/keɪ/	X	/eks/
L	/el/	Y	/wai/
M	/em/	Z	/zed/

Sumber : <https://dindin.id/menguasai-alphabet-bahasa-inggris-cara-pelafalan-dan-tips/>

IAIN PALOPO

Unit 1

INTRODUCTION of Mathematical Logic



Learning Future

Mathematical logic words

Pronunciations

Exercises

**In this unit, you will learn
how to:**

- *Know mathematical logic words*
- *Pronounce the common words*
- *Understand exercise as well*



Task 1



Listen & Repeat!

CONJUNCTIONS

ENGLISH

For
And
Nor
But
Or
Yet
So

PRONOUNCE

/fɪ:(r)/
/ænd/
/nɔ:(r)/
/bʌt/
/ɔ:(r)/
/jet/
/s /

MEANING

Karena
Dan
Tidak juga
Tapi
Atau
Namun
Sehingga



Example:

Lets consider the propositional are :

- *p* means “Mytha is beautiful”
- *q* means “Fatur is a friendly”

Formalize the following sentences:

1. Mytha is beautiful **and** fatur is a friendly
2. Mytha is **not** beautiful, **nor** fatur is a friendly
3. Mytha is Beautiful **or** fatur is a friendly

Solution :

1. $p \wedge q$
2. $\sim p$
3. $p \vee q$

IAIN PALOPO



Task 2



Exercises!

Fill in the blank with the correct conjunction such as but, or, and, so.

1. My family go to holiday _____ I don't join with them.
2. She didn't like banana _____ he didn't like grape.
3. They come to my house _____ I open the door.
4. She is very fat _____ she is overweight.
5. I am buying some fruits _____ vegetables.



Task 3

LOGICAL CONNECTIVES

Mathematic logic	Propositional logic	Express	Meaning
Conjunction	$p \wedge q$	p and q	p dan q
Disjunction	$p \vee q$	p or q	p atau q
Negation	$\neg p$	not p	Bukan p
Implication	$p \rightarrow q$	If p then q	Jika p maka q
Biimplication	$p \leftrightarrow q$	p if and only if q	p jika dan hanya jika q

✚ Attach the sentences with the right answer below.

- | | |
|--|-----------------|
| a. I am studying English and he is studying math | • Biimplication |
| b. It is not raining | • Conjunction |
| c. Jones will win or Smith will win | • Implication |
| d. If she is late for class then it is Monday | • Disjunction |
| e. Walking is safe if and only if rabbits have not been seen in the area | • Negation |



Task 4



Exercises!

Let's consider the propositional are:

p means "I study math everyday"

q means "you study English every night"

✚ Express the following as natural English sentences :

1. $\sim p$

Solution: _____

2. $p \wedge q$

Solution: _____

3. $p \vee q$

Solution: _____

4. $p \leftrightarrow q$

Solution: _____

5. $p \rightarrow q$

Solution: _____

Task 5



Listen and repeat the words!

English	Pronounce	Meaning
Understand	/ ʌnd stænd/	Mengerti
Shape	/ eɪp/	Bentuk
Mathematic	/mæ mətɪk/	Matematika
English	/ ɪ ɪŃ/	Bahasa Inggris
Solution	/s lu: n/	Penyelesaian

Activity :



Make a small group, each group have 3 people. Every group should make conversation based on the some words above, and then read in front of your

Task 6

CONDITIONAL SENTENCES

	Conditional	Result
Zero	If + simple present If you bring your book	Simple Present I read the book
First	If + simple present If you bring your book	Will/won't + V1 I will read the book

Second	If + simple past If you bought your book	Would/wouldn't + V1 I would read the book
Third	if + past perfect if you had bought your book	Would / Wouldn't have + V3 I would have read the book



Example:

Let p: Today is Monday, q: I will buy pencil and pen

1. $p \rightarrow q$

Solution: if today is Monday, then I will buy pencil and pen

2. $q \leftrightarrow p$

Solution: I will buy pencil and pen, if only if today is Monday

3. The converse, $q \rightarrow p$

Solution: if I buy pencil and pen, then today is Monday

4. The inverse, $\neg p \rightarrow \neg q$

Solution: if today is not Monday, then I will not buy pencil and pen.



Task 7

✚ Formalize the following statement in terms of proposition !

1. If he like rabbit, then he will so cute

Solution: $p \rightarrow q$ _____

2. If Lisa studies in the morning, then she knows the answer.

Solution: _____

3. If Lhya is not safe to walk alone then she don't go anywhere

Solution: _____

4. If we had left to Palopo by car, then I would have brought some food

Solution: _____

5. I will be famous, if only if I am smart

Solution: _____

6. I wouldn't eat banana, if only if I didn't have it

Solution: _____



Task 8

Tenses

TENSES	SENTENCES	FORM
Simple Present (kejadian sekarang)	Verbal	S + V1(s/es) + O
	Nominal	S + tobe (is,am,are) + ANA
Simple Past (kejadian lampau)	Verbal	S + V2 + O
	Nominal	S + tobe(was,were) + ANA
Simple future (kejadian yang akan datang)	Verbal	S + will/shall + V1 + O
	Nominal	S + will/shall + be + ANA
Past Future (kejadian lampau yang gagal terjadi)	Verbal	S + would/should + V1 + O
	Nominal	S + would/should be + ANA
Past perfect (kejadian yang telah terjadi dimasa lampau)	Verbal	S + had + V3 + O
	Nominal	S + had + been + ANA


Notes : *ANA : adjective, noun, and adverb

Example :

- ❖ Simple present
 - I study mathematic now
 - I am a student
- ❖ Simple past
 - My father went to Surabaya last week
 - They were a teacher
- ❖ Simple future
 - She will go to market tomorrow
 - I will be a teacher.
- ❖ Simple past future
 - You would clean my room

- I would be architect
- ❖ Past perfect
 - We had cleaned your room
 - She had been doctor

Task 9

 Arrange these jumble words below into the correct sentences

1. .arrive- Anton- home- at

Solution : _____

2. Latter- they- the- copied- had

Solution: _____

3. Would- I- buy- car- a

Solution: _____

4. Ms.Ika- in- bought- book-bookstore- some

Solution: _____

5. Had- you- drank- with- juice- friend- my.

Solution: _____

MATH WORDLIST

English	symbol	Pronounce	Meaning
Plus/positive	+	/pl s/	Tambah
Minus/negative	-	/'main s/	kurang
Times/multiply	x.	/m ltiplaid/ /taimz/	kali
Divide	:	/di'voidid/	Bagi
Equal	=	/ i:kw l/	Sama dengan

Task 10

The Logical-Mathematical Learning Style

By Ann Logsdon Fact checked by Cara Lustik

The logical-mathematical learning style is one of eight types of learning styles, or intelligences, defined in developmental psychologist Howard Gardner's theory of Multiple Intelligences. Logical-mathematical learning style refers to your ability to reason, solve problems, and learn using numbers, abstract visual information, and analysis of cause and effect relationships.

Logical-mathematical learners are typically methodical and think in logical or linear order. They may be adept at solving math problems in their heads and are drawn to logic puzzles and games.

Characteristics of the Logical-Mathematical Learning Style

People with logical-mathematical learning styles use reasoning and logical sequencing to absorb information.¹ Their strengths are in math, logic, seeing patterns, and problem-solving. They like to work with numbers, find logical methods to answer questions, classify, and categorize. They are comfortable working with the abstract.

They enjoy school activities such as math, computer science, technology, drafting, design, chemistry, and other "hard sciences." Logical-mathematical learners prefer logical order in instruction and often work best in structured, organized environments. They have strong visual analysis, memory, and problem-solving skills.

Natural tinkerers and builders, they enjoy bringing mathematical and conceptual ideas into reality via hands-on projects such as computer-assisted design, creating electronic devices, using computer applications, or programming computers.

People with the logical-mathematical learning style often seek out rules and procedures and may be less assured when those don't exist. They may not be tolerant when others don't follow logical sequences, rules, or procedures. They may need to work on seeing the big picture and systems thinking.

How Logical-Mathematical Learners Learn Best

People with logical-mathematical learning styles learn best when they're taught using visual materials, computers, statistical and analytical programs, and hands-on projects. They prefer structured, goal-oriented activities that are based on math reasoning and logic rather than less structured, creative activities with inexact learning goals.

Logical-mathematical learners would find a statistical study more appealing than analyzing literature or keeping a journal.² They may also enjoy creating graphs, charts, timelines, and categorizing collections.

As part of a group project, the mathematical logical learner may want to contribute by making an agenda or list, setting numerical goals, ranking brainstorming ideas, putting steps into a sequence, keeping track of the progress of the group, and constructing data reports. They often also enjoy troubleshooting problems using logic, analysis, and math.



Practice time

- After you read the text above, you have mini project
 1. Make a conclusion about the text
 2. Make a short video that explain about the text

REFLECTION

How well do you know after learning mathematic logic in English this unit? Tell it in front of your class!

IAIN PALOPO

Unit 2

RELATION and FUNCTION



Learning Future

Relation and Function

Word list

Exercises

In this unit, you will learn how to:

- Define relation and function
- Find domain and range of function
- Determine the types of function



Task 1

CARDINAL NUMBER

/k :dɪnl 'n mb (r)/

Number	Pronounce	English	Number	Pronounce	English
1	/w n/	One	26	/twentɪ'sɪks/	Twenty-six
2	/tu:/	Two	27	/twentɪ'sev n/	Twenty-seven
3	/ ri:/	Three	28	/twentɪ'eɪt/	Twenty-eight
4	/f /	Four	29	/twentɪ'nain/	Twenty-nine
5	/faɪv/	Five	30	/' :tɪ/	Thirty
6	/sɪks/	Six	40	/'f tɪ/	Forty
7	/'sev n/	Seven	50	/'fɪftɪ/	Fifty
8	/eɪt/	Eight	60	/'sɪkstɪ/	Sixty
9	/nain/	Nine	70	/'sev nti/	Seventy
10	/ten/	Ten	80	/'eɪtɪ/	Eighty
11	/ɪ'lev n/	Eleven	90	/'nainɪ/	Ninety
12	/twelv/	Twelve	100	/ 'h ndr d/ ; /w n 'h ndr d/	A hundred; one hundred
13	/ :'ti:n/	Thirteen	105	/ 'h ndr d n faɪv/	A hundred and five
14	/f 'ti:n/	Fourteen	140	/ 'h ndr d n 'f tɪ/	A hundred and forty
15	/fɪf'ti:n/	Fifteen	900	/nain 'h ndr d/	nine hundred
16	/sɪkst'i:n/	Sixteen	1000	' z nd/:w n ' z nd/	a thousand, one thousand
17	/seven'ti:n/	Seventeen	1002	/' ' z nd n tu:/	a thousand and two
18	/er'ti:n/	Eighteen	1030	/' ' z nd n , :tɪ/	A thousand and thirty
19	/nain'ti:n/	Nineteen	6.000	/sɪks' z nd/	Six thousand
20	/'twentɪ/	Twenty	10.000	/ten ' z nd/	ten thousand

21	/twenti'w n/	twenty-one	12.356	/twelv' z n d ri: 'h ndr d n 'fifti siks/	Twelve thousand, three hundred and fifty six
22	/twenti'tu:/	twenty-two	100 000	/ 'h ndr d ' z nd/	a hundred thousand
23	/twenti' ri:/	twenty- three	1.000 000	/ 'mlj n/	a million
24	/twenti'f /	twenty-four	1.000.000.000	/ 'bɪlj n/	a billion
25	/twenti'faɪv/	twenty-five	1.000.000.000. 000	/ 'trɪlj n/	a trillion

- ✚ Natural Numbers /'næt rəl 'n mb (r)/
1,2,3,... *one, two, three, and so forth (without end).*
1,2,3,..., 10 *one, two, three, and so forth up to ten*
- ✚ Integers /'ɪnt j r/
..., -2, -1, 0, 1, ... *..., negative two, negative one*
, zero, one, ..
- ✚ A Digit /'dɪd ɪt/
any one of the ten numerals 0,1,2,3,4,5,6,7,8,9.
Example:
 - 3 is a single-digit number, but 234 is a three-digit number.
 - In 234, 4 is the units digit, 3 is the tens digit, and 2 is hundreds digit.

