

## **The Development E-Module Based on Contextual Approach Assisted by Next Flipbook Maker in Old Poetry Learning to Improve Literacy for Grade V Elementary School Students**

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### ***Abstract***

The purpose of this study was to develop media, to determine the feasibility and effectiveness of the Next Flipbook maker-assisted e-module in increasing students' literacy. Data collection techniques used are test techniques, interviews, and questionnaires. While the data obtained in this study in the form of quantitative and qualitative data including learning observations, product validation, and student interest in learning. The data sources in this study were fifth grade students and elementary school teachers in Kradenan District, Grobogan Regency. The e-module development design assisted by Next Flipbook maker and which has been developed by researchers consists of 3 parts, namely planning, process and content. The feasibility of the product is seen from the validation results of material experts, media experts and linguists. From the material expert validation process, the average results obtained are 3.47 with a percentage of 86.75% in the very appropriate category, media expert validation obtains an average result of 3.83, a percentage of 95.75% in the very feasible category, and the validation of linguists obtains the results an average of 3.45 percentage 86.25% with a very decent category. Furthermore, the products developed can improve students' scientific literacy skills. This is indicated by student learning outcomes that reach a 99% completeness level with a very high category. Based on the validation results and strengthened by student learning outcomes, the e-module assisted by Next Flipbook maker is effectively used as a learning medium to improve the scientific literacy skills of fifth grade students in Kradenan District, Grobogan Regency. Furthermore, the e-module media assisted by Next Flipbook maker was applied to the experimental class to determine the effectiveness of the developed product. The results of the product effectiveness test in improving critical thinking skills, the results of the Paired Samples T-Test test from the control class data with the experimental class, seen from the significance (2 tailed) showed results  $<0.05$  i.e 0.000. Thus, it can be decided that  $H_a$  is accepted and  $H_0$  is rejected, meaning that there is a difference between the control class and the experimental class. The development of e-module media assisted by Next Flipbook maker is effective in improving students' literacy skills.

**Keywords:** *E-Module, Contextual Teaching and Learning Approach, Literacy*

### **INTRODUCTION**

In Indonesian, there are four skills that must be mastered by students, namely reading, writing, speaking, and listening. The four language skills must be given to students with adequate time allocation and must include and always be related. These language skills are classified into two, namely receptive language skills (listening, reading) and productive (speaking, writing). One of the most important skills in life is writing skills (Arviyana & Syahrul, 2017). Writing skills are productive and expressive activities so that these skills do not come by themselves but require practice.



Writing skills are very important to see language skills, because writing can reflect a person's level of language ability. Therefore, writing is always taught in schools. The skills of students in writing activities will have a positive impact on themselves, both in various aspects of developing their minds as well as for their provision in going to the world of further education and even the world of work (Indrilla & Ciptaningrum, 2018). Students who develop writing skills and want to learn actively and creatively will be able to produce written forms that can be interesting and easily understood by others. Thus, it is hoped that through writing activities, they can improve their various language skills. As stated by Winarni et al. (2021) writing is a language skill that is used to communicate indirectly, not directly face to face with other people. Writing is an expressive and productive language skill. By writing something someone is able to express feelings and express ideas in the form of writing. Ismuwardani et al. (2019) further explained that writing is a productive skill by using writing.

One way to develop writing skills is by appreciating literature to students through teaching old poetry, with the aim that students gain more awareness of themselves, others and the environment, gain memories, acquire basic knowledge and understanding of old poetry that needs attention. and teaching in schools is the selection of teaching materials and their presentation (Aladini & Farahbod, 2020). According to Saleh & Weda (2018), old poetry is Indonesian poetry that has not been influenced by western poetry. Old poetry is old poetry that is bound by certain rules. Poetry born before the Dutch colonial period. The static and objective nature of the old society gave birth to a static form of poetry that was very bound by certain rules.

