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E-Module Development Using the Canva Heyzine Application on Finding Main Ideas in Paragraphs for Grade V Elementary School Students

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Abstract

This research has four objectives, namely describing the e-module development process, creating e-modules that are valid for material experts and teaching material experts, creating e-modules that are suitable and practical for teachers, and creating e-modules that are interesting to students. Using R&D methods and ADDIE models, as well as interviews, questionnaires, and documentation as data collection instruments, the product received a score of 85.93% from material experts and 98.43% from teaching material experts. In practicality, the product got a result of 90% from teachers. As for attractiveness, the product obtained 100% results from individual trials, 95.55% from small-scale trials, and 95.33% from large-scale trials. Thus, it can be concluded that the e-module of the material seeks the main idea in paragraphs for grade V elementary school students, which has been developed using the Canva Heyzine application and is valid, practical, and interesting to use when learning.

Keywords: development; e-module; valid; practical; interesting.

INTRODUCTION

One of the important components that will evolve with time and technology is education (Al Husaeni et al., 2024). Thus, for a person to be able to survive the challenges and problems of the 21st century, he must be able to adapt to the progress of the times by utilizing the technology and information he has and developing it into innovative, creative, and useful works (Popoola et al., 2024). One of the efforts to adapt to the advancement of science and technology is using teaching materials and media for learning, from previously taking place offline, then online, then partially offline, and again to fully offline when the COVID-19 pandemic hit the world. The terms commonly used at that time were Distance Learning (PJJ), Limited Face-to-Face Learning (PTMT), and 100% Face-to-Face Learning (PTM 100%)

All data, explanations, and tools used to complete a learning goal and interest are teaching materials (Harefa et al., 2023) and will develop over time. One of them is the module, which is briefly a learning instrument that helps the student's learning process (Serevina et al., 2018). From this, the module can be used for learning, be it for PJJ, PTMT, or PTM 100%. Modules that can be accessed using electronic devices are called electronic modules or e-modules.

Based on interviews with teachers of class V-E SDN 002 West Balikpapan, it is known that teachers at the school use Bupena, theme books, and books published by Airlangga as teaching materials. During PJJ, teachers take advantage of monthly Google Classroom and Zoom meetings according to the agreed day to conduct PTM online. When PTMT occurs, teachers are more tired of delivering material because they have to deliver the same material to different students twice because of the stipulated regulations. In addition to decreasing student motivation in learning, another impact of the duration of PJJ is the difficulty of students finding the main idea in paragraphs (Eva, 2024). One way to help make it easier for teachers to teach and increase student motivation in learning is to develop e-modules (Situmorang et al., 2020).

Characteristics and components must be considered in the development of e-modules. Some of the characteristics that must be considered include *self-instructional* (modules support independent learning), *self-contained* (modules must have cohesive, intact, consistent, and relevant material according to learning needs and objectives), *stand-alone* (modules that are not related to other media or teaching materials so that students learn independently), *user-friendly* (easy to use), and *adaptive* (modules must be adaptive and flexible according to the progress of science and technology towards relevant material according to the times) (Kurniawan & Kuswandi, 2021). As for the components, some things that must be considered are the explanation of the teaching material, curricular objectives, benefits and relevance, competency examples, intact analysis tests, and reflections and responses (Figuero et al., 2024).

One of the discussions that can be developed into e-modules is the main idea in paragraphs, namely a collection of sentences that are related and harmonious so that they form a complete writing (Saryono, 2021), with the function of a forum for thoughts and a marker of new discussions (Munirah, 2015). The elements of the paragraph itself are the topic of discussion, the main sentence, the explanatory sentence, and the connecting word (Dewi et al., 2023), provided that the formation is centered on one main topic, the integration between sentences, and the completeness of the supporting sentences in strengthening the main sentence (Telesca et al., 2020).

There is one main idea in a paragraph. The main idea is the basis of a paragraph (Feenstra, 2023) and has other designations such as the main idea, main idea, main thought, and main idea (Sasono, 2021). Some of the characteristics of the main idea are: 1) In the form of a topic or main idea; 2) It is the basis or point of the problem; 3) It can be redeveloped because it is a general discussion; 4) It can be at the beginning of a paragraph (deductive), or the end of a paragraph (inductive), or the beginning and end of a paragraph (deductive-inductive or mixed); and 4) Written in one sentence (Rahayu & Sidiqin, 2019). The main idea material is taught in Indonesian lessons and contained in Basic Competencies (KD) 3.1 and 4.1 for grade V of elementary school.