Task 2

RELATIONS

1. A **relation** is a set of ordered pairs.
For example, $A = \{ (-1,3), (2,0), (2,5), (-3,2) \}$
2. **Domain** is the set of all first coordinates : $\{-1,2,2,-3\}$
So $\text{dom}(A) = \{-1,2,-3\}$
3. **Range** is the set of all second coordinates : $\{3,0,5,2\}$
So $\text{rang}(A) = \{3,0,5,2\}$



Example:

Determine the following bellow with correct relation, domain and range.

1. $\{(1,-2),(-2,-0),(-1,2),(1,3)\}$

Relation: $A = \{(1,-2),(-2,-0),(-1,2),(1,3)\}$

Domain: $\{1,-2,-1,1\}$

Range : $\{-2,0,2,3\}$ (note: the element -2 is not listed twice)

Listen and repeat the words !

MULTIPLIED NUMBER

English	Pronounce	Meaning	English	Pronounce	Meaning
Once	/w ns/	Sekali	Nine times	/nam taimz/	Sembilan kali
Twice	/twais/	Dua kali	Ten times	/ten taimz/	Sepuluh kali
Three times	/ ri: taimz/	Tiga kali	Many times	/ meni taimz/	Beberapa kali
Four times	/f taimz/	Empat kali	Uneven	/ n i v()n/	Bilangan ganjil
Five times	/faiv taimz/	Lima kali	Even	/ i v()n/	Bilangan genap
Six times	/siks taimz/	Enam kali	A slice	/ ' slais/	Seiris
Seven times	/'sev n	Tujuh kali	A piece	/ ' pi s/	Seotong



Task 3



Exercises!

Determine the domain and range of the relation !

6. $\{(bear,7),(cat,35),(dog,20),(deer,20),(chick,52)\}$

Domain : _____

Range : _____

7. $\{(1,1),(2,2),(3,5),(4,10),(5,15)\}$

Domain : _____

Range : _____

8. $\{(-3,-2),(-2,-4),(-1,-), (1,-2)\}$

domain : _____

range : _____

9. $\{(a,b),(b,c),(c,b),(d,c)\}$

Domain : _____

Range : _____

10. $\{(e,6),(f,9),(g,22),(h,40)\}$

Domain : _____

Range : _____

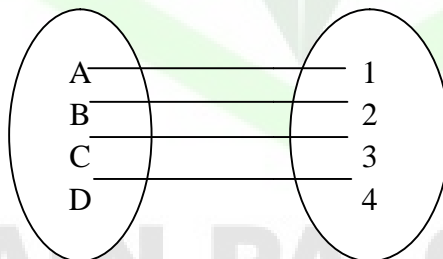


Task 4

FUNCTIONS

Function is every element of set A has one and only one image on set B or function no two ordered pairs has the same first element.

✚ Consider the relation $f=\{(a,1),(b,2),(c,3),(d,4)\}$



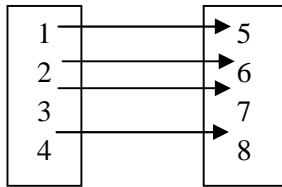
Example:

Check to see if the following relations are functions :

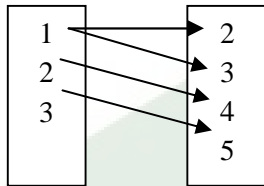
$A=\{(1,5),(2,6),(3,7),(4,8)\}$

$B=\{(1,2),(1,3),(2,4),(3,5)\}$

Solution:



According to the mapping table for A
We can see that A is *function*

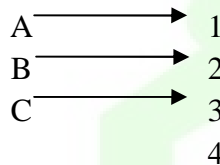


According to the mapping table for B
We can see that B is *not a function*

Classification of function :

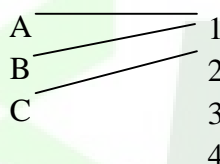
1. A function is functions for which each element of the set A is mapped to a different element of the set B are said to be **one-to-one**.

Example :



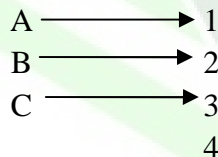
2. A function can map more than one element of the set A to the same element of the set B . Such a type of function is said to be **many-to-one**

Example:



3. A function which is both one-to-one and onto is said to be a **bijective** function.

Example :



MATH WORDLIST

English	symbol	Pronounce	Meaning
not equal	\neq	/not i:kw l tu:/	Tidak sama dengan
less than	$<$	/les th n/	Lebih kecil dari
greater than	$>$	/greit r th n/	Lebih besar dari
less than or equal to	\leq	/les th n o:(r) i:kw l tu:/	Kurang dari atau sama dengan
greater than or equal to	\geq	/greit r th n o:(r) i:kw l tu:/	Lebih dari atau sama dengan



Task 5



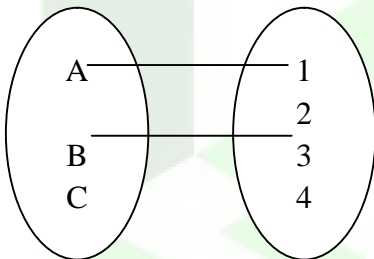
Exercises!

1. Check to see if the following relations are functions with mapping and determine the classification of the function, domain and range !

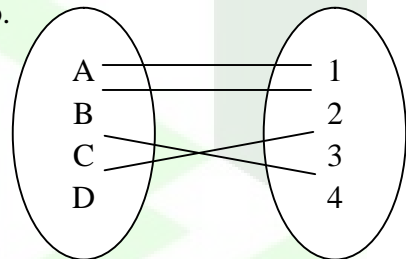
- $\{(-2,1),(-1,7),(1,5),(8,6)\}$
- $\{1,3),(1,4),(-2,8),(3,10)\}$
- $\{-1,7),(2,6),(5,7),(9,4)\}$
- $\{(a,1),(b,3),(c,1),(d,3)\}$

2. Which of the following relations represent a function and explain why?

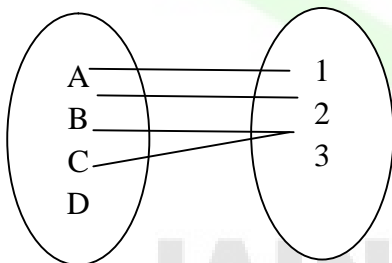
a.



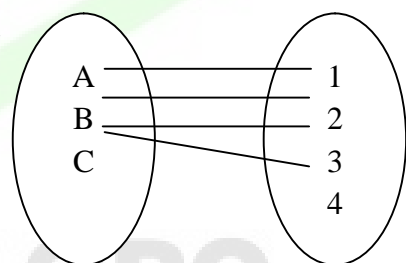
b.



c.



d.



Task 6

Vocabulary!

English	Pronounce	Meaning
Relation	/rɪ leɪʃ()n/	Hubungan
Function	/'f ʌ k n/	Fungsi
Domain	/d ɪ meɪn/	Daerah asal
Range	/reɪnd /	Daerah hasil
Coordinate	/'k ɔː(r)dɪneɪt/	Kordinat

Activity :

Write a short story based on the some words above, and then read in front of your class!

Task 7

QUESTION TAG

DEFINITION

- Question tag is a short question put down in the end of the statement

FUNCTION

- Ask confirmation about something statement uncertain

The basic structure of a tag question is:


1. If the statement is **positive**, we use a **negative** question tag.
Example: I am beautiful, **aren't I?**
2. If the statement is **negative**, we use a **positive** question tag.
Example: **she wasn't smart, was she?**

3. If there is an **auxiliary verb** in the statement, we use it to form the question tag.
Example: Your parents **have** retired, **haven't** they?
4. If the verb in the statement is **present simple or past simple** and is positive. Here we use **don't, doesn't or didn't**.
Example: I **don't** need to finish this today, **do** I?
5. If the verb in the statement is **to be** in the present simple or past simple. In this case we use **to be** to make the question tag:
Example: The bus stop **is** over there, **isn't** it?
6. If **imperatives** statement although positive or negative (Simple Present), we use **will/would**
Example: **Don't open your books**, **will** you?
7. If the statement **Let's**, we use **shall**.
Example: **Let's** take the next bus, **shall** we?

Task 8



Exercises!

-  Match the statement with the correct question tag

Statement	Question Tag
a. You aren't a math teacher,	• Wasn't I?
b. We use algorithm to answer,	• Does she?
c. Anni doesn't come today,	• Will you?
d. Lets draw the picture,	• Haven't I?
e. I was waiting you,	• Didn't she?
f. Your father hadn't met her,	• Was she?
g. Don't forget to make a cake,	• Are you?
h. I have eaten,	• Don't we?
i. Jenni cooked noodle,	• Had he?

j. She wasn't jealous

• Shall we?

Task 9



Work in pairs!

- ❖ Complete the conversation with question tag and the work in pairs to practice the dialogue!

Tirta : Jenni, I'm afraid that I won't be able to see you on Friday. I've got to see some class and you make it any other time _____?

Jenni : Yes, don't worry, we can meet next week. You have a time next week _____?

Tirta : That's fine. I pick you up at the station, _____?

Jenni : That's very kind of you, but my car will be back from the garage, so I can drive up.

Tirta : oh okay, but I'm sorry about the delay. You forgive me, _____?

Jenni : Yeah, That's fine, really. I haven't much work on the proposal, and now I've got an extra weekend. I'll look at it in more detail.

- ❖ Use the dictionary to check the meaning of these words.

- | | |
|-------------------|--------------------|
| ▪ Afraid : _____ | ▪ Garage : _____ |
| ▪ See : _____ | ▪ Drive up : _____ |
| ▪ Kind : _____ | ▪ Delay : _____ |
| ▪ Pick up : _____ | ▪ Weekend : _____ |

Task 10

Functions versus Relations

There are different ways of looking at functions. We will consider a few. But first, we need to discuss some terminology.

A "relation" is just a relationship between sets of information. Think of all the people in one of your classes, and think of their heights. The pairing of names and heights is

a relation. In relations and functions, the pairs of names and heights are "ordered", which means one comes first and the other comes second. To put it another way, we could set up this pairing so that either you give me a name, and then I give you that person's height, or else you give me a height, and I give you the names of all the people who are that tall. The set of all the starting points is called "the domain" and the set of all the ending points is called "the range." The domain is what you start with; the range is what you end up with. The domain is the x's; the range is the y's. (I'll explain more on the subject of determining domains and ranges later.

A function is a "well-behaved" relation. Just as with members of your own family, some members of the family of pairing relationships are better behaved than other. (Warning: This means that, while all functions are relations, since they pair information, not all relations are functions. Functions are a sub-classification of relations.) When we say that a function is "a well-behaved relation", we mean that, given a starting point, we know exactly where to go; given an x, we get only and exactly one y.

🎨 After you read the text above, answer the question bellow !

