

NUMERACY LITERACY MODULE BASED ON LOCAL CULTURE: EFFORT TO IMPROVE NUMERACY LITERACY SKILL

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Abstract

Numeracy literacy, is one of the skills that must be possessed by the younger generation in facing the 21st century and required in the world of work nowadays. This ability allows a person to analyze the information presented in various forms of data presentation, and make the right decisions on the available information. In addition, the world of work in the current era of 4.0 also requires workers who have numeracy literacy skills. The purpose of this research is to develop a numeracy literacy module that meets the criteria of being valid, practical, and effective for use as learning resource of numeracy literacy for students. This type of research is research and development and uses the Plomp development model which goes through 5 stages, namely the preliminary investigation phase, the design phase, the realization or construction phase, the testing, evaluation, and revision phase, and the implementation phase. As for this research, it did not reach the implementation phase considering the limited time of the study. The results showed that the developed module had met the valid criteria with a score of 3.7, practical with a score of 3.7, and effective with a student completeness score of 83.3%.

INTRODUCTION

In the 4.0 era, OECD (2012) declare 3 important abilities that must be possessed including character quality, competence, and basic literacy. Basic literacy relates to how to apply core skills regarding numeracy, language, science, finance, culture and citizenship, as well as digital in daily activities. Numeracy is one of the core skills that must be mastered.

Numeracy is related to numeracy skills. When students develop the knowledge and skills to use mathematics confidently in all subjects at school and in their lives, students are said to be "numerable" (Merrylin, 2012). Numeracy literacy means being literate and aware

about numeracy. Numeracy literacy is the knowledge and skill to use various kinds of numbers and symbols related to basic mathematics to solve practical problems in various contexts of everyday life, (b) analyze information presented in various forms (graphs, tables, charts, etc.). etc.), then use the interpretation of the results of the analysis to predict and draw conclusions and decisions (Tim GLN, 2012). Numeracy literacy is an ability that equips the younger generation to adapt to life in the 21st century in the middle of increasingly crazy technological developments (Tout & Schmitt, 2002). Rational reasoning in daily activities is formed through numeracy.

One of the characteristic of the 21st century is news and information which is easily accessible. Various information in the community ranging from social, political, economic, health and other information certainly requires good analytical skills to absorb the essence contained therein. These informations are usually presented in the form of tables, charts, graphs and can not be separated from numbers. The possession of numeracy literacy skills enables a person to understand and analyze information clearly based on the data presented. Furthermore, through numeracy literacy skills, one can do various things related to numeracy and everyday life. Efficient monthly financial planning in a family, for example, requires numeracy literacy skills. The construction of houses, roads or bridges in a less cost and good quality also requires numeracy literacy skills in the management and planning of their construction.

The importance of numeracy literacy skills is unfortunately not in line with what happens in reality. The results of the Indonesian Numeracy Ability Test by TIMSS (2016) showed a score of 395, while the average score of all countries taking the test was 500. Furthermore, based on data obtained from PIAAC, Indonesia obtained a numeracy rank of 32 out of 34 countries with an average Indonesia's average score is 210 points (OECD, 2016).

The ability of numeracy literacy as a provision for the younger generation in facing the challenges of life in the 21st century, of course, should be possessed by individuals at all levels of education, starting from elementary, junior high school, high school, and high education/university. Students, who study at high education/university, as the last gate that leads them to the world of work, should have good numeracy literacy skills. Therefore, the education obtained by students in high education should facilitate them to develop numeracy literacy skills. Because why, high education is the last level of education for students before actually entering the world of work. Unfortunately, the understanding of numeracy literacy among students, especially in IAIN Curup mathematics tadaris students, is also still low. This can be seen from the results of the questionnaire on students' understanding and needs of the Rejang Lebong local culture-based numeracy literacy module. Only 20% of students who answered knew about numeracy literacy. During lectures, students have not been introduced to numeracy literacy. It shows that students do not have good knowledge about numeracy literacy.

In order to grow and develop numeracy literacy skills in students, the provision of learning resources as teaching materials regarding numeracy literacy is important so that students can learn concepts about numeracy literacy from various sources (GLN Team, 2017). Literacy strengthening strategies and Numeracy to develop the school ecosystem as a place of learning with one of them the development of a text-rich environment (Dewayani, 2021). Numeracy Literacy learning resources or teaching material which are

rich in texts about numeracy, problems and discussions related to numeracy, are the right combination to create learning resources that can provide more in-depth knowledge to students.