Innovations regarding the development of e-modules have been carried out. Some of them were carried out by Vivi Novitasari (2020) with the 3D Pageflip Professional application on the Theme 7 Subtheme Filling Independence material for class V. Then, Septiana (2021) also developed a Flipbook Maker-based e-module to increase the creativity of elementary/middle school students in learning. Najmatun, Nazihah (2022) also developed an e-module on Theme 6 with the aim of increasing the learning independence of 2nd-grade students of SDN Merjosari 1, Malang City. The three studies are certainly different in terms of *software* and development methods and models used, but all three have the same results, namely valid and suitable products for learning. Based on these descriptions, e-modules with material to find the main ideas in paragraphs for grade V elementary school students can be developed.

METHOD

The research method used is *Research and Development* (R&D), a method of observing, regulating, manufacturing, and testing the conformity of products that have been developed (Sugiyono, 2021). The model used is ADDIE, a systematic development model designed to create student-centered work-based learning and effective learning tools (Branch, 2009). ADDIE itself has abbreviations, namely, *Analyze*, *Design*, *Develop*, *Implement*, and *Evaluate*. In this case, the product to be developed is an e-module of main idea material in paragraphs for grade V elementary school students using the Canva Heyzine application.

The *analysis* stage was carried out by interviewing teachers of class V-E SDN 002 West Balikpapan regarding the problems faced during PJJ, PTMT, and PTM 100% enforced. The *design stage* is carried out by planning the preparation of the e-module. The *development* stage is carried out by starting to develop e-modules as planned, as well as conducting validity tests for experts and teachers. The *implementation* stage was carried out for students in grades V-E through individual trials, small-scale trials, and large-scale trials. Finally, the *evaluation* stage is carried out by collecting data from the three trials to find out the attractiveness of the product when used in learning.

The types of data used are quantitative and qualitative, with quantitative data coming from questionnaires and qualitative data coming from input (can be in the form of criticism or suggestions) received. The trial subjects include material experts, teaching material experts, and students of class V-E SDN 002 West Balikpapan. The data collection tool used was interviews with V-E class teachers

twice. The first interview was conducted at the analysis stage, and the second interview was conducted after the trial activity for the students was carried out. Other data collection tools are questionnaires designed to determine the feasibility and attractiveness of products, as well as documentation to complete the data. The data from the questionnaire of experts and teachers will be analyzed using the Likert scale with a value range between 1 to 4 (strongly disagree, disagree, strongly agree, strongly agree), while the data of the results of the student questionnaire will be analyzed using the Guttman scale, which is worth 0 if answering "disagree" and a value of 1 if answering "agree." The results of each questionnaire will be calculated using the formula Akbar (2016).

$$P = \frac{Tse}{Tsh} \times 100\%$$

Information:
P = Yield (in percent (%))
Tse = Earning Score
Tsh = overall score
The results obtained are then concluded based on the criteria referring to Akbar (2016) as follows.

Table 1. Product Validity and Attractiveness Criteria

Yield (%)	Category	Information
85,01 – 100,00	Very valid / very interesting	It can be used without revision
70,01 – 85,00	Valid enough / interesting enough	Usable but needs minor revisions
50,01 – 70,00	Less valid / less attractive	Recommended not to be used because it needs major revision
01,00 – 50,00	Invalid/unattractive	Not applicable

RESULTS AND DISCUSSION

Result

At the *analysis stage*, it was found that teachers at SDN 002 West Balikpapan used various printed books such as Bupena, theme books, and books published by Airlangga as sources and teaching materials. When PJJ takes place, teachers use Google Classroom for assignments and Zoom Meetings to conduct face-to-face online learning according to the mutually agreed time. When PTMT takes place, teachers tend to be more tired because they have to teach the same material twice to different students on the same day due to the PTMT policy that is in place. When 100% PTM was enforced, it was found that students' motivation to learn greatly decreased as a result of the long-term sustainability of PJJ. In addition, students experience obstacles in understanding the material to find the main idea in paragraphs in the Indonesian subject matter, and teachers have quite difficulty in developing KD regarding identifying problems in paragraphs. With the development of the times and the sophistication of technology, students also have a high interest in technological developments, so teachers argue that digital teaching materials that can be accessed through their respective electronic devices for elementary school students are still considered rare.

At the *design stage*, various plans to start developing e-modules are carried out. The plan includes activities to determine the materials, sources, and applications to be used, determine the components to be used, and start making e-modules. The entire content of the e-module is designed with the Canva app. The content of the e-module includes the front cover, preface, instructions for use, table of contents, KD and learning objectives, concept maps, subject matter equipped with pictures and videos, evaluation questions and answer keys, reference lists, a brief biography of the author, a questionnaire of user responses, and the back cover.