1. What is a relation and function?
2. What are the different between the domain and the range?
3. What the meaning of "well-behaved" in the text about?
4. Give the conclusion about the text above!

REFLECTION

How well do you know after learning relation and fraction in English this unit? Tell it in front of your class!

IAIN PALOPO

Unit 3

PROBABILITIES

**In this unit, you will learn
how to:**

- *Analyze the short article*
- *Understand the exercise about the probability*
- *Know modal probability in English*





Task 1

Scan this QR code for task 1 and task 2 or klik this link

<https://drive.google.com/folderview?id=1OxCzquHYyqC5ZJ2mcV5d3WyJoAiGyUXJ!>



Repeat the following ordinal number after the speaker !

ORDINAL NUMBER

/k :dinl 'n mb (r)/

Number	Pronounce	English	Number	Pronounce	English
1 st	/f :st/	First	20 th	/'twentɪ /	twentieth
2 nd	/'sek nd/	Second	21 st	/'twentɪf :st/	twenty-first
3 rd	/ :d/	Third	22 nd	/'twentɪ'sek nd/	twenty-second
4 th	/f : /	Fourth	23 rd	/'twentɪ' :d/	twenty-third
5 th	/'fɪf /	Fifth	24 th	/'twentɪ'f : /	twenty-fourth
6 th	/'sɪks /	Sixth	25 th	/'twentɪ'fɪf /	twenty-fifth
7 th	/'sev n /	Seventh	26 th	/'twentɪ'sɪks /	twenty-sixth
8 th	/eɪt /	Eighth	27 th	/'twentɪ'sev n /	twenty-seventh
9 th	/'nain /	Ninth	28 th	/'twentɪ'eɪt /	twenty-eighth
10 th	/'ten /	Tenth	29 th	/'twentɪ'nain /	twenty-ninth
11 th	/'lɛv n /	Eleventh	30 th	/'θɪtɪ /	Thirtieth
12 th	/'twɛlf /	Twelfth	40 th	/'f :tɪ /	Fortieth

13 th	/ˈθɪːn /	thirteenth	50 th	/ˈfɪftɪ /	Fiftieth
14 th	/fɔːˈtiːn /	fourteenth	60 th	/sɪksti /	Sixtieth
15 th	/fɪfˈtiːn /	fifteenth	70 th	/ˈsevn̩ti /	Seventieth
16 th	/sɪksˈtiːn /	sixteenth	80 th	/eɪti /	Eightieth
17 th	/sevenˈtiːn /	seventeenth	90 th	/ˈnaɪntɪ /	Ninetieth
18 th	/eɪˈtiːn /	eighteenth	100 th	/ˈhʌndrɪd /	hundredth
19 th	/ˈnaɪnˈtiːn /	nineteenth	1000 th	/ˈθaʊzənd /	thousandth



Task 2



Exercises!



Listen to the recording and write down the number you hear. Write the number in word!

- | | | |
|----|-----|-----|
| 1. | 6. | 11. |
| 2. | 7. | 12. |
| 3. | 8. | 13. |
| 4. | 9. | 14. |
| 5. | 10. | 15. |



Task 3

PROBABILITY

Probability of an Event is number of outcomes in an event divide by number of outcomes in sample space $P(E) = \frac{n(E)}{n(S)}$

A sample space, S , is a set of possible outcomes of a random experiment.

An event, A , is a subset of the sample space.

This means that event A is simply a collection of outcomes.



Example:

- Random experiment: Pick a person in this class at random.

Solution : Sample space: $S = \{\text{all people in class}\}$

Event A : $A = \{\text{all males in class}\}$.

- Find the probability of rolling a '3 with a die.'

Solution: Sample Space = $\{1, 2, 3, 4, 5, 6\}$, Number of favorable event = 1

Total number of outcomes = 6

So, $P(E) = n(E)/n(S)$

Thus, Probability, $P = 1/6$

MATH WORDLIST

English	symbol	Pronounce	Meaning
Parentheses	()	/p ren sis/	Tanda kurung
Root		/ru t/	Akar
Integral	∫	/ intigr l/	Bilangan bulat
Infinity		/m fin ti/	Tidak terhingga
Percen	%	/p (r) sen/	perseratus



Task 4



Exercises!

1. A vessel contains 4 blue balls, 5 red balls and 11 white balls. If three balls are drawn from the vessel at random, what is the probability that the first ball is red, the second ball is blue, and the third ball is white?
2. I have in my pocket ten coins. Nine of them are ordinary coins with equal chances of coming up head and tail when tossed and the tenth has two heads. If I take one of the coins at random from my pocket, what is the probability that it is the coin with two heads ?
3. 10% of the bulbs produced in a factory are of red colour and 2% are red and defective. If one bulb is picked up at random, what is the probability that a factory of red?
4. Find the probability of rolling a 3 with five times die !
5. There are 8 pillows in a bed, 4 are red, 2 are yellow and 2 is blue. What is the probability of picking a yellow pillow?

Vocabulary !

English	Pronounce	Meaning
probability	/pr b 'bɪl tɪ/	Peluang
sample	/'sɑ:mpl/	Sampel
event	/'ɪv nt/	Kejadian
frequency	/'fri:kw nsi/	Frekuensi
dice	/daɪs/	Dadu



Task 5

MODAL: Possibility

Modal possibility is a modal verb to something possible and expresses a guess or suggestion.

Kind Modal Possibility	Tenses	Meaning
Must	Simple present/ simple past/ Present continuous/ past continuous	Pasti
Should Ought to	Simple present/ simple past/ Present continuous/ past continuous	Kemungkinan besar
May Might Could Can	Simple present/ simple past/ Present continuous/ past continuous /simple future/ future continuous	Mungkin

FORM OF MODAL

EXAMPLE

1. Simple present/ simple future

MODAL + V1

He may go home everyday

2. Present continuous/ future continuous

Conclusion : MODAL + BE + VING

I should be visiting you

Spontaneity: MODAL + V1

You must speak English

3. Simple past

MODAL + HAVE + V3

They may have studied yesterday

4. Past continuous

Conclusion : MODAL + HAVE + BEEN+ VING

She might have been eating

Spontaneity: MODAL + HAVE + V3

You should have come last year

Note : Modal has 2 meanings

1. *Conclusion, when continuous using BE + VING*
2. *Spontaneity, when continuous without using BE + VING*

Task 6



Exercises!

Fill the gap with the correct modal possibility!

1. I need to get to the office, so I _____(might/should) take the motorcycle. It's cheaper than a taxi.
2. There are some questions about math. Everyone _____(may/must) answer the question.
3. Putri is awesome, she _____ (can/should) speak six languages including German.
4. I am hungry, I think I _____(can/ought to) buy some food.
5. He has been leaving in Japan for ten years but he _____(can't/couldn't) forget every place in Japan.
6. The sky looks cloudy. It _____ (might/ must) rains.

Task 7



Exercises!

Write the sentences about the picture bellow. Use modals of probability.

1



2



3



4



5



6



1. Sani spoke with them. They may study about future _____.
2. _____
3. _____
4. _____
5. _____
6. _____



Task 8

 *Read the text below.*

Mathematical problems

(an extract from the lecture of D. Hilbert, Paris 1900)

History teaches the continuity of the development of science. We know that every age has its own problems, which the following age either solves or casts aside as profitless and replaces by new ones. If we would obtain an idea of the probable development of mathematical knowledge in the immediate future, we must let the unsettled questions pass before our minds and look over the problems which the science of today sets and whose solution we expect from the future. To such a review of problems the present day, lying at the meeting of the centuries seems to be well adapted. For the close of a great epoch not

only invites us to look back into the past but also directs our thoughts to the unknown future.

The deep significance of certain problems for the advance of mathematical science in general and the important role which they play in the work of the individual investigator are not to be denied. As long as a branch of science offers an abundance of problems, so long is it alive; a lack of problems foreshadows extinction or the cessation of independent development. Just as every human undertaking pursues certain objects, so also mathematical research requires its problems. It is by the solution of problems that the investigator tests the temper of his steel; he finds new methods and new outlooks, and gains a wider and freer horizon.

It is difficult and often impossible to judge the value of a problem correctly in advance; for the final award depends upon the gain which science obtains from the problem. Are there general criteria which mark a good mathematical problem? An old French mathematician said: "A mathematical theory is not to be considered complete until you have made it so clear that you can explain it to the first man whom you meet on the street." This clearness and ease of comprehension, here insisted on for a mathematical theory, I should still more demand for a mathematical problem if it is to be perfect; for what is clear and easily comprehended attracts, the complicated repels us.

Moreover a mathematical problem should be difficult in order to entice us, yet not completely inaccessible, lest it mock at our efforts. It should be to us a guide post on the mazy paths to hidden truths, and ultimately a reminder of our pleasure in the successful solution.

The mathematicians of past centuries were accustomed to devote themselves to the solution of difficult particular problems with passionate zeal. They knew the value of difficult problems. For example, the "problem of the line of quickest descent," proposed by John Bernoulli. Experience teaches, explains Bernoulli, that lofty minds are led to strive for the advance of science by nothing more than by laying before them difficult and at the same time useful problems, and he therefore hopes to earn the thanks of the mathematical world by following the example of men like Mersenne, Pascal, Fermat, Viviani and others and laying before the distinguished analysts of his time a problem by which, as a touchstone, they may test the value of their methods and measure their strength.



Task 10



Practice time

After you read the text above, you have mini project

- 1 .Make a short conclusion about the probability
2. Make a short video that explain about the probability and upload in your social media

REFLECTION

How well do you know after learning this unit probability in English?
Tell it in front of your class!

GLOSSARY

A

Addition	: penjumlahan
Angles	: sudut
Area	: luas
Apply	: berlaku
Axis	: sumbu
Average	: rata-rata
Acute	: lancip
Arrange	: menyusun
Acute angle	: sudut lancip
Ascend	: naik

B

Base	: bilangan pokok
Biimplication	: biimplikasi

C

Circle	: lingkaran
Consecutive	: berurutan
Cubed	: pangkattiga
Calculate	: menghitung
Complement	: elemen yang tidak termasuk dalam himpunan
Coordinate	: kordinat
Correlation	: hubungan
Chance	: peluang
Centre	: titik pusat

D

Division	: pembagian
Decimals	: decimal
Determine	: menentukan
Denominator	: penyebut dalam pecahan
Domain	: daerah asal
Dice	: dadu

E

Equals	: sama dengan
--------	---------------

Equation : persamaan
Even number : bilangan genap
Exponent : pangkat
Even : genap
Equivalent : setara

F
Function : fungsi
Factor : faktor
Frequency : frekuensi
Figure : gambar
Finite set : himpunan tak terhingga
Formula : rumus

H
Horizontal : mendatar

I
Inequality : pertidaksamaan
Independent variable : variable bebas
Integer : bilangan bulat

L
Linear : persamaan
Lines : garis
Length : panjang

M
Multiplication : perkalian
Minus : kurang
Mean : rata-rata
Mode : modus
Median : nilai tengah

N
Natural number : bilangan asli
Numerator : pembilang

IAIN PALOPO

O

Odd number : bilangan ganjil

Obtain : memperoleh

P

Powers of numbers : pangkat bilangan

Proportion : perbandingan

Prime number : bilangan prima

Problem : permasalahan

Probability : probabilitas

Plus : tambah

Permutation : permutasi

R

Relation : relasi

Region : daerah

Range : jangkauan

S

Subtraction: pengurangan

Solution : pemecahan

Sample : sampel

Set : himpunan

T

Triangle : segitiga

U

Union : gabungan dua himpunan

Universal set : himpunan semesta

W

Whole number : bilangan cacah

Width : lebar

IAIN PALOPO

REFERENCES

Booth D.J. , *Foundation Mathematics*, Addition – Wesley Publishing Company, 1983.