E-module is an electronic version of the module where access and use carried out through electronic devices such as computers, laptops, tablets or even smartphones. Text on e-modules can be created using Microsoft Word (Serevina et al., 2018). But to display interactive media, e-modules must be created using special e-book programs such as Flipbook Maker, I-books Author, Caliber, and so on. The advantage of e-modules from printed teaching materials is that they are complete with interactive media such as video, audio, animation and other interactive features that can be played and replayed by students when using e-modules (Mulyani et al., 2021). E-modules are considered innovative because they can display teaching materials that are complete, interesting, interactive, and carry good cognitive functions. Aufa et al. (2021) found that e-modules can improve students' critical thinking skills and get a positive response from students.

Some understandings of the CTL approach according to experts, including: According to Indrilla (2018) contextual teaching and learning is a holistic educational process and aims to motivate students to understand the meaning of the subject matter being studied by linking the material with the context of their daily lives (personal, social, and cultural contexts) so that students have knowledge/skills flexibly that can be applied (transferred) from one problem/context to another. Meanwhile, Dewi & Primayana (2019) suggests that CTL is an educational process that aims to help students see meaning in the academic material they are studying by connecting academic subjects in the context of their daily lives, namely with the concept of personal circumstances their social and cultural.

Next Flip Book Maker is a useful software to make it easier for users to create an e-module. This software has the advantage that it can give a flipbook effect to the created e-module. The flipbook effect in question is to display like reading a real book, which can open or turn page by page (Belia et al., 2022). Next flip book maker software is an application that can be used to convert Pdf of digital flipping page publications that allows us to create interactive learning content with several supporting features. Next flip book maker is different from the PDF that is usually used. In terms of appearance, Next flip book maker is like an e-module display that can be flipped over while reading it. Next flip book maker is an interactive media that can easily add various types of animative media to Flipbook. Just by adding file, edit style and publish, we can insert Youtube videos, hyperlinks, animated text, images, audio and flash into Flipbook and everyone can produce amazing flip books easily (Rasiman & Agnita, 2014). Therefore, the use of e-modules based on the Contextual Teaching and Learning approach assisted by Next flip book maker in Indonesian subjects in improving the poetry writing skills of fifth grade students is carried out as a solution to assist teachers in the process of learning to write rhymes (Maynastiti et al., 2020). Because this learning model in its steps applies learning concepts that link the material being taught with real-world situations, especially in learning to write old poetry.

Based on the existing problems, the authors developed an e-module based on the Contextual Teaching and Learning approach assisted by Next flip book maker to make it easier for students to improve their ability to write rhymes as a form of self-expression. As stated in basic competencies 4.6, speaks old personal works of poetry with perfect pronunciation, intonation, and expression as a form of self-expression. Therefore, the author conducted a development research entitled "The Development E-Module Based on Contextual Approach Assisted by Next Flipbook Maker in Old Poetry Learning to Improve Literacy for Grade V Elementary School Students".

The research that is relevant to this problem is the research conducted by Novita (2020) in a study entitled Development of Flip Book Maker-Based Learning Media in Fiqh Learning for Class IV Students and Belia et al. (2022) in the study entitled Analysis of E-Module Needs with The Flip PDF Professional Application for Integers.

## 1. Framework of Thinking

Writing is a form of manifestation of language skills and skills that are most recently mastered by language learners after the ability to listen, speak, and read (Oppenheimer et al., 2017). One of the basic competencies from the aspect of writing skills in class V is writing old poetry. But in fact, students still find it difficult to learn to write rhymes. The students still have difficulty in determining the words and lyrics to be used as rhymes. The students also still have difficulty in making word choices that match the topic. Furthermore, the students also paid less attention to the use of spelling. In addition, the use of teaching materials in learning is also inadequate (Angelino & Matronillo, 2020). The book used by the teacher in learning is a BSE book whose material is not too broad. In addition, the appearance of the BSE book is less attractive because the pictures and colors are not bright. This has prompted researchers to develop an E-Module assisted by Next flipbook maker for fifth grade elementary school students that can make it easier for students to learn to write rhymes (Andini & Fitriana, 2018). The developed e-module is a module that contains a summary of instructions for writing rhymes that are adapted to the readability level of fifth grade elementary school students. The e-module is devoted to rhyme writing activities that are made as attractive as possible so that they attract students' interest in learning. Aspects in writing rhymes are described in simple steps that are easily understood by students.