Figure 1. E-module Design View in Canva

Furthermore, at the *development stage*, the design of the e-module that has been made is downloaded in PDF form to be used as an e-module in the Heyzine Flipbook application, which will then be assessed for its validity by experts and teachers. The e-modules that have been uploaded to Heyzine Flipbook can be accessed through a link (https://heyzine.com/flip-book/a862f101cc.html) with a total of 32 pages.

Figure 2. E-Module Display in Heyzine Flipbook

Material Expert Validation Results

The validation of the teaching material was carried out by one of the lecturers of Indonesian Language and Literature Education from the State University of Malang. There are three indicators that are assessed, namely the suitability of the material, the scope of the material, and the presentation technique. More details can be seen as follows.

Table 2. Material Expert Validation Results

No.	Indicators and Aspects	Earning Score	Overall Score	Yield (%)	Category
1.	**Material suitability**				
	Material compatibility with KD	12	12		
	Accuracy of the material	7	8	90,62	Highly valid
	Suitability of the material to the student's ability	10	12		
2.	**Scope of material**				
	Breadth of material	10	12	79,16	Quite valid
	Encourage curiosity	9	12		
3.	**Serving technique**				
	Material Shortage	7	8	87,5	Highly valid
Overall Results		55	64	85,93	**Highly valid**
Information		**It can be used without revision**			

Referring to Table 1, with a result of 85.93%, it can be concluded that the material on the product is very valid and can be used without revision. Some of the inputs received are that it is necessary to make the writing on the e-module more standard, the order of presenting information on the type and location of topic sentences can be made more orderly, the practice questions can be multiplied, and examples of paragraphs that are in accordance with student development.

Results of Validation of Teaching Materials Experts

The validation of teaching materials was carried out by an Educational Technology lecturer from the State University of Malang. Three indicators are assessed: presentation, practicality, and systematics of the e-module. More details can be seen as follows.

Table 3. Teaching Materials Validation Results

No.	Indicators and Aspects	Earning Score	Overall Score	Yield (%)	Category
1.	**Presentation of e-modules**				
	Attractiveness of the display	4	4		
	Attractiveness of the cover	4	4	93,75	Highly valid
	composition	4	4		
	Content compatibility with theme	3	4		
	Writing e-modules				
2.	**Practicality of e-modules**				
	Practicality of e-modules	4	4		
	Convenience of e-modules	4	4	100	Highly valid
	The appeal of e-modules for learning	4	4		
3.	**Systematics of e-modules**				
	Introduction	12	12	100	Highly valid
	Contents	12	12		
	Closing part	12	12		
Overall Results		63	64	98,43	**Highly valid**
Information			**It can be used without revision**		

Referring to Table 1, with a result of 98.43%, it can be concluded that the teaching materials in the form of e-modules are very valid and can be used without revision. In the assessment questionnaire, input from teaching material experts is generally good.

User Validation Results (Teacher)

Validation from teachers is carried out by teachers of class V-E SDN 002 West Balikpapan. There are four indicators assessed, namely the suitability of the material, the scope of the material, the presentation technique, and the practicality of the e-module. More details can be seen as follows.

Table 4. Teacher Validation Results

No.	Indicators and Aspects	Earning Score	Overall Score	Yield (%)	Category
1.	**Material suitability**				
	Material compatibility with KD	11	12		
	Accuracy of the material	7	8	90,62	Highly valid
	Suitability of the material to the student's ability	11	12		
2.	**Scope of material**				
	Breadth of material	10	12	91,66	Highly valid
	Encourage curiosity	12	12		
3.	**Serving technique**			75	Quite valid
	Material Shortage	6	8		
4.	**Practicality of e-modules**				
	E-modules are practical to use	3	4		
	Easy-to-use e-modules	4	4		
	Interesting e-modules to use in learning	4	4	93,75	Highly valid
	E-modules are feasible for students to use for learning	4	4		

Overall Results	72	80	90	**Highly valid**
Information		**It can be used without revision**		

Referring to table 1, with the acquisition result being 90%, the suitability and practicality of using the e-module is concluded to be very valid and can be used without revision. There was input from teachers in the assessment questionnaire, namely that the entire program was generally good and interesting to increase student motivation in learning.

