



Developing Reading E-Module Based on Langkat Sultanate History for English Department Study of STKIP Al-Maksum Langkat

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Article Info	Abstract
Article History Received: 2022-08-11 Revised: 2022-09-22 Published: 2022-10-01	Providing English learning material with developing reading E-Module Based on Langkat Sultanate History is important as English Department Study of STKIP Al-Maksum Langkat. This research aims to develop Reading e-Module Based on Langkat Sultanate History, to increase students' awareness about Langkat Sultanate History and to promote local wisdom at Langkat District. This research is concerned with the development of an English reading e-Module for students of the English department study of STKIP Al-Maksum by applying the four phase Research and Development (R & D) proposed by Gall, Gall & Borg (2003). At the define stage, first, the author decides to create the requirements to create the e-Module following the need analysis. Furthermore, at the design stage, the author creates the initial design (prototype) e-Module. The results of the study show that the module that has been developed is valid, practical and effective. The validity of the module reaches a valid category based on the expert's and validator's evaluation. It is hoped that they will be able to continue to raise local culture or local wisdom in Indonesia as a learning module to preserve Indonesian culture for students.
Keywords: <i>Reading; e-Module; Langkat Sultanate History.</i>	

Artikel Info	Abstrak
Sejarah Artikel Diterima: 2022-08-11 Direvisi: 2022-09-22 Dipublikasi: 2022-10-01	Penyediaan materi pembelajaran bahasa Inggris dengan mengembangkan E-Module pada mata kuliah reading berbasis Sejarah Kesultanan Langkat penting dilakukan sebagai Jurusan Bahasa Inggris STKIP Al-Maksum Langkat. Penelitian ini bertujuan untuk mengembangkan e-Modul 'reading' berbasis Sejarah Kesultanan Langkat, untuk meningkatkan kesadaran mahasiswa tentang Sejarah Kesultanan Langkat dan untuk mempromosikan kearifan lokal di Kabupaten Langkat. Penelitian ini berkaitan dengan pengembangan e-Module 'reading' Bahasa Inggris untuk mahasiswa jurusan Bahasa Inggris STKIP Al-Maksum dengan menerapkan empat tahap Research and Development (R&D) yang diusulkan oleh Gall, Gall & Borg (2003). Pada tahap define, pertama, penulis memutuskan untuk membuat kebutuhan untuk membuat e-Module mengikuti analisis kebutuhan. Selanjutnya pada tahap desain, penulis membuat desain awal (prototype) e-Module. Hasil penelitian menunjukkan bahwa modul yang dikembangkan valid, praktis dan efektif. Validitas modul mencapai kategori valid berdasarkan penilaian ahli dan validator. Bagi Peneliti selanjutnya diharapkan dapat terus mengangkat budaya lokal atau kearifan lokal di Indonesia sebagai modul pembelajaran untuk melestarikan budaya Indonesia bagi siswa.
Kata kunci: <i>Reading; e-module; sejarah kesultanan Langkat</i>	

I. INTRODUCTION

E-Module is a modification of the conventional module by combining the use of information technology so that the existing modules can be more interesting and interactive. The use of the e-Module supports multimedia facilities like images, animations, audio, and video in it. Further, it is regarded that e-Module is suitable for use in cost estimating (Arthur et al., 2020). Electronic-based teaching materials can be easily obtained because of the presence of information technology network devices. Moreover, Electronic based teaching material as a resource believed can encourage students' English learning (Isnani, 2019). Reading is one of the bases in the development of knowledge for

students and everyone. The role of digitization can be a solution to restore student interest in reading which has decreased slightly. Currently, video platforms are more popular, the development of e-Modules in reading must be designed as well as possible to make students interested in reading. Elsewhere, it was founded that students have more positive attitudes toward digital reading (Pardede, 2019).