Tadris Mathematics Student of IAIN Curup need to introduced to literacy numeracy. It is because only 20 % of students who answered knew about numeracy literacy based on the questionnaire. Meanwhile, IAIN Curup Tadris Mathematics Program Studi does not have Literacy Numeracy Teaching Material. It is necessary to provide numeracy literacy teaching materials for mathematics students so they can get to know more about numeracy literacy. Teaching material developed in this research is in the form of module. Majid in Pamungkas (2017) say that teaching materials are all forms of materials used to assist teachers in carrying out learning activities. Provision of teaching material products can be done through product development.

There are several types of product development models, one of them is the Plomp development model. Plomp development model has several stages, those are investigation phase of the need for the product to be developed, the product design phase, the realization or construction phase of the module based on the needs analysis of the product, and the testing, evaluation, and revision phases (Rochmad, 2012). In this case, the learning resource developed is a numeracy literacy module. Modules are the easiest learning media because they can be studied anywhere, are relatively short and specific, increase student motivation, and teachers can find out which students are successful or not (Meyer, 1978; Puspita, 2019). The module contains a subject, learning objectives, materials, sample questions, and evaluations to measure one's understanding of the material presented in the module.

The basic principle of numeracy literacy according to the Numeracy Literacy Movement Team (Tim GLN, 2017) is contextual and in accordance with local culture. Rejang Lebong culture is a culture that is embraced by the people of Rejang Lebong Regency, Bengkulu Province. IAIN Curup is one of the universities located in Rejang Lebong Regency, Bengkulu Province. One of the tribes in Rejang Lebong is the Rejang tribe, where the Rejang tribe is found in Rejang Lebong Regency, Kepahyang Regency, North Bengkulu Regency, Central Bengkulu Regency, Lebong Regency. The Rejang tribe is the second largest population in Bengkulu Province, and this tribe is adaptive to the development of modern life. Referring to the basic principles of numeracy literacy presented by the GLN Team (Tim GLN, 2017), getting children used to solving numerical problems related to everyday life and related to local culture is an effort that can be done to foster numeracy literacy skills in children.

Regarding the rejang lebong culture as a local culture where students gain knowledge during lectures, the results of a questionnaire on students' understanding and needs of the numeracy literacy module based on the rejang lebong culture, as many as 80 percent of students do not know about rejang lebong culture. This is because many students come from outside Rejang Lebong so they are not familiar with the rejang lebong culture. Therefore, the developed numeracy literacy module is also associated with elements of the rejang lebong culture.

Research on developing numeracy literacy through the use of certain learning models has been done ((Dantes & Handayani, 2021), (Latifah & Rahmawati, 2022), (Maghfiroh, 2021), (Faridah, 2022), (Ambarwati & Kurniasih, 2021)), research on

familiarizing children with numeracy literacy-based questions to develop numeracy literacy is there as well ((Shabrina, 2022), (Puspaningtyas & Ulfa, 2020), (Setyaputri dkk, 2022)). However, the development of a numeracy literacy module based on local culture (rejang lebong) as a learning resource for children in developing numeracy literacy skills has not been there, therefore researchers are interested in developing a numeracy literacy module based on rejang lebong culture in this research which is valid, practice, and effective.

RESEARCH METHODS

Research Type

The type of research is research and development (R & D). The purpose of this development research is to produce certain products and test whether he products developed are effective or not (Sugiyono, 2013). Sampling was done by purposive sampling method. Sample are taken from the students of tadris mathematics who have been done attending analysis data class because the modul are integrated with analysis data matters in Tadris Mathematics course. Sample of the research are 28 students of Tadris Mathematics.

Research Time and Place of

This research was conducted at IAIN Curup (Tadris Mathematic Program Study). The research was conducted within 4 months, those are March-June 2022.

Procedure

The development model used in this study is the Plomp development model. This development phase consists of 5 stages (Rochmad, 2012). The Stages can be seen on the following picture:

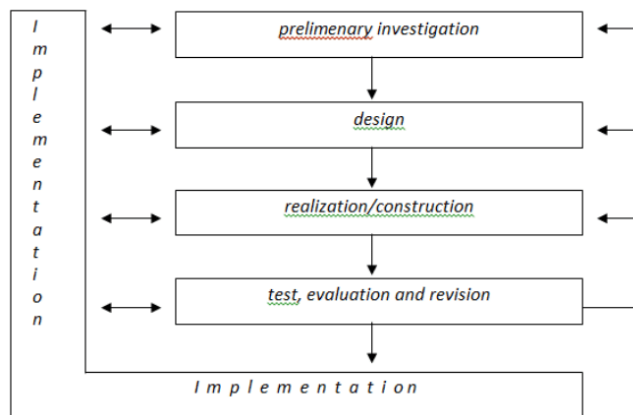


Figure 1.

