E-Module Development Using Heyzine for The Fifth Grade Students of Elementary School

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ABSTRACT
The purpose of this study is to develop and feasibility of e-modules using heyzine on human and environmental materials. The methodology used is Research and Development (R&D) with the ADDIE (Analysis, Design, Development, Implementation, Evaluation) method approach. The subjects involved in this study were two Pakuan University lecturers as heyzine media experts and language experts for the human and environment sub-theme, as well as one SDN teacher as an expert on human and environmental materials, and respondents from Class V students at SDN Nambo 2. The heyzine application media expert provided the e-module validation score of 87.3% is included in the very feasible category, human and environmental material linguists give a validation score of 98.8% in the very feasible category, and human and environmental materials experts with a score of 81.3% fall into the category worthy. The results of the pretest were 86.4% in the proper category and in the posttest it was found to be 90.6% in the very feasible category from both tests as a student response which resulted in an N-gain of 0.36 in the very Feasible category and can help students understand learning material well, trigger enthusiasm for learning and hone skills in using heyzine application media. It can be concluded that the development of e-modules using heyzine on human and environmental material is appropriate for use by teachers and students in the learning process in class V..

Keywords: E-Module, Heyzine, Elementary School, R n D

1. INTRODUCTION

The development of the 21st century makes media an integral part of the educational process. The global information age provides quick and easy access to information from various sources, as well as the ability to process, manage and track this information for use in life. The structure and development of thinking, abilities and life ethics for each individual are studied effectively so that students can gain meaningful experience for themselves.

In general, the objectives of teaching the use of electronic modules of the Heyzine application in primary schools are: (1) to provide students with knowledge and skills that can be used in social life; (2) Provide opportunities for students to identify, analyze, and synthesize learning problems in the classroom, especially human and environmental materials encountered in human life. (2) prepare students to interact with fellow citizens and with different scientific disciplines and fields of knowledge; (4) Using the environment that is part of life, to develop awareness, positive mental attitude and skills in students. (5) Provide students with an opportunity to develop knowledge and science in accordance with the development of life, society, science and technology. [2] Similarly, the success of teaching depends on the ability and accuracy of teachers to select and use different teaching strategies. In schooling, early learning resources are now provided by teachers, allowing students to learn on their own. [4] Many learning resources are used to invite students to self-study, one of which is study material in the form of modules. Modules are learning materials for students to explore on their own, such as subtopics in e-books for preschool literacy activities.

The core components of the module are used by students as an alternative to self-study. [1] the module is expected to help students complete certain activities that will facilitate them in acquiring the basic skills at the end of the course. module function; 1) improve learning skills on a consistent basis without going through initial stages, 2) determine and plan teaching time based on student needs and learning progress, 3) know how students' skills progress through stages. are obtained predetermined standards, 4) identifying weaknesses or skills that students have not achieved based on established standards;

Based on classroom observations , information was obtained about the learning process in the fifth grade, which showed that: (1) teachers are dominant, traditional teaching methods (lecture and question-and-answer) are used; according to the 2013 curriculum (2), subject textbooks provided by schools are teaching materials or books that are used in the learning process of students, do not improve students' understanding because students' textbooks contain less content. Is. () The researcher also noticed students' reluctance to ask questions, even if they did not master the material taught by the teacher, when the teacher asked questions, only three or four students answered the teacher's questions. (4) *lack of ICT-based learning materials* such as e-modules (5) teachers do not have the capacity to develop their own modules [1] supported by previous research issues, such as modules used so far are not efficient, so the alternative is to develop modules based on learning models. Learning media are an integral part of the learning process, they act as communication media, audiovisual or teaching aids, encourage student learning and give meaning to learning.

However, based on field observations and interviews, especially SDN Nambo 02, Klapanunggal District, Nambo Village, Bogor Regency fifth grade teachers said that the teaching and learning resources used in SDN Nambo 02 are very different. and did not make full use of technology in their use. In the process of learning teaching materials, students only rely on school-provided subject textbooks as learning resources, so students are less motivated to participate in learning. Encouraged, many students do not understand the learning material, because the material presented in the textbooks on the subjects is general, not specific. Hence, there is a need for learning resources that are more creative and relevant [3] Hence, there is a need for innovation in the design of learning materials to make the learning process more effective and interesting. These *flipbook-based e-learning materials make the learning material easy for students to understand, include examples found in the student's environment, are beautifully packaged, and engage students with these flipbooks. Introduces the use of technology*. Because it is used directly by students, it is possible to control, for example, the opening and closing of new pages through *practice questions in the form of digital technology, educational videos and games.* This electronic module is built using *Heyzine software* and [5] *Canva Design.* [6] canva graphic design features premium functionality.