Sultanate of Langkat is the oldest monarchy among the Malay monarchies in East Sumatra or now North Sumatra. During the leadership of Kejuruan Hitam King (1750-1818), the attack on Langkat came from the Kingdom of the Netherlands. Langkat was previously subordinate to the Sultanate of Aceh until the early 19th

century. Thus, dealing with the authenticity attaching the history of the Sultanate Langkat in the reading materials is deemed necessary. STKIP Al-Maksum Langkat is one of the Colleges in Langkat Regency. This college was founded by Mr. H. Drs. H. Akhmad Julham, M.Pd., MM As Trustee of the Haji Maksum Abidin Shaleh Foundation Stabat-Langkat, and STKIP Al-Maksum Langkat is the first and only college that has an educational program in Langkat. Currently, many teenagers in Langkat do not know about the history of the Langkat Sultanate, the stories about the Langkat Sultanate can be used as a reference to develop young people's reading interest and preserve the slightly faded history of the Sultanate. Based on the description, the development of the Reading e-Module Based on Langkat Sultanate History is a breakthrough to develop the form of digital reading and promote local wisdom through history. The stories about the history of the Langkat sultanate are rarely made into reading in lessons. Through this research, the researchers filled the gap by Developing Reading e-Module Based on Langkat Sultanate History as a local wisdom content for the English Department Study of STKIP Al-Maksum Langkat.

Research Objective: (1) To develop Reading e-Module Based on Langkat Sultanate History (2) To increase students' awareness about Langkat Sultanate History (3) To promote local wisdom at Langkat District, research Urgency: (1) To provide Reading e-Module Based on Langkat Sultanate History course at the English Department Study Program, STKIP Al Maksum Langkat (2) To increase the students' awareness of Langkat Sultanate History (3) To promote local wisdom at Langkat District to the community.

1. Electronic Module (E-Module)

The design of e-Module which can be accessed online is an innovation of learning English (Aini et al., 2020). Using e-Module will help the students to access the course by the online platform (Asrial et al., 2019). Thus, dealing with accessibility and cost estimating STKIP Al-Maksum Langkat was using a web-based platform as e-learning for the entire study program. The advantages of e-Module are: (1) it gives many direct feedbacks, so students know their scores; (2) it has clear, specific, and targeted objectives that ease the delivery of the material; (3) it motivates students to learn everywhere; (4) it accelerates students' learning independence (Khosiyono, 2018). An excellent and interesting module

features are self-instructional, self-contained, stand-alone, adaptive, and user-friendly. Therefore it is expected that the teaching-learning processes will be promoted by developing a suitable e-Module. Material development is an effort for writers or teachers to create, evaluate, and adapt language teaching materials (Farajnezhad & Branch, 2022). Based on the explanation above, e-Module is a modification of the conventional module by combining the use of information technology, so that the existing modules can be more interesting and interactive. The use of the e-Module supports multimedia facilities like images, animations, audio, and video in it. The development of the e-Module is a part to make the learning process more interesting and interactive. As in this study, the researchers developed materials integrating Langkat Sultanate History values into English materials. It is important to put careful attention to the literature review regarding the cultural values in the language materials.

2. Reading Material

In English language learning, reading is among the focus skills that also have an important role in contributing to children's success both academically and in life (Berlin et al., 2022). Reading material is a collection of text. Text is defined as a term of meaning realization that shapes information, message, or ideas in a series of sentences arranged rhetorically in an exact genre grammatically (Rambe, D. A. (2017). Reading is one of the bases in the development of knowledge for students and everyone. The role of digitization can be a solution to restore student interest in reading which has decreased slightly. Currently, video platforms are more popular, the development of e-Modules in reading must be designed as well as possible to make students interested in reading.