Donovan P. , *Basic English for Science*, Oxford University Press, 1978.

<http://math.cnm.pg.gda.pl/english-for-2/>

<https://www.colorincolorado.org/article/math-instruction-english-language-learners>

<https://mathcs.clarku.edu/~djoyce/hilbert/problems.html>



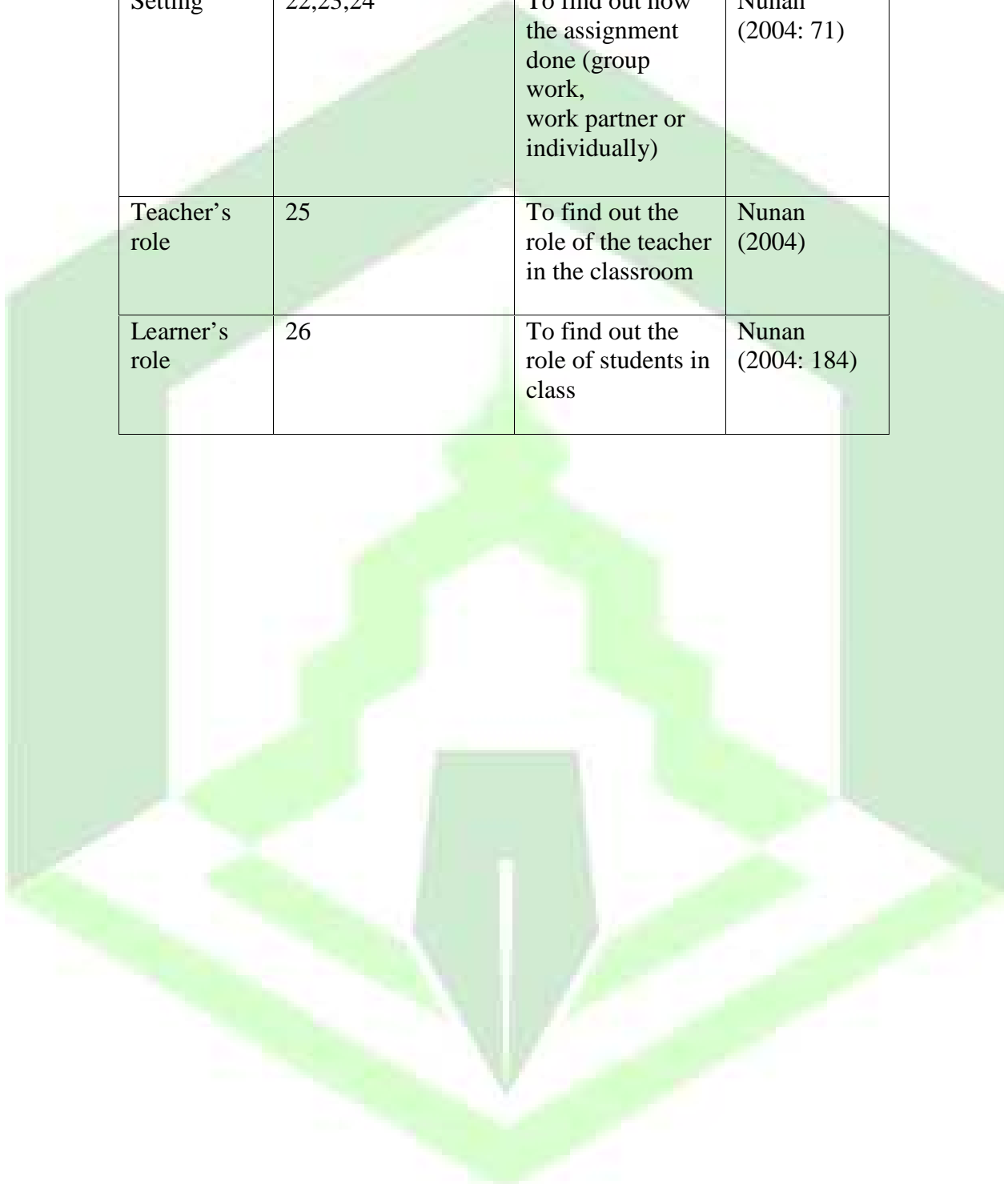
IAIN PALOPO



Blueprint of Needs Analysis Questionnaire

Aspect	Number of Items	Purpose of the Questions	References
Personal Identity of the Students		To find some information about student identity.	Hutchinson and Waters (1987: 62-63)
Necessities on goal	1	To find out the reason of students to learn English	Nunan (2004:41)
Necessities	2	To know student needs in terms of targets situation	Hutchinson and Waters (1987: 56)
Lacks	3,4,5,6,7	To find out the level of knowledge of students and students' weakness in studying English	Hutchinson and Waters (1987: 55)
Wants	8,9,10	To find students' desires related to material	Hutchinson and Waters (1987: 56)
Input	11,12,13,14,15,16,17	To find out what content is needed to design a task	Nunan (2004: 47)
Procedure	18,19,20,21	To find out what students are must do with the task	Nunan (2004: 52)

Setting	22,23,24	To find out how the assignment done (group work, work partner or individually)	Nunan (2004: 71)
Teacher's role	25	To find out the role of the teacher in the classroom	Nunan (2004)
Learner's role	26	To find out the role of students in class	Nunan (2004: 184)



IAIN PALOPO

QUESTIONNAIRE

“English for Mathemetics”

A. Data Responden

Nama :
Semester :
Jenis Kelamin :

B. Petunjuk Pengisian

Berilah tanda (x) pada kolom yang sesuai dengan keadaan yang menggambarkan keadaan Anda saat ini, serta sesuai dengan apa yang Anda butuhkan atau Anda inginkan terkait dengan pembelajaran Bahasa Inggris. Semua jawaban yang Anda berikan di dalam lembar angket ini tidak mempengaruhi nilai Anda pada matakuliah bahasa Inggris. Jika Anda memilih jawaban lain-lain, tuliskan jawaban tersebut dengan sangat jelas.

1. Mengapa Anda belajar bahasa Inggris saat ini?
 - a. Untuk bisa lulus dalam perkuliahan bahasa Inggris
 - b. Untuk dapat mengakses informasi-informasi berbahasa Inggris yang berkaitan dengan jurusan Matematika
 - c. Untuk dapat mengakses informasi berbahasa Inggris di luar perkuliahan bahasa Inggris
 - d.

2. Apa manfaat bahasa Inggris bagi Anda setelah lulus nanti?
 - a. Untuk bisa berkomunikasi dalam bahasa Inggris dengan baik di dunia pendidikan & pengajaran
 - b. Untuk dapat mengakses informasi-informasi berbahasa Inggris yang berkaitan dengan jurusan Matematika
 - c. Untuk dapat mempermudah saya dalam belajar berbahasa Inggris dalam Matematika
 - d. Untuk menunjang profesi saya setelah lulus nanti
 - e.

3. Bagaimanakah tingkat penguasaan bahasa Inggris Anda sekarang ini?
 - a. Tidak dapat memahami apapun dalam bahasa Inggris
 - b. *Basic*: dapat berkomunikasi secara baik pada beberapa topik dengan percakapan pendek, masih mengalami beberapa kesulitan pada kosakata, grammar dan pelafalan masih dipengaruhi oleh bahasa ibu

- c. *Intermediate*: walaupun masih mempunyai kesulitan dalam kosakata, grammar, dan pelafalan, tapi mampu terlibat dalam percakapan yang mudah dan pada topik-topik yang dikenal
 - d. *Advanced*: mampu berkomunikasi dengan lancar pada sebagian besar topik, hanya mengalami sedikit kesulitan pada kosakata, grammar dan pelafalan.
 - e.
4. Kesulitan apa yang Anda jumpai saat *speaking* (berbicara) dalam bahasa Inggris?
- a. Kesulitan dalam melafalkan kosakata dalam bahasa Inggris
 - b. Kesulitan dalam memahami informasi yang dibicarakan karena tidak memiliki pengetahuan yang cukup mengenai istilah matematika
 - c. Kesulitan dalam mengaplikasikan penyusunan kalimat dalam Inggris
 - d. Kesulitan dalam menyampaikan ide karena kurang menguasai kosakata juga istilah-istilah dalam Matematika
 - e.
5. Kesulitan apa yang Anda jumpai ketika *reading* (membaca) dalam bahasa Inggris?
- a. Sulit mendapatkan ide pokok dalam teks
 - b. Sulit memahami kosakata yang terdapat dalam teks soal Matematika
 - c. Sulit memahami bacaan karena keterbatasan dalam penguasaan kosakata
 - d. Sulit memahami pilihan kata yang digunakan karena terbatas kosakata yang berkaitan dengan istilah Matematika
 - e.
6. Kesulitan apa yang Anda temui ketika *writing* (menulis) dalam bahasa Inggris?
- a. Sulit dalam menggunakan tanda baca
 - b. Sulit mengungkapkan gagasan dengan baik
 - c. Sulit menggunakan pilihan kata yang tepat
 - d. Sulit menyusun kalimat, klausa atau paragraf
 - e. Sulit menemukan ide sebagai bahan untuk menulis
 - f.
7. Kesulitan apa yang Anda temui ketika *listening* (mendengar) dalam bahasa Inggris?
- a. Mengidentifikasi kata-kata kunci dalam sebuah pembicaraan
 - b. Membuat kesimpulan informasi dari sebuah pembicaraan dalam bahasa Inggris
 - c. Sulit memahami instruksi lisan
 - d. Sulit memahami bahasa *native speaker* karena keterbatasan kosakata dalam bahasa Inggris
 - e.

8. Keterampilan berbahasa apa yang paling Anda butuhkan dalam jurusan Anda saat ini?
- Keterampilan *Listening*
 - Keterampilan *Reading*
 - Keterampilan *Writing*
 - Keterampilan *Speaking*
9. Pengetahuan kebahasaan apa yang anda butuhkan dalam meningkatkan kemampuan menulis dalam bahasa Inggris?
- Grammar*
 - Vocabulary*
 - Pronunciation*
 -
10. Pengetahuan kebahasaan apa yang anda butuhkan dalam meningkatkan kemampuan berbicara dalam bahasa Inggris?
- Grammar*
 - Vocabulary*
 - Pronunciation*
 -
11. Dalam belajar mendengarkan (*listening*) input yang Anda inginkan berupa....
- Monolog dan dialog.
 - Monolog dan dialog yang disertai gambar.
 - Monolog dan dialog yang disertai daftar kosa kata baru.
 - Mendengarkan teks yang dibacakan dosen.
 -
12. Dalam belajar berbicara (*speaking*) input yang Anda inginkan berupa ...
- Model monolog dan dialog.
 - Model monolog dan dialog yang disertai dengan gambar.
 - Model monolog dan dialog yang disertai dengan daftar kosa kata baru dan cara pengucapannya.
 - Materi otentik yang sering dijumpai pada pelajaran Matematika.
 -
13. Dalam belajar membaca (*reading*) input yang Anda inginkan berupa ...
- Materi otentik, yang dengan mudah dapat dijumpai dalam keseharian (contohnya, menjawab soal, mencocokkan gambar dengan kalimat, dll)

- b. Teks yang menggambarkan konteks yang berkaitan dengan bidang kerja saya nantinya.
- c. Teks yang disertai daftar kosakata baru yang terkait.
- d. Teks disertai gambar.
- e.