Plomp Development Model

The development procedure of this research are:

1. Initial Investigation Phase (Preliminary Investigation Phase)

The most important process in this initial investigative phase is identify problems, seek information about gaps between what to do with what happened. This initial investment

phase associated with analyzing a problem or analyzing needs. In this phase, an analysis of the needs of students and lecturers is carried out of the module to be developed.

2. Design Phase

In this phase, activities are carried out to design numeracy literacy modules based on the local culture of Rejang Lebong.

3. Realization or Construction Phase

This phase is drafting or creating the modules based on the results of the needs analysis of students and lecturer. The result of this phase is draft 1 of the numeracy literacy module based on the local culture of Rejang Lebong.

4. Test, Evaluation, and Revision Phase

a. Validation of Draft 1 Module

Draft validation will be carried out by validators or experts. If results draft 1 validation by the validator without revisions or minor revisions, then will be continued with the trial draft 1. But if the validation results draft 1 still needs to be revised, so it is revised again to get draft 2. Do the same thing again start from the validation of the validators. And if expert consideration of draft 2 without revisions or minor revisions, then proceed with trials draft 2. But if draft 2 needs to be revised then it will be revised again. so as to produce draft 3. And do the same thing so on until a cycle occurs. The cycle stops when the analysis results expert consideration of the draft without revision, and is eligible for piloted. Which means the developed module is valid.

b. Trials

The valid module is then tested. Trials were conducted to test the practicality and effectiveness of developed module. Trials were conducted to 10 students who were given analysis data class and effectiveness were conducted to 18 students who were currently attending an analysis data class.

c. Analysis of trial results.

The test results were analyzed to find out whether the valid module achieves results in accordance with the objectives which have been set

5. Implementation Phase

After evaluating and obtaining a product that is valid, practical and effective, then the product that has been developed can be implemented for a wider area

This research did not do the implementation phase considering the limited time of the research. The product developed in this research is a numeracy literacy module based on the rejang lebong culture.

Data Source, Instrument, and Data Collection Techniques

The data in this study come form the expert validation data, lecturer assessment data, student assessment data. These data were obtained from the instrument data collectors and in the form of quantitative data and qualitative data. Quantitative data obtained from filling out the data collection instrument that was carried out by placing a check mark on the appropriate answer choice. While qualitative data obtained from comments and suggestions about product development which is the module.

Data Collection instrument are expert validation sheet, practicality sheet, and effectiveness instrument test. The validation sheet is used to obtain validity data of the

modules developed based on the validation format consists of four components, namely measurement objectives, instructions, aspects assessed, and validator input. The aspects that are generally assessed in the module include content and language aspects. The content aspect has 5 indicators, namely: a) achievement indicators, b) study instructions, c) learning activities, d) exercise, and e) summary. While the language aspect includes four indicators, namely: a) clarity; b) convenience; c) suitability; and d) use.

This practicality sheet is used to obtain assessment data from students when using modul in lectures. Students are also asked to provide feedback expressions of being happy/unhappy, clear/unclear, interested / not interested, interesting / not interesting and accompanied comments on lectures in class after using Rejang Lebong local culture-based numeracy literacy module.

The instrument used to measure effectiveness is the test sheet in the form of a description test. Tests were carried out to find out the effectiveness of the developed module, namely knowing the score of the test results after students learn to use the module that has been developed.

The data collection techniques used in this study are: 1) Checklist method, where the data collection techniques with this checklist method are validation sheet given to the validator along with the module validated. The validator team was asked to provide an assessment with how to put a mark (√) in the appropriate column, 2) Test method, where this test method aims to find out how the results are evaluation of students after carrying out the lecture process using the Rejang local culture-based numeracy literacy module Lebong.