3. The Sultanate of Langkat

The name of Langkat comes from the name of a tree that resembles a 'langsar' tree. The Langkat tree has fruit that is bigger than the 'langsar' fruit but smaller than 'duku' fruit. It tastes bitter and tart. This tree used to be often found on the banks of the Langkat River, namely in the lower reaches of the Batang Serangan River which flows through the city of Tanjung Pura. However, the tree is now extinct. The Langkat Sultanate is a kingdom

that used to rule in the Langkat Regency, North Sumatra now. The Langkat Sultanate became prosperous because of the opening of rubber plantations and the discovery of oil reserves in Pangkalan Brandan. The Sultanate of Langkat is the oldest monarchy among the Malay monarchies in East Sumatra or now North Sumatra. During the leadership of Kejuruan Hitam King (1750-1818), the attack on Langkat came from the Kingdom of the Netherlands. Langkat was previously subordinate to the Sultanate of Aceh until the early 19th century. Currently, many teenagers in Langkat do not know about the history of the Langkat Sultanate, the stories about the Langkat Sultanate can be used as a reference to develop young people's reading interest and preserve the slightly faded history of the Sultanate.

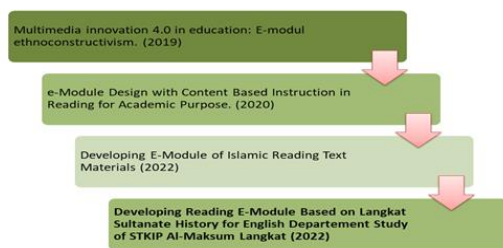


Figure 1. List of previous research

Based on the previous research above, the author assumed that attaching the local wisdom of Langkat, especially the history of Sultanate Langkat did not conduct. Concerning the background of the study in the previous research, the author is interested in conducting the research involving local wisdom as a material in developing reading e-Module.

II. METHOD

1. The Types of Research

This research is R&D (Research and Development). Borg & Gall (1983) described that the steps of R & D process are usually referred to as the R & D cycle, which consists of (1) studying research findings pertinent to the product to be developed, (2) developing the product based on these findings, (3) field testing it in the setting where it will be used eventually, and (4) revising it to correct the deficiencies found in the field-testing stage (Gall et al., 2003). In this research, the

product is the Reading e-Module for students in the second semester of the English Department Study of STKIP Al-Maksum Langkat. The basis of the e-Module is Langkat Sultanate History as local wisdom.

2. Research Model

Those four models' Gall, Gall & Borg are used as a research model which consists of four stages, namely: (define), (design), (development), and (dissemination).

3. Time and Place of The Research

The research will be held at STKIP Al Maksum Langkat, Langkat regency and the time will begin April 2022.

4. Research Subjects

The research subjects are students of the second semester of the English Department Study of STKIP Al-Maksum Langkat.

5. The procedure of The Development

At the define stage, first, the author decides to create the requirements to create the e-Module following the need analysis. Furthermore, at the design stage, the author creates the initial design (prototype) e-Module. The information is collected in the defined stages used to develop the initial design. The next stage is developed, at this stage is carried out e-Module development according to the design and criteria that have been determined at the previous stage which will be validated by several experts, namely, Education Technology Experts and Literary Experts. After the above three stages are completed, the next step is the disseminate stage which is disseminating the e-Module that has been in that correct category.

6. Method of Collecting Data

Method of collecting data consist of target, method, instrument and subject

Tabel 1. Method of Data Analysis

No	Target	Method	Instru- ment	Subject
1	Reaction about the effectiveness of Reading E-Module	Question-naire	Question-naire	Expert in Educa-tional Techno-logy
2	Reaction about the content of Reading E-	Interview	Question-naire	Tribal council of Langkat

Module			
3	Test	Essay Test	Second semester students of the English Department Study
Student's comprehension of Reading E-Module			

7. Data Analysis

The data will be analyzed by using Evaluation Checklist proposed by Miekley and they will be validated by the qualification of validity (Miekley, 2005).