14. Dalam belajar menulis (*writing*) input yang Anda inginkan berupa ...

- a. Contoh teks/tulisan yang akan dipelajari.
- b. Kosa kata yang berkaitan dengan teks yang akan ditulis.
- c. Penjelasan struktur kalimat yang berkaitan dengan teks yang akan ditulis.
- d. Gambar yang berhubungan dengan teks yang akan ditulis.
- e.

15. Menurut Anda, panjang teks dialog yang sesuai untuk menunjang keterampilan *speaking* dalam pembelajaran bahasa Inggris Anda adalah....

- a. Teks yang berkisar antara 150-200 kata
- b. Teks yang berkisar antara 150-200 kata dan disertai gambar atau video
- c. Teks yang berkisar antara 200-250 kata
- d. Teks yang berkisar antara 200-250 kata dan disertai gambar atau video
- e.

16. Menurut Anda, panjang teks yang sesuai untuk menunjang keterampilan *reading* dalam pembelajaran bahasa Inggris Anda adalah....

- a. Teks yang berkisar antara 150-200 kata
- b. Teks yang berkisar antara 150-200 kata dan disertai gambar atau video
- c. Teks yang berkisar antara 200-250 kata
- d. Teks yang berkisar antara 200-250 kata dan disertai gambar atau video
- e.

17. Dalam belajar bahasa Inggris, topik yang Anda inginkan adalah..... (boleh memilih lebih dari satu)

- a. Logika
- b. Persamaan dan pertidaksamaan linear
- c. Relasi dan fungsi
- d. Persamaan kuadrat
- e. Barisan bilangan
- f. Geometri
- g. Permutasi dan kombinasi
- h. Peluang
- i.

18. Dalam pembelajaran bahasa Inggris *speaking* (berbicara) jenis kegiatan yang Anda sukai adalah
- Mempraktekkan dialog di depan kelas berpasangan dengan teman.
 - Bermain peran (role play)
 - Bertukar informasi antar teman dalam kelompok
 - Berdiskusi tentang topik tertentu atau permasalahan Matematika
 -
19. Dalam pembelajaran bahasa Inggris *reading* (membaca) jenis kegiatan yang Anda sukai adalah
- Membaca nyaring teks dengan pengucapan dan intonasi yang benar.
 - Membaca sebuah teks soal secara individu lalu menjawab pertanyaan mengenai teks tersebut.
 - Mendiskusikan isi teks secara berkelompok untuk memahaminya.
 - Menganalisa arti kosakata baru berdasarkan konteks yang dibaca.
 -
20. Dalam pembelajaran bahasa Inggris *writing* (menulis) jenis kegiatan yang Anda sukai adalah
- Menyusun kalimat-kalimat sehingga menjadi satu paragraf yang benar
 - Mengidentifikasi dan memperbaiki kesalahan struktur kalimat
 - Mengidentifikasi dan memperbaiki kesalahan tanda baca pada teks
 - Menulis teks yang serupa dengan input teks yang diberikan
 -
21. Jenis kegiatan dalam pelajaran bahasa Inggris yang saya harapkan dapat memperkaya kosakata (*vocabulary*) Anda adalah
- Mencocokkan kata-kata atau ungkapan bahasa Inggris dengan maknanya yang telah disediakan
 - Mencocokkan kata-kata atau ungkapan bahasa Inggris dengan gambar
 - Melengkapi kalimat atau paragraph dengan kata-kata yang telah disediakan sebelumnya
 - Melengkapi kalimat atau paragraph dengan kata-kata sendiri berdasarkan pengetahuan.
 -
22. Dalam pembelajaran bahasa Inggris, Anda lebih suka mengerjakan dengan cara...
- Individu
 - Pasangan
 - Kelompok kecil (2-3 orang)
 - Kelompok besar (5-8 orang)
 -

23. Media pengajaran apa yang dapat mendukung proses pembelajaran Anda? (Boleh memilih lebih dari satu)
- Audio (rekaman,dll)
 - Visual (gambar, tulisan, LCD, Model,dll)
 - Audio visual (siaran berita Video, Talkshow, film, dll)
 - Media cetak (buku teks, koran,modul, dll)
 - Realita (obyek nyata yang berupa benda nyata, ataupun benda tiruan)
 -
24. Tempat pembelajaran bahasa Inggris yang Anda sukai adalah...
- Ruang kelas
 - Perpustakaan
 - outdoor
 - Laboratorium bahasa (*listening*)
 -
25. Dalam pembelajaran bahasa Inggris, Anda senang bila dosen..
- Menggunakan bahasa Inggris sebagai bahasa pengantar
 - Bertindak sebagai *organizer* yaitu melibatkan siswa dan mengatur aktivitas belajar
 - Bertindak sebagai *prompter* yaitu hendaknya memberi chunks (melibatkan kata-kata yang sering muncul dalam percakapan) bukan hanya kata-kata belaka
 - Sebagai *assessor* yaitu mencatat serta menilai kinerja bahasa yang di hasilkan siswa
 - Melibatkan siswa dalam mengatur aktivitas belajar
 - Bertindak sebagai *feedback provider* yaitu memberi *feedback* terhadap hasil kerja siswa
 - Sebagai *resource* yaitu membantu member fasilitas untuk meningkatkan kinerja siswa
 -
26. Dalam pembelajaran bahasa Inggris, saya lebih suka jika saya...
- Mendengar penjelasan dosen dan melaksanakan instruksi dari dosen
 - Berpartisipasi aktif secara komunikatif dikelas
 - Melakukan analisis secara sistematis terhadap materi pelajaran Matematika yang bahasa Inggris
 - Presentasi setiap akhir pelajaran
 -

LEMBAR VALIDASI INSTRUMEN EVALUASI UNTUK AHLI BAHASA

Judul: Developing English Learning Material for Mathematics study program Students of IAIN Palopo

A. Petunjuk Pengisian

1. Lembar penilaian kelayakan ini meliputi aspek pendahuluan, isi, bahasa.
2. Berilah tanda (✓) pada kolom angka yang sesuai dengan penilaian yang Anda berikan.
3. Pedoman skala penilaian adalah sebagai berikut:
 - 1: tidak layak
 - 2: kurang layak
 - 3: cukup layak
 - 4: layak
 - 5: sangat layak
4. Anda dimohon kesediaannya untuk memberikan saran-saran perbaikan pada bagian akhir lembar ini.

B. Penilaian Kelayakan

NO	URAIAN	Kelayakan				
		1	2	3	4	5
I	Aspek Isi					
	a. Tujuan penelitian dinyatakan dengan jelas			✓		
	b. Tujuan kuesioner dinyatakan dengan jelas				✓	
	c. Petunjuk pengisian kuesioner mudah dipahami					✓
II	Aspek Cakupan (Isi)					
	a. Butir-butir kuesioner mencakup data yang berhubungan dengan cakupan isi materi memadai.			✓		
	b. Butir-butir kuesioner mencakup data yang berhubungan dengan penggunaan bahasa di dalam				✓	

	materi baik dan benar.					
	c. Butir-butir kuesioner mencakup data yang berhubungan dengan aktifitas pembelajaran memadai.				√	
	d. Butir-butir kuesioner mencakup data yang berhubungan dengan input materi memadai.				√	
	e. Butir-butir kuesioner mencakup data yang berhubungan dengan kegrafikaan memadai.	√				
III	Aspek Bahasa					
	a. Butir-butir kuesioner dirumuskan dalam bahasa Indonesia yang baik dan benar.				√	
	b. Butir-butir kuesioner dirumuskan dalam bahasa Indonesia yang efektif.			√		
	c. Butir-butir kuesioner dirumuskan dalam bahasa Indonesia yang efisien.			√		
	d. Butir-butir kuesioner dirumuskan dalam bahasa yang mudah dipahami sesuai tingkat kemampuan berbahasa responden.				√	

C. Komentar

Kuesioner dapat digunakan dengan sedikit perbaikan, yaitu dengan menyederhanakan kalimat/bahasa yang digunakan, dan hindari penyusunan kalimat yang *ribet* atau *berbelit-belit*.

D. Saran

S.D.A.

E. Kesimpulan

Instrument kuesioner ini (lingkari salah satu pilihan):

1. Tidak dapat digunakan
2. Dapat digunakan

3. Dapat digunakan dengan perbaikan sebagai berikut
Penyederhanaan kalimat/bahasa yang digunakan,
Hindari penyusunan kalimat yang *ribet* atau *berbelit-belit*.

Palopo, 29 Mei 2020
Penilai Kelayakan

TTD

Yuda Satria N., S.Pd., M.Si.P



IAIN PALOPO



**RENCANA PEMBELAJARAN SEMESTER (RPS)
PROGRAM STUDI TADRIS MATEMATIKA
FAKULTAS TARBIYAH DAN ILMU KEGURUAN
INSTITUT AGAMA ISLAM NEGERI (IAIN) PALOPO**

MATA KULIAH	KO DE	RUMPUN	BOBO T (SKS)	SEMESTER	TANGGAL PENGESAHAN
English for Mathematics	-	Matematika	2	IV	-
OTORISASI	Dosen Pengembang RPS		Koordinator RMK	Ka PRODI	
	-		-	-	
CAPAIAN PEMBELAJARAN	<p>CP-Prodi/ CPL</p> <p>Sikap:</p> <ol style="list-style-type: none"> 1. Bertakwa kepada Tuhan yang Maha Esa dan mampu menunjukkan sikap religius dalam kehidupan perseorangan, masyarakat dan bangsa; 2. Berkontribusi dalam peningkatan mutu kehidupan masyarakat, berbangsa, bernegara dan kemajuan peradaban berdasarkan pancasila; 3. Menampilkan diri sebagai pribadi yang jujur, berakhlak mulia, dan teladan bagi masyarakat; 4. Menunjukkan etos kerja, tanggung jawab, rasa bangga, percaya diri dan cinta terhadap bidang pekerjaan; <p>Pengetahuan:</p> <ol style="list-style-type: none"> 1. Menguasai pengetahuan dan langkah-langkah dalam mengembangkan pemikiran kritis, logis, kreatif, inovatif dan sistematis serta memiliki keingintahuan intelektual untuk memecahkan masalah pada tingkat individual dan kelompok dalam komunitas akademik dan non akademik; 2. Menguasai pengetahuan dan langkah-langkah ber komunikasi baik lisan maupun tulisan dengan menggunakan 				