Analysis Data Technique

The validation sheet is filled in by 3 validators to see the content, language, and material aspects. The instrument for measuring practicality was obtained from a student practicality assessment sheet filled out by 10 students in a small class module trial. Furthermore, to measure effectiveness, it was seen from the test results of 18 students who took part in field trials. When more than 80 percent of students attain the minimum completeness score (75) then the module is said to be effective to use. The following table shows the criteria score intervals in order to convert the assessment scores from quantitative data to qualitative data to determine the validity and practicality of the developed module:

Table 1.
Validity and Practicality of Modul Criteria

Interval	Criteria
$Mi + 1,5 Sdi < x$	Very Valid/ Very Practice
$Mi + 0,5 Sdi < x \leq Mi + 1,5 Sdi$	Valid/ Practice
$Mi - 0,5 Sdi < x \leq Mi + 0,5 Sdi$	Valid Enough/ Practice Enough
$Mi - 1,5 Sdi < x \leq Mi - 0,5 Sdi$	Less Valid/ Less Practice
$x \leq Mi - 1,5 Sdi$	Invalid/ Unpractice

Information:

$$Mi = \text{Ideal Score Mean} = \frac{\text{minimum score} + \text{maximum score}}{2}$$

$$Sdi = \text{Deviation Standar Ideal} = \frac{\text{maximum score} - \text{minimum score}}{6}$$

$$x = \text{Actual Total Score}$$

RESULT AND DISCUSSION

Result

1. Preliminary Investigation Phase

a. Results of Student Needs Questionnaire for Rejang Lebong's Local Culture-Based Numerical Literacy Module

This needs analysis was done in the 2019/2020 Tadris Mathematics Study Program. Questionnaire for students consists of 29 questions. The information obtained related to the module requirements is as follows:

- All students need a numeracy literacy module as a source for learning numeracy literacy.
- Only 20% of students know or have heard of numeracy literacy
- 80% of students hope a numeracy literacy module based on the local culture of Rejang Lebong can be developed.

b. Results of the Forum Group Discussion (FGD)

All data findings from the results of the questionnaire were then discussed in expert lecturer groups through FGD. The FGD was held in March 2022, with as many as 5 Tadris Mathematics Lecturers as participants. The results of the in-depth discussion showed that numeracy literacy learning resources for students of the IAIN Curup tadris mathematics study program had never been developed, therefore participants agreed that a numeracy literacy module based on the local culture of rejang lebong was needed.

There are several courses that can be integrated with numeracy literacy, including education statistics and data analysis. This is because education statistics and data analysis are included in the scope of the data analysis material (Team GLN, 2017). The results of the FGD agreed to integrate numeracy literacy with data analysis courses. It is because the limited development time. If the development of the numeracy literacy module is integrated with the education statistics course, it will take longer time. Therefore, the development of a numeracy literacy module based on the rejang lebong culture will be integrated with the data analysis course.

2. Design Phase

In the product design phase, the development of learning resources in the form of this module is first limited to data analysis courses and is limited to one-sample descriptive analysis test material and two-sample comparison tests specifically on parametric data. The design of the Rejang Lebong culture-based numeracy literacy module is showed in the following picture.

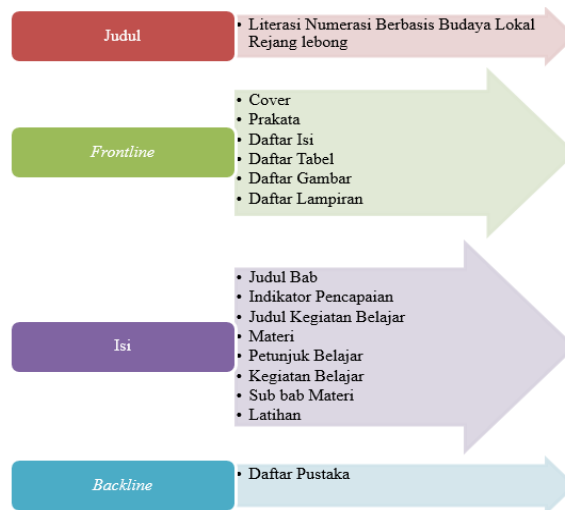


Figure 2.
Module Development Design

3. Realization or Construction Phase

The result of this realization phase is draft 1 of the numeracy literacy module based on the local culture of Rejang Lebong. This module was developed in April-June 2022 and refers to several references that have been compiled. The results of the preliminary design development of this module consist of 85 pages in total. The first four pages are written in Roman numerals consisting of cover (i), foreword (ii), table of contents (iv). The next page, written in Hindu-Arabic numerals, consists of chapter titles, achievement indicators, titles of learning activities, study instructions, learning activities, materials, exercises, and bibliography. The developed module includes five chapters, those are:

Chapter 1. Numeracy Literacy, consists of 2 learning activities:

- Learning Activities 1. Definition and Benefits of Numerical Literacy
- Learning Activities 2. Numeracy Literacy Indicators

Chapter 2. Numeracy Literacy in Mathematics, consists of 5 learning activities

- Learning Activities 1. Numeracy Literacy Components in Mathematics
- Learning Activities 2. Numeracy Literacy in Numbers
- Learning Activities 3. Numeracy Literacy in Algebra Materials
- Learning Activities 4. Numeracy Literacy in Geometry Materials
- Learning Activities 5. Numeracy Literacy in Statistics

Chapter 3. Rejang Lebong Culture

- Learning Activities 2. Types of Rejang Lebong Culture

Chapter 4. Data Analysis

- Learning Activities 1. Basic Concepts of Hypotheses
- Learning Activities 2. One Sample Descriptive Analysis Test
- Learning Activities 3. Two-Sample Comparative Analysis Test

Chapter 5. Numerical Literacy Problems Based on Rejang Lebong Culture

Each chapter is designed with a predetermined format. Broadly speaking, the module consists of an introduction, materials and exercises. The introduction includes achievement indicators, titles of learning activities, and learning instructions. The material contains a discussion of learning activities. Closing consists of exercises. These three things are applied continuously in each chapter.

4. Testing, Evaluation, and Revision Phase

a. Validation Assessment by Expert

After the module is constructed, then an assessment is carried out by experts or validators which aims to find out whether the draft 1 that has been compiled is valid or not based on the assessment of the experts (3 validators). 3 Validator are 1) Adi Asmara, M. Pd. (Mathematics Aspect), 2) Ely Syafitri, M. Pd. (Numeracy Literacy Aspect), 3) Irni Latifa Irsal, M. Pd. (Design Aspect). This validation is carried out by several experts, who are tasked with assessing aspects of the material or content, appearance, and language. Validation was done in June 2022. The summary of the results of all values given by the validator is as follows.

Table 2.
Recapitulation of Validator Assessment

Number	Aspect	Mean
1.	Content	3,5
2.	Display	3,9
3.	Language	4,0
Mean		3,7
Score		Valid

The suggestion of validators are:

- It is necessary to add a question in the Rejang Lebong Culture chapter and analyze the data.
- The Cultural Context of Rejang Lebong needs to be more varied.
- The information about the first question in the last part of the module is still ambiguous, namely about the year of coffee production.

Generally, the assessment results from the validators stated that the draft 1 module produced could be continued for testing after being revised according to the suggestions of the validators. Suggestions and comments from the validators were followed up as material for the revision of draft 1. The conclusion given by the validator is that the module is declared "Worth using after revision".

b. Practicality Assessment through Small Trial

A small trial stage was carried out to determine the practicality of the module. Modules that have been validated and revised according to input, are tested on several students. This trial was conducted on ten students of the 2019 batch who have taken data analysis courses and have heterogeneous abilities. The student is asked to provide assessments, comments, suggestions for improvement about the module that has been

developed by filling out the student assessment sheet for the module. Student assessments from the small trial stage are as follows.

- Attractive in terms of appearance.
- Appropriate in terms of the use of test characters, images, and layouts in the module.
- Clear on study instructions.
- Easy to understand in terms of language.

Because there are several suggestions from students for small trials, revisions are made before being used in field trials.

Table 3.

Student Practicality Assessment Results on Module Data

Number	Assessment Aspect	Score
1.	Interestingness	3,7
2.	Easiness	3,6
3.	Usefulness	3,7
Total Score		3,7
Category		Practice

c. Effectiveness Assessment through Test Results on Field Trials

Field trials were done on 18 4th semester students for the 2021/2022 Academic Year. This trial was conducted to determine the effectiveness of the rejang lebong culture-based numeracy literacy module that has been developed. The module is said to be effective if the percentage of students who get a numeracy literacy test score (the test is at the end of the module) is above the KKM (75) more than 80%. The following are the results of the tests:

Table 4.