## METHODOLOGY

Research on the development of an E-Module Based on a Contextual Teaching and Learning Approach Assisted by Next Flipbook Maker in Old Poetry Learning to Improve Literacy for Fifth Grade Elementary School Students uses the Research and Development (R&D) model or research and development. According to Richey & Klein (2014), it can be stated that this research model is a research that produces a product that is widely used and functions in the community after testing the effectiveness of the product and conducting research to test the product.

## 1. Research Procedure

The research procedure of e-module research based on a contextual teaching and learning approach assisted by Next Flip Book Maker in learning old poetry to improve literacy for fifth grade elementary school students using the development research model according to Perdana et al. (2017) includes 10 stages, namely potential and problems, data/information collection, product design, design validation, design revision (improvement), product trial, product revision, trial use, product revision, mass production.

## 2. Data Sources and Types

The data sources in this study were teachers and fifth grade elementary school students in the Gadjah Mada Group, Kradenan District, Grobogan Regency in the odd semester of the 2021/2022 academic year. The subjects of this study were fifth grade students of Public Elementary School No. 1 Kuwu,

Public Elementary School No. 1 Kalisari and Public Elementary School No. 1 Banjardowo. The types of data used are quantitative data and qualitative data. This data is used to describe the validation results of experts and material experts. In addition, to measure the value generated after using e-module media with the help of Next Flipbook Maker. Quantitative data comes from questionnaire and test scores. Qualitative data comes from suggestions for improvement from validation questionnaires filled out by media experts, material experts, and audience observation sheets which are filled out when students use e-module media with the help of the next flipbook maker.

### 3. Data Collection

Collecting data using questionnaires, interviews and tests. Questionnaires were used to obtain data about the validity and practicality of the e-module media assisted by the Next Flipbook Maker from display design experts, material experts, classroom teacher responses as learning experts and student responses to the e-module media assisted by the Next Flipbook Maker that had been developed (Boparai et al., 2018). Interviews were conducted to determine development needs and to obtain data about the competencies to be achieved by students in relation to the curriculum in accordance with the research school. The test carried out in this study was in the form of a description test. The purpose of the test in this study was to measure the effectiveness of developing e-module media with the help of Next Flipbook Maker in elementary schools.

### 4. Data analysis

Data analysis according to Van de Vijver et al. (2021) data analysis is an activity after data from all respondents or other data is collected. Activities in data analysis are; grouping data based on variables and types of respondents, tabulating data based on variables from all respondents, presenting data for each variable studied, performing calculations to answer the problem formulation and performing calculations for hypotheses that have been proposed. For data analysis in the development of e-module media assisted by Next Flipbook Maker to improve students' scientific literacy skills, including. The data prerequisite test is normality test and homogeneity test including normality test, homogeneity test, hypothesis testing analysis includes validity/feasibility test analysis, practicality test analysis, effectiveness test analysis

## RESULTS

### 1. Needs Analysis

Based on interviews and teacher and student questionnaires, data obtained that students understand explanations and memorization, but students' reading and writing literacy which is still low makes it difficult for students to understand old poetry material. When delivering material in class, students understand the explanation and memorization, but when students are asked to process the information they have. Many students are not able to process new information. Only a few students were able to complete the questions given by the teacher. Based on the results of interviews and filling out questionnaires, it can be analyzed that the level of need for e-modules in learning old poetry with the CTL learning model assisted by Next flipbook maker for elementary school students in grade 5 is considered high enough, so that e-modules in learning old poetry with CTL learning models assisted by Next flipbook Maker is needed in improving the writing skills of fifth grade elementary school students in the Gadjah Mada Group, Kradenan District, Grobogan Regency.