	<p>bahasa Arab dan Inggris dalam perkembangan dunia akademik dan dunia kerja (dunia non akademik);</p> <p>Keterampilan Umum:</p> <ol style="list-style-type: none"> 1. Mampu menerapkan pemikiran logis, kritis, sistematis, dan inovatif dalam konteks pengembangan atau implementasi ilmu pengetahuan dan teknologi yang memperhatikan dan menerapkan nilai humaniora yang sesuai dengan bidang keahliannya 2. Mampu menunjukkan kinerja mandiri, bermutu dan terukur sesuai dengan bidang keahliannya 3. Mampu mengkaji implikasi pengembangan atau implementasi ilmu pengetahuan dan teknologi yang Mampu mengambil keputusan secara tepat, dalam konteks penyelesaian masalah di bidang keahliannya berdasarkan hasil analisis informasi dan data 4. Mampu mendokumentasikan, menyimpan, mengamankan, dan menemukan kembali data untuk menjamin kesahihan mencegah plagiasi 5. Mampu berkolaborasi dalam team, menunjukkan kemampuan kreatif (creativity skill), inovatif (innovation skill), berpikir kritis (critical thinking) dan pemecahan masalah (problem solving skill) dalam pengembangan keilmuan dan pelaksanaan tugas di dunia kerja: <p>Keterampilan Khusus:</p> <p>Mampu menerapkan pemikiran logis, kritis, sistematis, dan inovatif dalam konteks pengembangan atau implementasi ilmu pengetahuan dan teknologi yang memperhatikan dan menerapkan nilai humaniora yang sesuai dengan bidang keahliannya</p>
	<p>Capaian Pembelajaran Mata Kuliah (CPMK)</p> <ol style="list-style-type: none"> 1. Mahasiswa mampu memahami dan menghafal kosakata yang berhubungan dengan matematika. 2. Mahasiswa mampu mengidentifikasi kosakata yang berhubungan dengan matematika, menangkap informasi yang didapat dari bacaan teks, dan mampu mengucapkan kosakata dengan baik dan benar 3. Mahasiswa mampu menulis kesimpulan singkat tentang pembelajaran matematika. 4. Mahasiswa mampu memahami logika matematika dengan baik. 5. Mahasiswa memahami teks bacaan dan kosakata yang berhubungan dengan matematika. 6. Mahasiswa mampu melengkapi kalimat yang berhubungan dengan matematika 7. Mahasiswa mampu memahami dan menggunakan kosakata tentang vocabulary of matematika. 8. Mahasiswa mampu memahami dan menggunakan kosakata, bahasa serta percakapan tentang matematika. 9. Mahasiswa mampu membaca teks sederhana tentang masalah matematika. 10. Mahasiswa mampu memahami penggunaan <i>number</i> yang benar. 11. Mahasiswa mampu mengidentifikasi struktur dasar kalimat <i>question tag</i>. 12. Mahasiswa mampu mengidentifikasi kalimat peluang.

	<p>13. Mahasiswa mampu menggunakan tenses dengan benar dan tepat.</p> <p>14. Mahasiswa mampu membuat kesimpulan singkat dari setiap pembelajaran matematika.</p>
Deskripsi Singkat MK	<ul style="list-style-type: none"> • Mata kuliah ini bertujuan untuk memberikan pemahaman terhadap bahasa Inggris bisnis sehingga mahasiswa mampu berkomunikasi secara lisan maupun tertulis.
Bahan Kajian	<ol style="list-style-type: none"> 1. Introduction of Mathematic 2. Logical connection 3. Conditional sentences 4. Tenses 5. Cardinal number 6. Relation 7. Multiplied number 8. Function 9. Question Tag 10. Ordinal number 11. Probability 12. Modal: possibility 13. Vocabulary of Mathematics
Pustaka	<p>Utama :</p> <ol style="list-style-type: none"> 1. Arsyad, Azhar. 2013. <i>Dasar-dasar Penguasaan Bahasa Inggris</i>. Yogyakarta: Pustaka Belajar 2. Booth D.J. , <i>Foundation Mathematics</i>, Addition – Wesley Publishing Company, 1983. 3. Donovan P. , <i>Basic English for Science</i>, Oxford University Press, 1978.
	<p>Pendukung :</p> <p>Website</p> <ol style="list-style-type: none"> 1. http://math.cnm.pg.gda.pl/english-for-2/ 2. https://www.colorincolorado.org/article/math-instruction-english-language-learners

3. <https://mathcs.clarku.edu/~djoyce/hilbert/problems.htm>

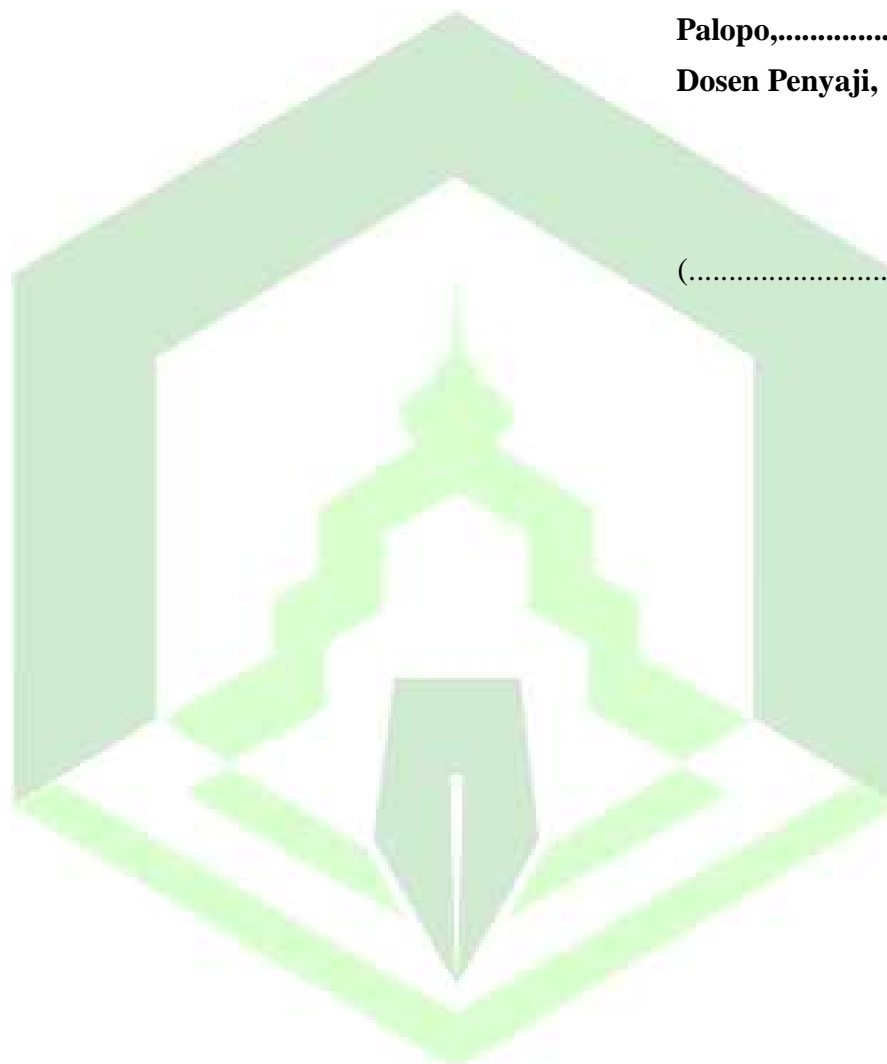
Media Pembelajaran	Perangkat Lunak: Slide Powerpoint, Internet, Google Meet	Perangkat Keras: Laptop, LCD. WhiteBoard/Spidol,buku
Tim Teaching	-	
Mata Kuliah Syarat		

Minggu Ke-	SubCP-MK (Kemampuan Akhir yang Diharapkan)	Indikator	Kriteria dan Bentuk Penilaian	Metode Pembelajaran [Estimasi Waktu]	Materi Pembelajaran [Pustaka]	Bobot Penilaian (%)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I	<ul style="list-style-type: none"> Mahasiswa mampu memahami kontrak perkuliahan dan mengikuti aturan yang telah disepakati bersama. 	<ul style="list-style-type: none"> Setelah mengikuti perkuliahan mahasiswa dapat memahami kontrak perkuliahan 	Sikap dan pendalaman	Ceramah	Kontrak Perkuliahan	2
II	<ul style="list-style-type: none"> Mahasiswa mampu memahami hubungan conjunction dengan logika matematika 	<ul style="list-style-type: none"> Mahasiswa mampu memahami penggunaan conjunction 	Afektif Kognitif dan keaktifan	Ceramah Diskusi Discovery learning Writing and speaking	<i>Introduction of Mathematic</i>	3

III	<ul style="list-style-type: none"> Memahami kosakata yang berhubungan dengan logical connectives Melatih pemahaman dengan menjawab pertanyaan dari logical connectives 	<ul style="list-style-type: none"> Mampu memahami penggunaan logical connectives Mampu mengucapkan kosakata dengan baik dan benar Mampu membuat kalimat berdasarkan kosakata 	Afektif (lembar penilaian sikap) dan Kognitif pemahaman terhadap materi dan keaktifan (tugas Individu).	Ceramah Discovery learning Tanya Jawab Writing Speaking	Logical connection	2
IV	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami aplikasi conditional sentences dalam matematika. 	<ul style="list-style-type: none"> Mahasiswa mampu mengisi jawaban dari soal. 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Writing	Conditional sentences	3
V	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami penggunaan tenses dalam setiap kondisi 	<ul style="list-style-type: none"> Mahasiswa mampu meurutkan kata menjadi kalimat yang baik 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Writing	Tenses	2
VI	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami dan menggunakan cardinal number dalam matematika 	<ul style="list-style-type: none"> Mahasiswa memahami kosakata yang berhubungan dengan cardinal number 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab	Cardinal number	3

VII	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami definisi dari relation 	<ul style="list-style-type: none"> Mahasiswa mampu menentukan domain dan range dalam relation 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Writing	Relation	5
VIII	<i>UTS</i>					15
IX	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami menggunakan kosakata multiplied number 	<ul style="list-style-type: none"> Mahasiswa mampu memahami dan menggunakan kosakata multiplied number 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Speaking	Multiplied number	5
X	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami dan mengidentifikasi function 	<ul style="list-style-type: none"> Mahasiswa mampu memahami dan mengidentifikasi function Mahasiswa mampu mengerjakan soal yang berhubungan dengan relation 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Writing	Function	5
XI	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami dan menggunakan question tag. 	<ul style="list-style-type: none"> Mahasiswa mampu menggunakan question tag dalam kalimat. Mahasiswa mampu mencocokkan question tag dengan statement 	Afektif Kognitif dan keaktifan	Ceramah Discovery learning Tanya Jawab Writing	Question Tag	5

XII	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat mendengarkan dan mengucapkan ordinal number 	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat mendengarkan dan mengisi pertanyaan yang berhubungan dengan ordinal number. 	Afektif Kognitif dan keaktifan	Ceramah Diskusi Discovery learning Writing Speaking Listening	Ordinal number	10
XIII	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami definisi peluang dan penggunaanya 	<ul style="list-style-type: none"> Mahasiswa mampu menjawab soal yang berhubungan dengan peluang 	Afektif Kognitif dan keaktifan	Ceramah Diskusi Discovery learning Tanya Jawab Writing	Probability	10
XIV	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami penggunaan modal possibility dalam kalimat. 	<ul style="list-style-type: none"> Mahasiswa mampu mengisi kalimat kosong dengan modal possibility yang benar dan tepat. 	Afektif Kognitif dan keaktifan	Ceramah Diskusi Discovery learning Tanya Jawab Writing	Modal: possibility	5
XV	<ul style="list-style-type: none"> Mahasiswa diharapkan dapat memahami dan menggunakan setiap kosa kata english for mathematics di setiap pembelajaran dengan baik 	<ul style="list-style-type: none"> Mahasiswa mampu mencari arti setiap kosa kata yang diberikan disetiap unit Mahasiswa mampu mengucapkan setiap kosa kata. 	Afektif Kognitif dan keaktifan	Ceramah Diskusi Discovery learning Tanya Jawab Listening Speaking Writing	Vocabulary of Mathematics	5
XVI	<i>Ujian Akhir Semester (UAS)</i>					20



Palopo,.....

Dosen Penyaji,

(.....)