Test Score Data

Results	Frequency	Persentage
Achieved	15	83,3%
Unachieved	3	16,7%

The test results showed that 83.3% of students scored more than the KKM. Therefore, the module was effective. These are the pictures of literacy numeracy module that has been developed:



Figure 3.
Cover of Module

Daftar Isi		BAB I LITERASI NUMERASI	
COVER	i	Indikator Pencapaian	
FRAKATA	ii	Setelah mempelajari modul ini, mahasiswa diharapkan mampu:	
DAFTAR ISI	iv	1. Memahami pengertian literasi	
BAB I. LITERASI NUMERASI	1	2. Memahami pengertian numerasi	
Kegiatan Belajar 1. Pengertian dan Manfaat Literasi Numerasi	2	3. Memahami pengertian literasi numerasi	
Kegiatan Belajar 2. Indikator Literasi Numerasi	12	4. Menjelaskan manfaat literasi numerasi	
BAB II. LITERASI NUMERASI DALAM MATEMATIKA	14	5. Mengidentifikasi indikator literasi numerasi	
Kegiatan Belajar 1. Komponen Literasi Numerasi dalam Matematika	16	Materi	
Kegiatan Belajar 2. Literasi Numerasi dalam Materi Bilangan	18	Materi pada modul ini disusun menjadi 2 kegiatan belajar, yaitu	
Kegiatan Belajar 3. Literasi Numerasi dalam Materi Aljabar	22	Kegiatan Belajar 1 : Pengertian dan Manfaat Literasi Numerasi	
Kegiatan Belajar 4. Literasi Numerasi dalam Materi Geometri	26	Kegiatan Belajar 2 : Indikator Literasi Numerasi	
Kegiatan Belajar 5. Literasi Numerasi dalam Materi Statistik	28	Petunjuk Belajar	
BAB III. BUDAYA REJANG LEBONG	42	1. Bacalah uraian materi dengan cermat dan berulang-ulang, sehingga	
Kegiatan Belajar 1. Jenis-jenis Budaya Rejang Lebong	43	Anda benar-benar memahami dan menguasai materi pembahasan.	
BAB IV. ANALISIS DATA	49	2. Cermati contoh yang diberikan	
Kegiatan Belajar 1. Konsep Dasar Hipotesis	50	3. Kerjakan latihan soal yang dirugaskan	
Kegiatan Belajar 2. Uji Analisis Deskriptif Satu Sampel	52	4. Buatlah catatan penting hasil materi yang dipahami	
Kegiatan Belajar 3. Uji Analisis Komparasi Dua Sampel	57	5. Diharapkan Anda juga mempelajari buku atau sumber penunjang lainnya	
BAB V. SOAL-SOAL LITERASI NUMERASI BERBASIS BUDAYA REJANG LEBONG	70		
DAFTAR PUSTAKA	80		

Figure 4.
Content of Module

Kegiatan Belajar 4

Literasi Numerasi dalam Materi Geometri

Komponen Numerasi	Literasi : Menggunakan penalaran spasial
Kompetensi Dasar Matematika	Dasar : Menghitung volume bangun ruang dan luas permukaan bangun ruang dan bentuk komposisinya
Indikator Numerasi	Literasi : Mampu menganalisis informasi dalam bentuk (grafik, tabel, bagan, diagram dan lainnya)

Contoh Soal:

1. Bunu memiliki biskuit dalam sebuah toples berbentuk tabung seperti tampak pada gambar 2.6.



Gambar 2.6 Biskuit dalam toples


26 Modul Literasi Numerasi Berbasis Budaya Hijau Lebong

Literasi numerasi berbeda dengan kompetensi matematika. Meski keduanya berdasar pada pengetahuan dan keterampilan matematika, namun keduanya membutuhkan keterampilan yang berbeda. Seseorang yang memahami matematika belum tentu mampu menerapkan fungsi matematika dalam kehidupan sehari-hari. Di kehidupan nyata, penerapan matematika seringkali tidak terstruktur dan memiliki banyak cara penyelesaian serta berhubungan dengan faktor nonmatematis. Dapat disimpulkan bahwa pembelajaran matematika sehari-hari pun belum tentu dapat menumbuhkan kemampuan numerasi di masyarakat.

Semisal seorang siswa belajar bagaimana membagi bilangan bulat dengan bilangan bulat lainnya. Ketika bilangan yang pertama tidak habis di bagi, maka akan ada sisa. Biasanya siswa diajarkan untuk menuliskan hasil bagi dengan sisa, lalu mereka juga belajar menyatakan hasil bagi dalam bentuk desimal. Dalam konteks kehidupan sehari-hari, hasil bagi dalam bentuk desimal sering kali tidak diperlukan sehingga sering kali dilakukan pembulatan. Secara matematis, kaidah pembulatan ke bawah dilakukan jika nilai desimalnya lebih kecil daripada 5, pembulatan ke atas jika nilai desimalnya lebih besar daripada 5, dan pembulatan ke atas atau ke bawah bisa dilakukan jika nilai desimalnya 5.