### 2. Planning

The steps for developing an e-module based on a contextual teaching and learning approach assisted by Next Flipbook Maker in old poetry learning to improve literacy for class V elementary school students are as follows:

1. Formulate Goals; The purpose of making e-modules is to improve students' writing skills in particular.
2. Observation of Mathematics Learning in Schools; Observation activities are intended to find out what media use needs to be developed and to find out the low writing ability of students when learning Indonesian.
3. Analyzing the Curriculum; Curriculum analysis includes Graduate Competency Standards, Content Standards, and Process Standards.
4. Mapping basic competencies and Learning Content; Mapping the basic competencies of Indonesian Language Subjects based on the results of curriculum analysis, content analysis of character education, and analysis of student character in schools.
5. Gathering Material Resources; Conducted by discussions with fifth grade teachers, supervisors, media experts, and colleagues which were carried out separately and gradually.
6. Develop Learning Tools; Learning devices are arranged to adapt to the development of learning media that will be made so that development goals can be achieved.
7. Determination of Media Development; Determine the appropriate media with the selected material. This is done by analyzing needs by conducting observations, interviews and distributing questionnaires to teachers and students. The media developed is an e-module with the help of the next flipbook maker in learning Indonesian old poetry material.

### 3. Module Development

The preparation of the e-module assisted by the next flipbook maker is as follows.

#### a. Next flipbook maker-assisted e-module component

The content components of the e-module assisted by the Next Flipbook Maker which are developed generally contain 3 components, namely introduction, content, and closing.

#### b. Preliminary

The introduction includes the title page, preface, table of contents, instructions for use, navigation instructions, core competencies, basic competencies, indicators and learning objectives.



**Figure 1** Introduction pages

#### c. Content

The contents of this E-module include 2 menus, namely the study menu and the play menu. The study menu contains material that explains various types of old poetry, for example. While the play menu contains the practice of growing plants in the gardens/fields around the school.

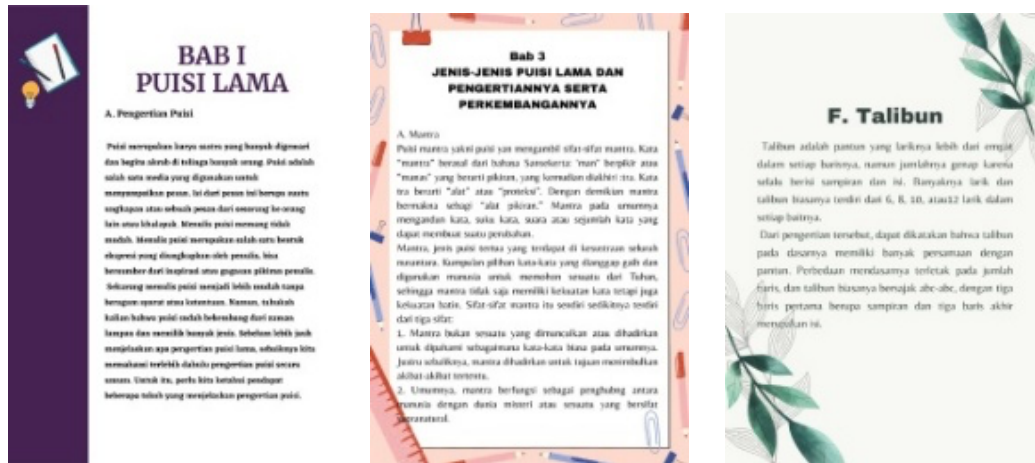


Figure 2 Content pages

The steps in developing an e-module are: 1) creating a concept through Canva. 2) convert files to pdf, 3) through Flip PDF Professional convert pdf files into applications that can be opened via smartphones, laptops or PCs. 4) Files can be exported as exe, app and html files.

#### d. Closing

The closing consists of a quiz menu and a competency test. On the quiz menu, children work on questions through the link provided and after taking the quiz, the child will immediately know the score that has been obtained. While the child's competency test will work on a description of 5 questions.