IAIN PALOPO

KUESIONER EVALUASI UNTUK AHLI MATERI

A. Data Responden

Nama : **FAULIYAH R. MUIN S.Pd., M.Pd**
 Umur :
 Jenis kelamin : **PEREMPUAN**
 Pendidikan : S1 S2 S3 Professor
 Pengalaman mengajar : 0-2 tahun 2-4 tahun 4-6 tahun ≥6 thn

B. Tabel Evaluasi

Isilah tabel berikut ini dengan memberikan tanda centang (✓) pada kolom yang telah tersedia

Keterangan:

SS : Sangat Setuju
 S : Setuju
 R : Ragu-ragu
 TS : Tidak Setuju
 STS : Sangat Tidak Setuju

No	Pernyataan	SS	S	R	TS	STS
A. Isi						
1.	Cakupan isi materi dalam bahan ajar <i>English for Mathematics</i> sesuai dengan kebutuhan mahasiswa jurusan Pendidikan Matematika.	✓				
2.	Kedalaman materi dalam bahan ajar <i>English for Mathematics</i> memadai.	✓				
3.	Keaslian isi materi dalam bahan ajar <i>English for Mathematics</i> memadai.	✓				

4.	Isu-isu terbaru di dalam bahan ajar <i>English for Mathematics</i> dibahas secara menarik.		✓				
----	--	--	---	--	--	--	--

Rangkuman kualitatif:

B. Bahasa

1.	Bahasa yang digunakan dalam bahan ajar sesuai dengan kemampuan mahasiswa.	✓					
2.	Bahasa yang disajikan komprehensif dan sesuai dengan tingkat perkembangan kognitif mahasiswa.		✓				
3.	Ekspresi yang digunakan sesuai dengan tata bahasa yang benar.	✓	✓				
4.	Bahasa yang disajikan dalam bahan ajar mudah dipahami.	✓					

Rangkuman kualitatif:

C. Aktifitas

1.	Kegiatan dalam <i>task</i> banyak melibatkan mahasiswa.	✓					
2.	Kegiatan dalam <i>task</i> bervariasi.	✓					
3.	Kegiatan dalam <i>task</i> sesuai topic.	✓					
4.	Kegiatan dalam <i>task</i> menarik bagi mahasiswa.	✓					
5.	Kegiatan dalam <i>task</i> dapat memotivasi mahasiswa untuk belajar bahasa Inggris.	✓					

6.	Kegiatan dalam <i>task</i> berguna bagi kehidupan nyata mahasiswa.		✓			
7.	Kegiatan dalam <i>task</i> membantu pemahaman materi.	✓				
8.	Kegiatan disusun berurutan dari mudah ke agak sulit.	✓				
9.	Kegiatan melibatkan siswa untuk dapat bekerja secara individu dan berpasangan.		✓			

Rangkuman kualitatif:

Runut *task* dari mudah kesulit

D. Input

1.	Instruksi dalam setiap <i>task</i> mudah dipahami.	✓				
2.	Input materi berbentuk gambar dan teks relevan.	✓				
3.	Input materi berbentuk gambar dan teks sesuai dengan kemampuan mahasiswa.		✓			
4.	Input materi berbentuk gambar dan teks menarik.	✓				
5.	Input materi berbentuk gambar dan teks sesuai dengan kemampuan berbahasa mahasiswa.		✓			
6.	Input materi mencakup struktur bahasa yang benar.	✓				
7.	Input berbentuk gambar membantu mahasiswa untuk memahami materi.	✓				
8.	Input materi dapat menambah wawasan mahasiswa.		✓			

9.	Input materi dapat menambah kosa kata mahasiswa.	✓				
10.	Input materi membantu mahasiswa dalam berbahasa.		✓			
11.	Input dan <i>task</i> seimbang.	✓				
12.	Pilihan topik sesuai dengan karakteristik mahasiswa.	✓				
13.	Contoh dan ilustrasi membantu pemahaman mahasiswa.	✓				

Rangkuman kualitatif:

sesuaikan task dengan topik

E. Desain dan *Layout*

1.	Tampilan materi jelas.	✓				
2.	Tampilan materi menarik.		✓			
3.	Ukuran huruf sesuai.	✓				
4.	Jenis huruf sesuai.		✓			
5.	Jarak spasi sesuai.	✓				
6.	Penggunaan tanda baca benar.	✓				

Rangkuman kualitatif:

perhatikan pemilihan font, jarak dan tanda baca

F. Evaluasi Umum

1.	Sistematika penyajian runtut.	✓				
2.	Keseluruhan materi sesuai dengan kemampuan berbahasa mahasiswa.	✓				
3.	Penilaian sesuai dengan input yang diberikan.	✓				

Rangkuman kualitatif:

Kesimpulan:

Secara umum, pendapat Bapak/Ibu terhadap materi yang dikembangkan:

- a. Layak
- b. Layak dengan perbaikan
- c. Tidak layak

Palopo, 20 Juli 2020

Penilai Kelayakan


Fadripta R MUM

KUESIONER EVALUASI UNTUK AHLI MATERI

A. Data Responden

Nama : LISA ADITYA D.M., M.Pd
 Umur : 30 TAHUN
 Jenis kelamin : PEREMPUAN
 Pendidikan : S1 S2 S3 Professor
 Pengalaman mengajar : 0-2 tahun 2-4 tahun 4-6 tahun \geq 6 thn

B. Tabel Evaluasi

Isilah tabel berikut ini dengan memberikan tanda centang (\checkmark) pada kolom yang telah tersedia

Keterangan:

SS : Sangat Setuju
 S : Setuju
 R : Ragu-ragu
 TS : Tidak Setuju
 STS : Sangat Tidak Setuju

No	Pernyataan	SS	S	R	TS	STS
A. Isi						
1.	Cakupan isi materi dalam bahan ajar <i>English for Mathematics</i> sesuai dengan kebutuhan mahasiswa jurusan Pendidikan Matematika.		\checkmark			
2.	Kedalaman materi dalam bahan ajar <i>English for Mathematics</i> memadai.		\checkmark			
3.	Keaslian isi materi dalam bahan ajar <i>English for Mathematics</i> memadai.	\checkmark				

4.	Isu-isu terbaru di dalam bahan ajar <i>English for Mathematics</i> dibahas secara menarik.		✓				
Rangkuman kualitatif:							
B. Bahasa							
1.	Bahasa yang digunakan dalam bahan ajar sesuai dengan kemampuan mahasiswa.		✓				
2.	Bahasa yang disajikan komprehensif dan sesuai dengan tingkat perkembangan kognitif mahasiswa.		✓				
3.	Ekspresi yang digunakan sesuai dengan tata bahasa yang benar.		✓				
4.	Bahasa yang disajikan dalam bahan ajar mudah dipahami.	✓					
Rangkuman kualitatif:							
C. Aktifitas							
1.	Kegiatan dalam <i>task</i> banyak melibatkan mahasiswa.	✓					
2.	Kegiatan dalam <i>task</i> bervariasi.	✓					
3.	Kegiatan dalam <i>task</i> sesuai topic.	✓					
4.	Kegiatan dalam <i>task</i> menarik bagi mahasiswa.	✓					
5.	Kegiatan dalam <i>task</i> dapat memotivasi mahasiswa untuk belajar bahasa Inggris.	✓					

6.	Kegiatan dalam <i>task</i> berguna bagi kehidupan nyata mahasiswa.	✓				
7.	Kegiatan dalam <i>task</i> membantu pemahaman materi.	✓				
8.	Kegiatan disusun berurutan dari mudah ke agak sulit.	✓				
9.	Kegiatan melibatkan siswa untuk dapat bekerja secara individu dan berpasangan.	✓				

Rangkuman kualitatif:

D. Input

1.	Instruksi dalam setiap <i>task</i> mudah dipahami.	✓				
2.	Input materi berbentuk gambar dan teks relevan.	✓				
3.	Input materi berbentuk gambar dan teks sesuai dengan kemampuan mahasiswa.	✓				
4.	Input materi berbentuk gambar dan teks menarik.	✓				
5.	Input materi berbentuk gambar dan teks sesuai dengan kemampuan berbahasa mahasiswa.	✓				
6.	Input materi mencakup struktur bahasa yang benar.	✓				
7.	Input berbentuk gambar membantu mahasiswa untuk memahami materi.	✓				
8.	Input materi dapat menambah wawasan mahasiswa.	✓				

9.	Input materi dapat menambah kosa kata mahasiswa.	✓				
10.	Input materi membantu mahasiswa dalam berbahasa.	✓				
11.	Input dan <i>task</i> seimbang.	✓				
12.	Pilihan topik sesuai dengan karakteristik mahasiswa.		✓			
13.	Contoh dan ilustrasi membantu pemahaman mahasiswa.	✓				
Rangkuman kualitatif:						
E. Desain dan <i>Layout</i>						
1.	Tampilan materi jelas.	✓				
2.	Tampilan materi menarik.		✓			
3.	Ukuran huruf sesuai.		✓			
4.	Jenis huruf sesuai.		✓			
5.	Jarak spasi sesuai.		✓			
6.	Penggunaan tanda baca benar.	✓				
Rangkuman kualitatif:						
<p>→ DESAIN BUKU LEBIH BAIK DIPERKECIL SESUAI UKURAN BUKU PADA UMUMNYA, SEHINGGA UKURAN HURUF, JARAK SPASI BISA DIATUR DENGAN BAIK.</p> <p>→ DIBERIKAN SAMPUL DAN DAFTAR PUSTAKA.</p>						
F. Evaluasi Umum						
1.	Sistematika penyajian runtut.	✓				
2.	Keseluruhan materi sesuai dengan kemampuan berbahasa mahasiswa.	✓				
3.	Penilaian sesuai dengan input yang diberikan.		✓			

Rangkuman kualitatif

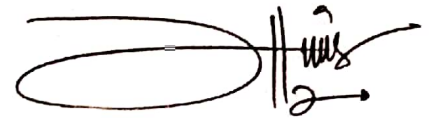
Kesimpulan:

Secara umum, pendapat Bapak/Ibu terhadap materi yang dikembangkan:

- a. Layak
- b. Layak dengan perbaikan
- c. Tidak layak

Palopo, 20 Juli 2020

Penilai Kelayakan



LISA ADITYA D.M., M.Pd

KUESIONER EVALUASI UNTUK AHLI MATERI

A. Data Responden

Nama : Magfirah Thayyib

Umur : 35 Tahun

Jeniskelamin : Perempuan

Pendidikan : S1 S2 S3 Professor

Pengalaman mengajar: 0-2 tahun 2-4 tahun 4-6 tahun ≥ 6 thn

B. Tabel Evaluasi

Isilah tabel berikut ini dengan memberikan tanda centang (\checkmark) pada kolom yang telah tersedia

Keterangan:

SS : Sangat Setuju

S : Setuju

R : Ragu-ragu

TS : Tidak Setuju

STS : Sangat Tidak Setuju

No	Pernyataan	SS	S	R	TS	STS
A. Isi						
1	Cakupan isi materi dalam bahan ajar <i>English for Mathematics</i> sesuai dengan kebutuhan mahasiswa jurusan Pendidikan Matematika.		\checkmark			
2	Kedalaman materi dalam bahan ajar <i>English for Mathematics</i> memadai.		\checkmark			
3	Keaslian isi materi dalam bahan ajar <i>English for Mathematics</i> memadai.		\checkmark			
4	Isu-isu terbaru di dalam bahan ajar <i>English for Mathematics</i> dibahas secara menarik.		\checkmark			

Rangkuman kualitatif:

Dari segi isi, buku ini sudah tergolong baik tetapi struktur isi sebaiknya merujuk pada materi matematika dasar untuk mahasiswa pendidikan matematika (Lihat silabus matkul matematika dasar atau semacamnya). Struktur materi sebaiknya berdasar/ mempertimbangkan urutan tingkat kesulitan, misal materi cardinal dan ordinal number disajikan sebelum materi logika karena materi angka lebih mudah dari materi logika.