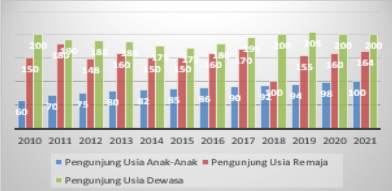
Figure 5.
Literacy Numeracy Matters

2. Rumah khas adat rejang disebut juga *Umeat Potong Jang*. *Umeat* berarti rumah, *potong* bermakna buatan, dan *jang* berarti orang rejang. Jadi *Umeat Potong Jang* bermakna "Rumah Buatan Orang Rejang". Bentuk lain dari rumah adat rejang adalah rumah adat "Meno'o" yang berlokasi di desa Air Meles Atas Kecamatan Selupu Rejang, Kabupaten Rejang Lebong.



Gambar 5. 1 Rumah Meno'o

Sebagai situs budaya, rumah adat ini banyak dikunjungi wisatawan. Grafik di bawah ini menunjukkan total pengunjung yang mengunjungi rumah adat rejang sejak tahun 2010 hingga tahun 2021.



Tahun	Pengunjung Usia Anak-Anak	Pengunjung Usia Remaja	Pengunjung Usia Dewasa
2010	50	70	100
2011	60	80	110
2012	70	90	120
2013	80	100	130
2014	90	110	140
2015	100	120	150
2016	110	130	160
2017	120	140	170
2018	130	150	180
2019	140	160	190
2020	150	170	200
2021	160	180	210

Gambar 5. 2 Pengunjung Rumah Adat Rejang "Meno'o"

2. Berdasarkan grafik di atas, tentukan kebenaran dari pernyataan berikut!

- Total pengunjung usia anak-anak selalu meningkat dari tahun ke tahun
- Secara umum, total pengunjung usia remaja tidak lebih dari 150 orang
- Total pengunjung usia anak tidak pernah lebih dari 1/2 total pengunjung usia dewasa

72 Modul Literasi Numerasi Berbasis Budaya Rejang Lebong

73

Figure 6.
Numeracy Literacy integrated Rejang Lebong Culture Questions

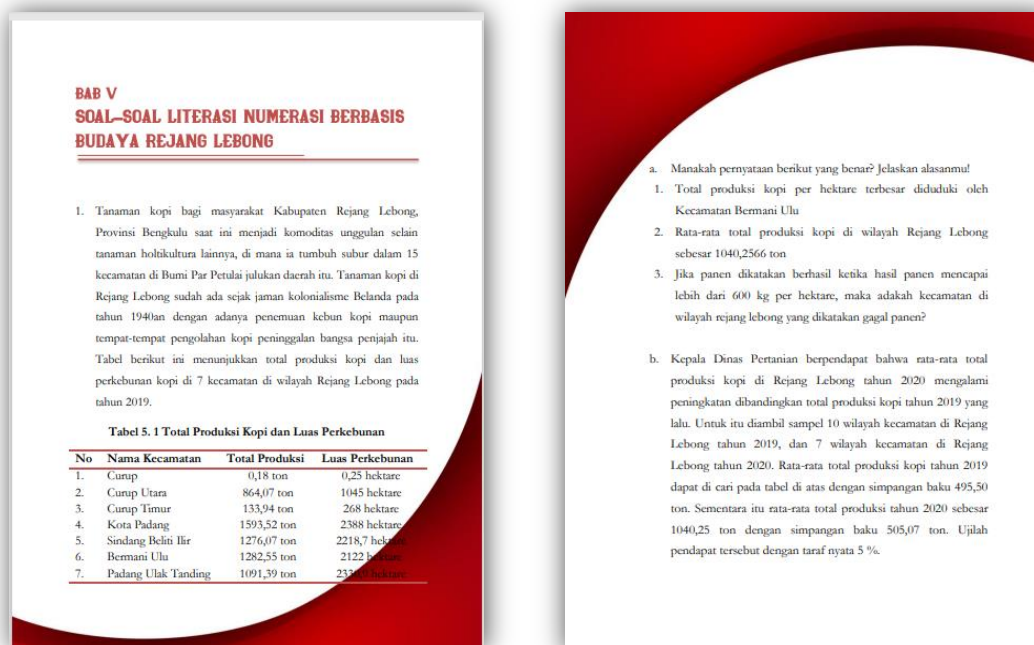


Figure 7.