Tabel 2. The qualification of validity media

Level of achievement	Qualification of Validity
85,01 % - 100%	Valid
70,01 % - 85,00 %	Quite valid
50,01% - 70,00%	Less valid
01,00% - 50,00%	Invalid

N-Gain will be obtained by the result of pretest and post-test. The average of N-Gain will be conducted by the author to know the improvement of students' comprehension of the reading e-Module. The pattern is:

$$N\ Gain = \frac{S\ post\ test - S\ pretest}{S\ maximum - S\ post\ test}$$

Tabel 3. Interpretation of N-Gain

Value of Interpretation	Interpretation
$g > 0,7$	High
$0,3 < g < 0,7$	Medium
$g < 0,3$	Low

8. Research Phase

The research phases are divided into four stages. It can be seen in the below picture:

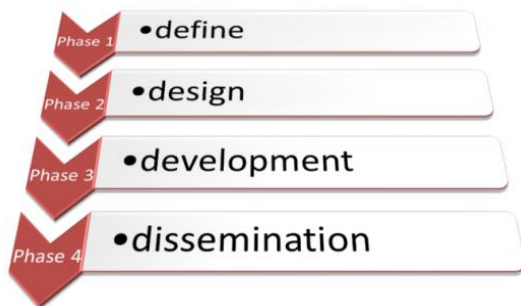


Figure 2. Four Model Research Design

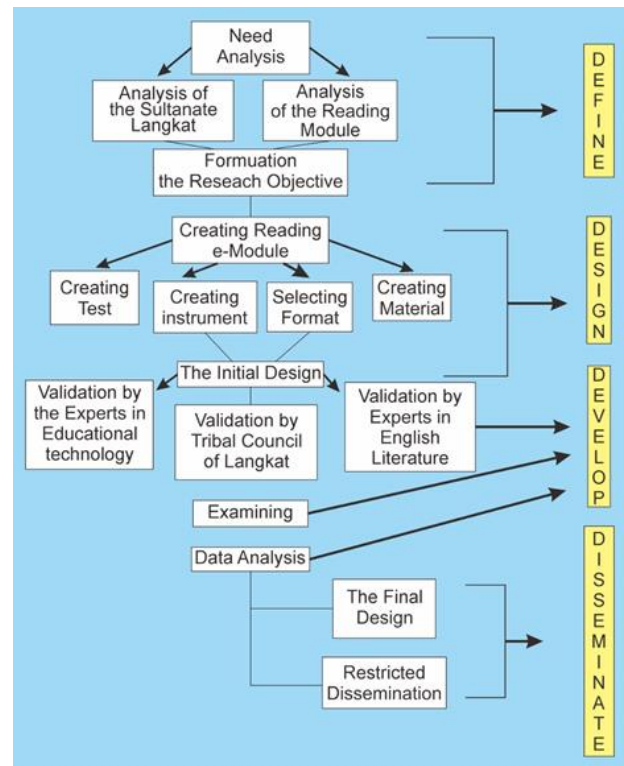


Figure 3. Diagram of 4 D Model

III. RESULT AND DISCUSSION

Research from the development of Reading E-module based on Langkat Sultanate History in this center learning model results obtained in the form of (1) Electronic Module (e-module) based on Langkat Sultanate history on the center learning model of reading at STKIP AL Maksum in Langkat District. (2) Evaluation of the validation of a team of experts from two validators, namely material expert and media expert on the contents of the material in the electronic module. (3) Assessment of 76 respondents consisting of Lecturers and Students in the English Department. The development of electronic modules in the learning center model in English Department was developed with the 4 Model which consists of 4 stages.

1. Define Stage

The researchers filled the gap by Developing Reading e-Module Based on Langkat Sultanate History as a local wisdom content for the English Department Study of STKIP Al-Maksum Langkat. Analysis stages use questioners and interviews to the students.