B. Bahasa

1	Bahasa yang digunakan dalam bahan ajar sesuai dengan kemampuan mahasiswa.		√			
2	Bahasa yang disajikan komprehensif dan sesuai dengan tingkat perkembangan kognitif mahasiswa.		√			
3	Ekspresi yang digunakan sesuai dengan tata bahasa yang benar.			√		
4	Bahasa yang disajikan dalam bahan ajar mudah dipahami.		√			

Rangkuman kualitatif:

Bahasa yang digunakan sudah sesuai dengan level mahasiswa tetapi ada beberapa ekspresi yang perlu dikoreksi misal logika matematika bukan mathematics logic, cari istilah matematika Bahasa Inggris yang tepat.

C. Aktifitas

1	Kegiatan dalam <i>task</i> banyak melibatkan mahasiswa.		√			
2	Kegiatan dalam <i>task</i> bervariasi.		√			
3	Kegiatan dalam <i>task</i> sesuai topic.		√			
4	Kegiatan dalam <i>task</i> menarik bagi mahasiswa.		√			
5	Kegiatan dalam <i>task</i> dapat memotivasi mahasiswa untuk belajar bahasa Inggris.		√			
6	Kegiatan dalam <i>task</i> berguna bagi kehidupan nyata mahasiswa.		√			
7	Kegiatan dalam <i>task</i> membantu pemahaman materi.		√			
8	Kegiatan disusun berurutan dari mudah ke agak sulit.			√		
9	Kegiatan melibatkan siswa untuk dapat bekerja secara individu dan berpasangan.		√			

Rangkuman kualitatif:

Secara umum, tasks yang disajikan sudah baik tapi hubungan/relevansi antar bagian dalam setiap task yang perlu dievaluasi kembali agar lebih terhubung dan berurut.

D. Input

1	Instruksi dalam setiap <i>task</i> mudah dipahami.		√			
2	Input materi berbentuk gambar dan teks relevan.		√			
3	Input materi berbentuk gambar dan teks sesuai dengan kemampuan mahasiswa.		√			
4	Input materi berbentuk gambar dan teks menarik.		√			
5	Input materi berbentuk gambar dan teks sesuai dengan kemampuan berbahasa mahasiswa.		√			
6	Input materi mencakup struktur bahasa yang benar.			√		
7	Input berbentuk gambar membantu mahasiswa untuk memahami materi.		√			
8	Input materi dapat menambah wawasan mahasiswa.		√			
9	Input materi dapat menambah kosa kata mahasiswa.		√			
10	Input materi membantu mahasiswa dalam berbahasa.		√			
11	Input dan <i>task</i> seimbang.			√		
12	Pilihan topik sesuai dengan karakteristik mahasiswa.		√			
13	Contoh dan ilustrasi membantu pemahaman mahasiswa.		√			

Rangkuman kualitatif:

Struktur bahasa masih perlu diperbaiki, misal instruksi/rubrik untuk latihan/tugas harus jelas dan penggunaan bahasa harus tepat, contoh "arrange ... to be" seharusnya "arrange ... into"; "glosory" harusnya "glossary"; "seberapa paham kalian ...?" bukan "how understand you", cari ekspresi Bahasa Inggris yang tepat.

E. Desain dan Layout

1	Tampilan materi jelas.		√			
2	Tampilan materi menarik.		√			
3	Ukuran huruf sesuai.		√			
4	Jenis huruf sesuai.		√			

5	Jarak spasi sesuai.		√			
6	Penggunaan tanda baca benar.					
Rangkuman kualitatif: Desain dan lay-out sudah baik tapi dibutuhkan konsistensi desain dan layout agar tidak terlalu banyak desain bentuk dan warna yang muncul. Tanda baca di glossary juga salah, bukan titik koma tapi titik dua yang harus digunakan antara kata yang dijelaskan dengan penjelasnya.						
F. Evaluasi Umum						
1	Sistematika penyajian runtut.			√		
2	Keseluruhan materi sesuai dengan kemampuan berbahasa mahasiswa.		√			
3	Penilaian sesuai dengan input yang diberikan.		√			
Rangkuman kualitatif: -						

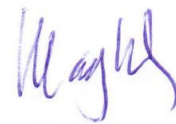
Kesimpulan:

Secara umum, pendapat Bapak/Ibu terhadap materi yang dikembangkan:

- a. Layak
- b. Layak dengan perbaikan √√
- c. Tidak layak

Palopo, 17 Juli 2020

Penilai Kelayakan



Magfirah Thayyib

IAIN PALOPO

KUESIONER EVALUASI UNTUK PENGGUNA (MAHASISWA)

B. Tabel Evaluasi

Isilah tabel berikut ini dengan memberikan tanda centang (☑) pada kolom yang telah tersedia

Keterangan:

SS : Sangat Setuju

S : Setuju

R : Ragu-ragu

TS : Tidak Setuju

STS: Sangat Tidak Setuju

Nama : *

Amira

Semester : *

6

Materi yang disajikan sesuai untuk level basic lower *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Materi telah sesuai dengan bidang dan kebutuhan mahasiswa Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Materi ini mampu meningkatkan kemampuan bahasa Inggris mahasiswa di bidang Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Input materi secara keseluruhan beragam *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Input materi menarik dan mudah dipahami *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Topic input materi telah sesuai dengan bidang kebutuhan mahasiswa yaitu bidang Pendidikan Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Panjang dan sumber input teks keseluruhan sesuai dengan kebutuhan mahasiswa Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Kegiatan keseluruhan unit beragam *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Latihan-latihannya tersusun dengan baik yaitu dari mudah kesulit *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Perintah dalam keseluruhan unit mudah dipahami *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Latihan dalam unit meliputi latihan individu, berpasangan, dan kelompok *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Kegiatan dalam unit mendorong mahasiswa berpartisipasi aktif dalam kelas *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Masukan lain:

This content is neither created nor endorsed by Google.

Forms

KUESIONER EVALUASI UNTUK PENGGUNA (MAHASISWA)

B. Tabel Evaluasi

Isilah tabel berikut ini dengan memberikan tanda centang (☑) pada kolom yang telah tersedia

Keterangan:

SS : Sangat Setuju

S : Setuju

R : Ragu-ragu

TS : Tidak Setuju

STS: Sangat Tidak Setuju

Nama : *

Irwin

Semester : *

6

Materi yang disajikan sesuai untuk level basic lower *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Materi telah sesuai dengan bidang dan kebutuhan mahasiswa Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Materi ini mampu meningkatkan kemampuan bahasa Inggris mahasiswa di bidang Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Input materi secara keseluruhan beragam *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Input materi menarik dan mudah dipahami *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Topic input materi telah sesuai dengan bidang kebutuhan mahasiswa yaitu bidang Pendidikan Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Panjang dan sumber input teks keseluruhan sesuai dengan kebutuhan mahasiswa Matematika *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Kegiatan keseluruhan unit beragam *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Latihan-latihannya tersusun dengan baik yaitu dari mudah kesulit *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Perintah dalam keseluruhan unit mudah dipahami *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Latihan dalam unit meliputi latihan individu, berpasangan, dan kelompok *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	sangat setuju

Kegiatan dalam unit mendorong mahasiswa berpartisipasi aktif dalam kelas *

	1	2	3	4	5	
sangat tidak setuju	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	sangat setuju

Masukan lain:

This content is neither created nor endorsed by Google.

Forms



KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PALOPO
FAKULTAS TARBIYAH DAN ILMU KEGURUAN
PROGRAM STUDI PENDIDIKAN BAHASA INGGRES
Jl. Agatis Kel.Balandi Kec.Bara 91914 Kota Palopo
Email:pbi.fik@gmail.com

SURAT KETERANGAN

Yang bertanda tangan di bawah ini :

Nama : Amalia Yahya, SE., M.Hum
NIP : 19771013 200501 2 006
Jabatan : Ketua Program Studi Pendidikan Bahasa Inggris

menerangkan bahwa mahasiswa yang tersebut namanya di bawah ini telah mampu membaca Al-Qur'an dan dapat dipertanggungjawabkan

Nama : Jenni Ramadhani Putri Ayu Lestari
NIM : 16 0202 0094
Program Studi : Pendidikan Bahasa Inggris
Fakultas : Fakultas Tarbiyah dan Ilmu Keguruan
Alamat/ No. HP : 082196304948

Demikian surat keterangan ini diberikan kepada yang bersangkutan untuk dipergunakan sebagaimana mestinya.

Palopo, 4 December 2020

Ketua Program Studi

a.n. Dekan
Wakil dekan I
Fakultas Tarbiyah dan Ilmu Keguruan



Muhammad Yusuf, S.Ag., M.Pd
NIP. 19740602 199903 1 003



Amalia Yahya, SE., M.Hum
NIP. 19771013 200501 2 006



KEMENTERIAN AGAMA REPUBLIK INDONESIA
INSTITUT AGAMA ISLAM NEGERI PALOPO
FAKULTAS TARBIYAH DAN ILMU KEGURUAN
PROGRAM STUDI PENDIDIKAN BAHASA INGGRIS
Jl. AgatisKel Balandai Kec. Bara 91914 Kota Palopo
Email: FTIK@iainpalopo.ac.id Web: ftik-iainpalopo.ac.id

Surat Keterangan Bebas Mata Kuliah

Sehubungan dengan selesainya "Mata Kuliah Mahasiswa" sebagai salah satu prasyarat utama untuk mengikuti Ujian Munaqasyah, maka kami menerangkan bahwa mahasiswa yang tersebut namanya di bawah ini:

Nama : Jenni Ramadhani Putri Ayu L

Nim : 16 0202 0094

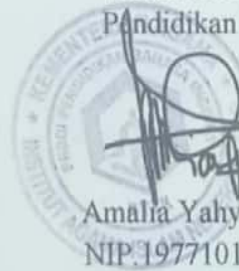
Prodi : Pendidikan Bahasa Inggris

Telah menyelesaikan seluruh mata kuliah mulai dari semester I sampai dengan semester VIII

Demikianlah surat keterangan ini dibuat untuk digunakan sebagaimana mestinya.

Palopo, 19 Agustus 2020

Ketua Prodi
Pendidikan Bahasa Inggris



Amalia Yahya, S.E., M.Hum
NIP. 19771013 200501 2 006

CURRICULUM VITAE



The researcher has complete name Jenni Ramadhani Putri Ayu Lestari. She was born on January 14th 1998 in Palopo, Sulawesi Selatan. She is the last daughter from three children. Her father's name is Hasan Basri and her mother's name is Bakhria Kasim. She has one brother and one sister. The researcher graduated from SDN 1 Bungku Tengah, Sulteng in 2010 and then she graduated from SMPN 5 Palopo in 2013.

Then, in 2016 she graduated from SMAN 1 Bungku Tengah. The researcher continued her study at State Islamic Institute of Palopo (IAIN) and taking English Language Education Study Program S-1 degree.

In the end of the study at State Islamic Institute of Palopo (IAIN), she wrote a thesis entitled **“Developing English Learning Materials for the Students of Mathematics Education Study Program at IAIN Palopo”**.

IAIN PALOPO