Figure 3 Closing pages

#### e. E-module Material Assisted by Next Flipbook Maker

The e-module material contains a variety of old poems and examples. Also, about the history of the author's development and years of generation.

#### f. Anatomy of a Book

E-module assisted by Next Flipbook Maker which was developed is loaded in the form of exe, app and html files. Where the E-module assisted by the next flipbook maker is easily accessible anywhere and anytime. The anatomical elements of a digital pocket book include the following.

#### g. Cover E-module with the Help of Next Flipbook Maker



The cover of the E-module with the help of the next flipbook maker is equipped with interesting illustrations according to the material. In writing the title on the digital pocket book cover, use the open sans extra bold font with a blend of knawave fonts.



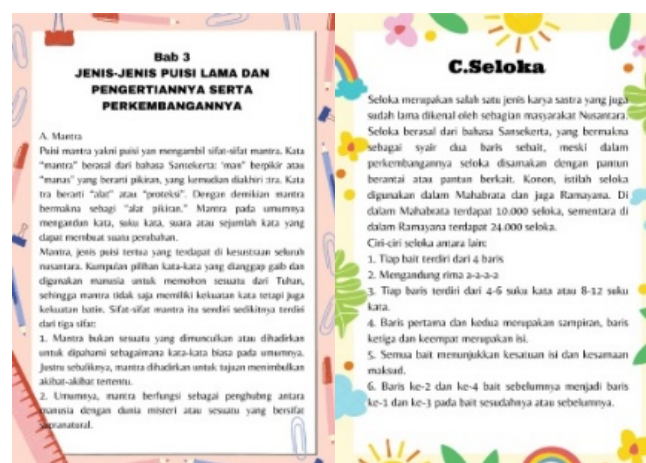
**Figure 4** E-module cover page

#### h. Next Flipbook Maker Assisted E-Module Text Design

The E-module book assisted by the Next Flipbook Maker was developed using the Open sans font with a size of 30. The choice of font is adjusted to the characteristics of the child, while the size is adjusted so that the E-module assisted by Next Flipbook Maker is easy to read.

#### i. Visual Design E-Module Assisted by Next Flipbook Maker

The design of the E-module assisted by the Next Flipbook Maker will explain the use of colors and images in the E-module assisted by the Next Flipbook Maker. For the color of the text of the contents of the E-module assisted by Next Flipbook Maker, use colors that vary according to the sub-material to make it interesting and easy to read, while for the title use black which is adjusted to the background color of the cover of the E-module assisted by Next Flipbook Maker.



**Figure 5** Content pages



The E-module assisted by the Next Flipbook Maker is equipped with a quiz to measure the level of student understanding at a glance. In addition, a competency test is also given to determine the level of understanding of the material that has been studied.

j. Evaluation

The last stage in this development design is evaluation which includes quizzes and competency tests. The competency test is in the form of a description containing the history of the development of writers in Indonesia, a variety of poetry and examples to strengthen students in understanding the material that has been studied.

4. Eligibility of Inquiry-Based Digital Pocket Book

Eligibility of next flip book maker assisted e-module. The feasibility assessment is carried out after the next flip book maker assisted e-module has been compiled. The feasibility assessment was carried out using a validation sheet by a linguist, namely Dr. Irfa'i Fatturohman, M.Pd., material experts namely Hendrik Hermawan, M.Pd and Dr. Eko Sudarmanto, M.Sc as a media expert. The feasibility assessment by linguists includes 2 aspects, namely the suitability of the material text and the suitability of the language. The average score of the linguists' assessment results can be seen in the following Table 1.

**Table 1** Assessment results of linguists

No.	Assessment Aspect	Score	Category
1	Material Text Compatibility	3.40	Very Valid
2	Language Compatibility	3.50	Very Valid
Average Score		3.45	Very Valid

The feasibility assessment by material experts includes 3 aspects, namely the completeness of the content of the material, aspects of usefulness and the suitability of practice questions. The average score of the results of the material expert assessment can be seen in the following Table 2.