The ability of Heyzine [7] which is very important in the learning process [8] Heyzine e-module flipbook learning materials have higher scores in cognitive affective and psychomotor areas because *the Hezine e-module flipbook materials* are used by students. Can facilitate performances and presentations. learning process. The development of electronic modules begins with the phase of gathering various suitable resources for content enrichment, searching for pictures, graphs, images and *setting up the necessary screens of the electronic modules.* Then, validate the product, including media, language, and content validation.

From the above description, it can be concluded that *an e-module is a set of learning materials arranged in an organized and attractive way, and* its features are focused on *when creating e-learning materials* using heyzine. need to give Student and Success *e-modules* support teachers in providing content and can be used as learning aids for students. In elementary school, *the content of the electronic module* is related to content about people and the environment, including content between people and the environment, the use of water for living things.

2. RESEARCH METHODS

This study was conducted at SDN Nambo 02 in September of the odd semester of the 2022/2023 academic year. In this study, research and development (R&D) methods, also known as research methods, are used to develop and manufacture products and test product feasibility. The research model used is ADDIE, i.e. Analysis (Analysis). Design (Design), Development (Development), Implementation (Implementation), Evaluation (Evaluation). The data collection methods used are both qualitative and quantitative. Percentile formula and percentile formula and n-increment formula were used to find out students' response to Khazin based learning materials.

$$\text{Percentage (\%)} = \frac{\text{Result}}{\text{Maximum score}} \text{ X 100\% found}$$

The level of reliability of educational materials is measured on a Likert scale.

Table 1 Likert scale

Percentage (%)	Classification
0% - 46%	Very disabled
47% - 60%	Impossible
61% - 73%	very handsome
74% - 85%	Capable
86% - 100%	It is very valuable

Furthermore, N-amplification scores are also used in the evaluation of research experiments [10] (Panggabin, Danis, 2020: 209).

N-gain = S post test - good.
S Max - sprats

3. RESULTS AND DISCUSSION

3.1 RESULTS

In this study, learning materials were developed using the Canva app, which was approved by three experts, including media, language and content experts. Experts review and advise on the developed training materials, then the evaluation results are estimated using a percentage formula, for example:

Percentage (%) = Result X 100% found
Maximum score

Each aspect of the Expert Certification Questionnaire consists of 15 items, each scored from 1 to 5, so the maximum total score is 75. Percentages of certification value earned include:

Media specialist : 8 7.3 %; Linguistics : 98.8%; Content Expert : 81.3%

Based on the media expert certification rate of 87.3%, it can be concluded that the learning materials created are considered appropriate for students to use and evaluate, while media experts' opinions or comments about the learning materials. , such as size or shape. . The letters included in the lesson have been revised and invitation phrases have been added.

Based on the percentage results obtained by 98.8% of the linguists from the certificate, it can be said that the teaching materials developed using Heyzine can be used in the learning process of students in the classroom.

Based on the content expert's reliability score of 81.3 percent, it can be concluded that the instructional materials developed by Heyzine are found to be suitable for students' learning process use and study, such as media suggestions or Comments. The training material should be specialized, i.e. the size or font size of the teaching material should be increased. This study was conducted in SDN Nambo 2, for the study it was divided into two phases, namely the testing phase given to the sixth grade, because they had previously studied the content of the sub-theme on the cultural diversity of my country. Study in class V who recently explored this sub-topic.

Questionnaires are used to ask students' opinions, when the developed teaching materials are used in classroom teaching, the developed teaching materials include material on the sub-topic of cultural diversity in my country, the test The total score on the application was 1285.

Each of these answer sheets is graded from 1 to 5 and distributed among 15 students, so the maximum total score is 1500 and the result is 1286. The appropriate score may and may not be based on the marks obtained in the electronic module. Calculate the following:

1.285 x 100% = 86.4%
1500

After the test, a study was conducted in the fourth grade, where the fourth grade was the class that did not study the subtopics on the cultural diversity of my country. The score obtained in this phase is 2719 and the maximum score is 3000.

This certificate question paper has 20 sections, each with a score of 1-5, the question paper is given to 30 students, so the maximum total score is 3000, and the final score is 2719, so it is calculated as can be calculated as:

2719 x 100% = 90.6%
3000

Based on student feedback, in the context of cultural diversity in my country, Canva-based educational materials are 90.6% suitable for use in the learning process.