2. Design Stage

In the design, this stage aims to create an initial design of e-modules based on local wisdom that will be developed based on the results of the defining stage. Furthermore, at the design stage, the author creates the initial

design (prototype) e-Module. The information is collected in the defined stages used to develop the initial design. The steps taken in this stage begin with reconstructing the indigenous knowledge. Reconstruction begins with interviews and direct observations conducted in three locations, namely: (1) Dinas Kebudayaan Langkat (Langkat Cultural Department District); (2) The elder of cultural practitioner and (3) STKIP AL Maksum Langkat. After reconstruction, the analysis of the English department syllabus of the 2013 curriculum was carried out. At the syllabus analysis stage, the decline of the Competency Achievement Indicator (IPK) of Basic Competence (KD), the preparation of the problem based on the grid of questions that have been designed. Next, compiles Reading E-module based on Langkat Sultanate History.

3. Development Stage

This development phase aims to create a revised e-module based on verification and input by the verifier. The development stage steps are:

a) Expert Validation

This expert validation validates the content of English reading and media on the E-module before the posttest. Two material experts and two media experts validated E-modules to determine whether the E-module developed is worth using. Validation aims to determine the correctness and feasibility of the E-module. The making of product improvements will use inputs and suggestions from the validator. Based on the validation results from experts, the material obtained a score of 85.75% (table 1), which included the quite valid category. From the media, experts got a score of 86.7% (table 2) which belongs to the valid category.

Table 4. Material Expert Results

Indicator of material validation	Percentage (%)	Category
The suitability of the material with the syllabus	85	Valid
Content and material aspects	85	Valid
Learning aspects	83	Quite Valid
Language aspects	90	Valid
Average	85.75	Valid

Table 5. Media Expert Results

Indicator of media validation	Percentage (%)	Category
The design of the cover and size of the module	90	Valid
The design of images	85	Valid
Font type and colour combination with the background	85	Valid
Average	86.7	Valid

b) Product Revision

At this stage, final adjustments are made to the developed e-modules to create the final product. Figure 4-5 shows the module design based on the Langkat Sultanate History design before and after revision. The improvements that were made were to improve, improve and make the cover more appealing and more interesting.

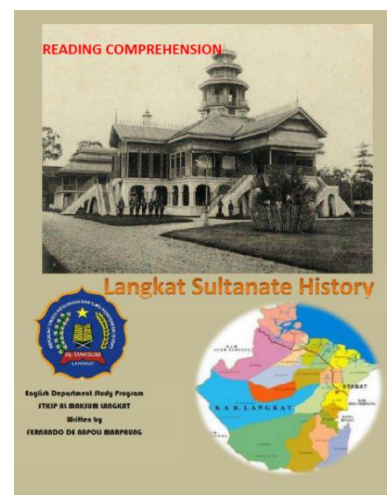


Figure 4. (Before revision)

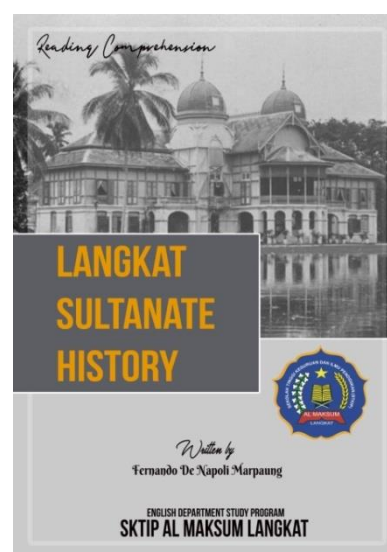


Figure 5. (After revision)

c) Content Revision

Revisions to the content were made to make it more interesting and easy to understand like an interesting book. Revisions to the content of this e module are shown in Figures 6 and 7, before and after the revision.