**Table 2** Material expert assessment results

No.	Assessment Aspect	Score	Category
1	Completeness of material content	3.10	Valid
2	Benefit aspect	4.00	Very Valid
3	Suitability of practice questions	3.33	Very Valid
Average Score		3.47	Very Valid

The feasibility assessment by media experts covers 4 aspects, namely the use of e-module, e-module cover design (cover), e-module content design, and ease of use of e-module. The average score of the media expert assessment results can be seen in the following Table 3.

**Table 3** Assessment results of media experts

No.	Assessment Aspect	Score	Category
1	Use of pocket book	4.00	Very Valid
2	Pocket book cover design	3.75	Very Valid
3	Pocket book content design	3.92	Very Valid
4	Easy to use pocket book	3.50	Very Valid
Average Score		3.88	Very Valid

a. Initial Field Trial Results (Limited)

The limited trial was carried out after the next flip book maker assisted e-module developed to improve students' scientific literacy was revised according to expert advice. The trial was carried out on 5 students and 1 teacher at Public Elementary School No. 1 Kuwu, Kradenan District, Grobogan Regency. The feasibility assessment at this trial stage uses a response questionnaire. The overall

average of the results of the initial (limited) field trial showed a score of 3.08 with the "Good" criteria, but there are still aspects of assessment that are lacking and need to be adjusted between the suitability of the questions and the material. This became the basis for revising an next flip book maker assisted e-module book after a limited trial.

**Table 4** Recapitulation of student response questionnaire results

No.	Trial Type	Overall Average Score	Criteria
1	Initial Trial	3.14	Good
2	Extended Trial	3.42	Very good

b. Main Field Trial Results (Expanded)

An inquiry-based digital pocket book developed to improve scientific literacy which was revised based on the results of a limited trial and then tested in the field. The results of the main field trial (expanded trial) in the sixth grade of Public Elementary School No. 1 Kuwu and Public Elementary School No. 1 Kalisari, the assessment of this trial was expanded using student and teacher response questionnaires. Respondents for filling out the questionnaire in this trial were the sixth-grade students of Public Elementary School No. 1 Kuwu and Public Elementary School No. 1 Kalisari each with ten children and one teacher in the sixth grade of the schools.

**Table 5** Recapitulation of teacher response questionnaire results

No.	Trial Type	Overall Average Score	Criteria
1	Initial Trial	3.03	Good
2	Extended Trial	3.32	Very good

## CONCLUSION

The average "Yes" answer to the student and teacher needs questionnaire was 89.00% and 90.00% proving that inquiry-based digital pocket books are needed by students and teachers to improve the scientific literacy skills of sixth grade elementary school students in Kradenan District. Assessment of the validator of linguistics, materials, and media experts shows the results of the assessment with the "Very Eligible" criteria. The results of filling out student and teacher response questionnaires also gave results with the criteria of "Good" and "Very Good". This proves that inquiry-based digital pocket books are appropriate to be used to improve the scientific literacy skills of sixth grade elementary school students in Toroh District. The next flip book maker assisted e-module developed in this study is effective in improving the scientific literacy skills of sixth grade elementary school students in Kradenan District. This is evident from the results of the paired t-test which gives the result that there is a significant difference in students' scientific literacy skills before and after participating in learning using next flip book maker assisted e-module. The independent t-test (independent sample t-test) proves that there are differences in students' scientific literacy skills between those who take part in learning using e-modul and those who do not use digital pocket books.

## IMPLICATIONS

The e-module learning media assisted by the next flipbook maker can be used as a means of independent online learning to improve student's literacy skills. The e-module learning media with the help of the next flipbook maker can be developed for other learning purposes by taking into account the principles of safety and usability value for elementary school students. The development of e-module media assisted by Next Flipbook Maker by utilizing the Next Flipbook Maker application, besides being easy to operate, it is also easy to manufacture and does not require special skills.

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## DATA AVAILABILITY

Data will be made available on request.

## CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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