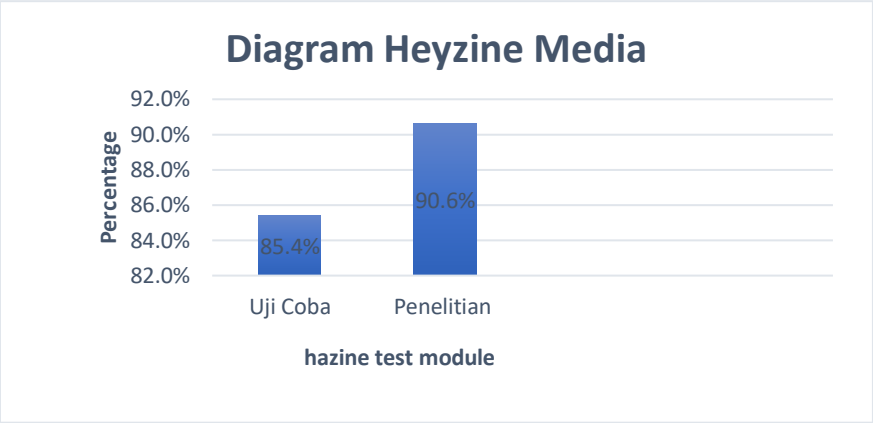

Figure 1. Percentage chart

Both can be calculated with the N-Gain value as:

N-gain = 90.6 - 85.5 = 0.36

100 - 85.4

In the N-Gain formula, 0.36 can be classified as average.

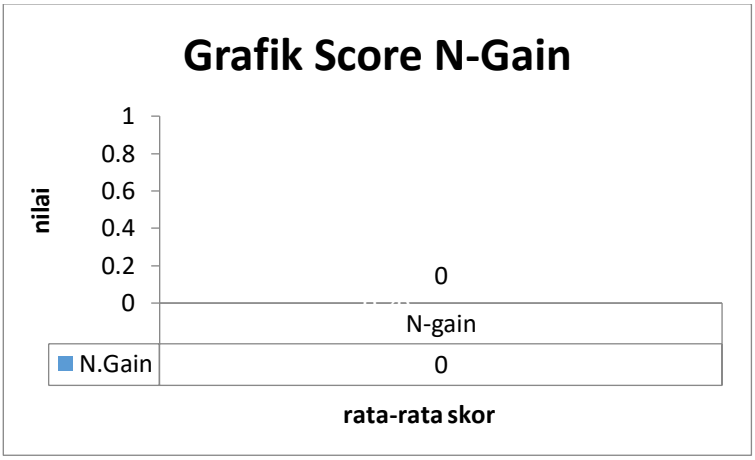

Figure 2. Scheme of N-amplification

3.2 Discuss

Based on the research results obtained with Canova Media Expert 81.3% (Consistent), Linguist 100% (Very Likely) and Content Expert 81.3% (Consistent). The resulting *rating* is 0.35, which can be described as average, so we can say that Canva-based learning materials are suitable for teachers and students in the learning process.

This is similar to a study that used Hagen App and Canva Designs to develop learning tools. The average probability of certificates obtained in this study, i.e. expert certificates, was 78.18%. In addition, the study conducted by [14] had a confidence level of 90.38% and 87.5% by content experts and media experts respectively, so the category was applicable.

In this study, study materials were created using Heyzine application and Canva design, in order to creatively design study materials due to existing problems, study materials based on Canva were developed. Based on the study [15] , teaching materials are developed so that students can learn positively and according to the current curriculum, and this development should be based on information technology. The e-modules created in the Hagen app with Canva Design can be used anywhere and anytime by extending the design link, so their study [16] decided to develop their learning materials. Use the Heyzine app with Canva Design to .

4. CONCLUSIONS AND RECOMMENDATIONS

The results of the study show that Canva-based educational materials on the sub-topic of Cultural Diversity of My People are suitable for use by teachers and students based on the results of the Canva Media Expert 8.7 test. 3% (decent), cultural diversity subtitle My country's language proficiency is 98.8% (very decent) and fitness level is 81.3% (decent). Not only that, the grade 4 students' response scores were 85.4% (good) and 90.6% (very

likely), and the average N-gain was 0.36% . Thus, it can be said that Canva-based educational materials are suitable for use in the educational process in the context of the cultural diversity of my nation. Just this research found that Canva's writing performance as a digital book design is not high enough, so it needs improvement to be used. For further research, it is possible to develop teaching materials with better formats and features.

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