Numeracy Literacy integrated with Rejang Lebong Culture Questions

Discussion

Based on the results of problem identification and needs analysis, a module is needed that can develop numeracy literacy based on the Rejang Lebong culture. The results of the student needs questionnaire showed that 80 percent of students did not know about numeracy literacy. In fact, numeracy literacy is one of the basic skills most needed by the younger generation in this 4.0 era. This ability becomes their provision to compete in the world of work. Absorption and understanding of information that is very easy to obtain in this digital age also requires numeracy literacy skills. In accordance with the concept of numeracy literacy, namely appreciating and understanding information expressed mathematically, for example graphs, charts, diagrams and tables (Pangesti, 2018). Therefore, developing numeracy literacy in Tadris Mathematics students at IAIN Curup is an important thing to do.

The principle of numeracy literacy is contextual and based on local culture. Numerical literacy is not the ability to understand mathematical concepts in the school curriculum, but one's ability to apply mathematical concepts in everyday life. Linking numeracy literacy with the culture of Rejang Lebong as a regional culture of Rejang Lebong district (location of IAIN Curup) is an interesting thing. The combination of Rejang Lebong culture and the concept of numeracy literacy which is packaged into one is an effort that can be made to develop numeracy literacy skills in students of the Tadris Mathematics Study Program IAIN Curup. This module was developed in the data analysis course. The selection of data analysis was carried out because data analysis is a subject that discusses data, how to read data presented in various forms of data presentation, analyze data,

process data, and interpret data. In line with the objectives of numeracy literacy skills, namely enabling individuals to understand and interpret various information obtained.

The development of the Rejang Lebong culture-based numeracy literacy module was carried out based on the results of the designs that had been prepared. To realize this, the researcher studied the concept of numeracy literacy and Rejang Lebong culture from various sources, reviewed the RPS data analysis, compiled indicators of achieving the expected competencies. Apart from that, FGD activities were also held for Tadris Mathematics lecturers to discuss the design of the numeracy literacy module that would be developed. Based on the results of the FGD, it was found that the developed module should also contain questions and examples of numeracy literacy questions at the junior and senior high school levels, even though the object of research has entered the tertiary level. This is because numeracy literacy is knowledge that is not well known to students of the Tadris Mathematics Study Program at IAIN Curup.

Generally, according to the validator, the developed module can facilitate students in growing and developing students' numeracy literacy skills. This can be seen from the validation score in the statement "the accuracy of asking questions allows students to develop numeracy literacy skills" which reaches an average of 4 (valid) for the three validators. This is because the questions contained in the module were developed based on indicators of numeracy literacy and packaged in the cultural context of Rejang Lebong.

Small class trials were conducted to assess the practicality of the developed modules. This trial was conducted on 10 students who had taken the data analysis class. The results of the small class trial show that the developed module is included in the practical category, with an average practicality score of 3.85. The results of the assessment will be considered for the next stage, namely field trials.

Field trials are tests carried out to measure the effectiveness of the modules that have been developed, after students have studied the modules and carried out on 18 students who are currently taking data analysis lectures. Effectiveness can be seen from the results of tests on numeracy literacy questions based on the Rejang Lebong culture. Based on the test results, it was found that 83.3% of students had achieved a minimum score of 70. It can be concluded that the Rejang Lebong culture-based numeracy literacy module is effective. As many as 80 percent of students based on the student needs questionnaire who previously did not know about numeracy literacy became aware. The developed module can train students to develop their numeracy literacy skills. By providing material, examples and exercises related to numeracy literacy, students become familiar with numeracy literacy.

CONCLUSION

Based on the results of research and development, it is concluded that:

1. The module developed using the Plomp development model, with the preliminary investigation phase, design phase, construction phase, assessment, evaluation and revision phases has valid, practical, and effective criteria.
2. The quality level of validity, practicality, and effectiveness of the module is as follows.

- a. The resulting Rejang Lebong Culture-based numeracy literacy module has reached the “valid” category. It can be seen from the validation results of experts that the module that has been developed is feasible to use.
- b. Based on the trial of the Rejang Lebong Culture-based numeracy literacy module, it has reached the "practical" category based on the results of the assessments of students.

The Rejang Lebong Culture-based numeracy literacy module that has been developed has reached the “effective” category. It is declared effective based on the achievement of classical learning outcomes, 83.3% of score students above 75 (KKM).

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