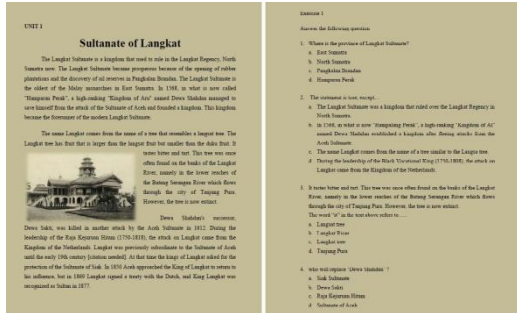


Figure 6. (Before revision)

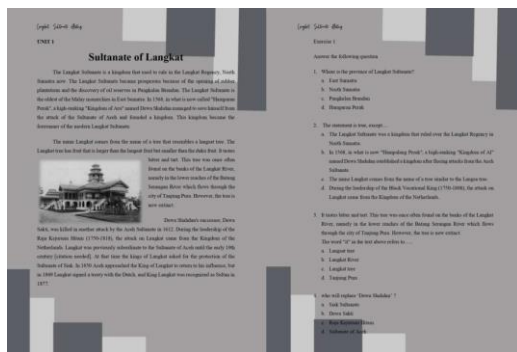


Figure 7. (Before revision)

d) Pretest and Posttest

After the draft E-module is revised, tests are performed to determine the application results and product effectiveness. Effectiveness stems from improved student learning outcomes through pretest and posttest results. Based on the results of our expert content verification, the first scored 26 points belonging to the valid category. The second give score 25, which is a valid category.

- Score Category
- 29 – 35 Very Valid
- 22 – 28 Valid
- 15 – 21 Enough
- 7 – 20 Invalid

A pre-test was conducted before using the developed E-module, and a post-test was conducted after using the e- module. Students were first given a pre-test to check their initial skills, and then proceed to a reaction material learning activity

using a revised based on Langkat Sultanate history. Classes or the lesson consisted of face-to-face and online. After the second meeting, the students took a post-test. One student or 15% of learners completed with score of 60 or higher from the pretest scores obtained. Post-test results were achieved by 80% of learners who exceeded the minimum level. The completeness of student learning outcomes is shown in Figure 8. All students were used as a sample because the study used a total sampling method.

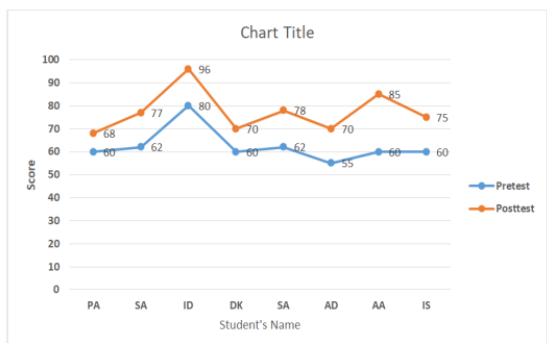


Figure 8. Students scored below the minimum required score

Based on Figure 8, some students scored below the minimum required score, the posttest results for all students increased compared to the pretest results. The data for the assessment of learning outcomes came from the results of the pretest and posttest, and then analyzed using t-test statistics. The normality test was carried out before the paired data test as a prerequisite for the paired t-test. A significant difference between pretest and posttest is indicated by a significance value of $0.000 < 0.05$ (2-tailed). It shows that electronic modules based on local wisdom can have a significant impact on improving students' reading and science skills.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

Developed e-modules are listed in valid categories and can be tested during the implementation phase. An electronic module based on the local wisdom can improve the reading and skills of learners. The novelty of this research result is in the form of an electronic module based on local wisdom that contains the Center's learning model. These

results are based on validation of e-module materials and e-module designs and are subject to good standards. The developed e-module is therefore valid. Of course, it is hoped that English Lecturers, Teachers and Students can know, understand, and apply the Area learning model, Center learning and evolution-based learning model based on local wisdom.

B. Suggestion

For further researchers, it is hoped that they will be able to continue to raise local culture or local wisdom in Indonesia as a learning module to preserve Indonesian culture for students.

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