Student Trial Results

The *implementation* stage was carried out on 27 students in class V-E SDN 002 West Balikpapan to find out the attractiveness of the product when used in learning through trial activities three times after the product received assessments from experts and teachers. The trial includes individuals with 3 students, small scale with 9 students, and large scale with 15 students. There are 10 questions given to students in the questionnaire that is distributed. The results of the attractiveness test obtained from each trial can be seen in the following table.

Table 5. Student Attractiveness Test Results

No.	Trial	Earning Score	Overall Score	Yield (%)	Criterion
1.	Individual	30	30	100	Very interesting
2.	Small-scale	86	90	95,55	Very interesting
3.	Large-scale	143	150	95,33	Very interesting

Referring to Table 1, with each result obtained in each trial above 85.00%, the e-module is declared very interesting if used in learning and can be used without revision. Some of the inputs from students regarding the e-module are: Thanks to the e-module program, learning activities have become easier and simpler. Hopefully, in the future, it will be even more interesting and helpful in learning. The e-module is very good, so it is recommended that it be created in the app or Play Store and App Store.

Then, the *evaluation stage* is carried out before and after the test to determine the quality of the product. Evaluation at the development stage is carried out by revising the product according to the input of experts and teachers, while evaluation after the trial is carried out by revising the product according to the input of students. With validation and attractiveness results above 85.00%, and referring to Table 1, the product is feasible and interesting to use in learning.

The final product that has been developed is an e-module of material to find basic ideas for grade V elementary school students, which can be accessed on the Heyzine Flipbook page anytime and anywhere in order to help the implementation of learning. The e-module is designed and developed using Canva, an *online* application that is easy to use for beginners in terms of design (Fitria, 2022). Meanwhile, Heyzine Flipbook is an application that creates learning media that is more interactive because the media can be filled with animation, sound, and page navigation (Hadiyanti, 2021). The results of Heyzine Flipbook can be shared online via the shared link, or it can be downloaded for offline access.

The e-modules that have been developed aim to support PJJ, PTMT, and PTM 100%, which are valid and attractive to use in learning. The components included in the e-module include the front cover, preface, instructions for use, table of contents, KD and learning objectives, concept map, material pages (including explanations of the main ideas, main sentences, and explanatory sentences, how to find the main ideas, and the locations of the main ideas), summaries, evaluation questions along with answer keys, reference lists, brief biography of the author, user responses, and *back cover*.

The product is tested for validity first by material experts and teaching materials, then tested for its usefulness and practicality by teachers, and then tested on students in class V-E SDN 002 West Balikpapan. The validity of the product is assessed using the Likert scale, while the attractiveness assessment uses the Guttman scale. The criteria for assessing the validity and attractiveness of the product are listed in Table 1, which refers to Akbar's opinion (2016).

The product obtained results of 85.93% from material experts, 98.43% from teaching material experts, and 90% from teachers. These three results, when referred to in Table 1, can be interpreted as valid, practical, and suitable products for learning activities. The trial was carried out on students in class V-E three times, namely individually with a result of 100%, on a small scale with a result of

95.33%, and on a large scale with a result of 95.33%. When referring to Table 1, it can be interpreted that the product can be very interesting when used in learning. Thus, the e-module has gone through the steps of preparing the module in general, which consists of analyzing needs, drafting *the* module, developing the module, validating, conducting trials, and revising the module, as well as meeting the criteria for a good module because the e-module attracts students' interest and motivation (Kosasih & Brintrup, 2022).

Through such things, the disadvantages and advantages of the product can be known. Some of these shortcomings are: 1) e-modules can only be accessed using electronic devices such as mobile phones, laptops, computers, etc.; 2) users must understand how to use electronic devices so as not to be confused in using e-modules; 3) the e-module can only be fully accessed when the electronic device is connected to the internet; 4) The e-module only focuses on the material looking for the main idea in the paragraph. Some of the advantages are: 1) e-modules can be accessed without space and time constraints; 2) e-modules add to the student learning experience; 3) the e-module is equipped with sample questions and video explanations if students are still confused with the material; 4) The e-module is equipped with instructions for use so that users are not so confused in using the e-module; and 5) the evaluation questions in the e-module are accompanied by an answer key that is directly connected to Google Forms.

CONCLUSION

Some of the conclusions obtained are that the e-module was developed through 5 stages of the ADDIE model and was designed with the Canva Heyzine application. The content of the e-module includes the front cover, preface, instructions for use, table of contents, KD and learning objectives, concept maps, subject matter equipped with pictures and videos, evaluation questions and answer keys, reference lists, a brief biography of the author, a questionnaire of user responses, and the back cover. The e-module was considered valid with the results of 85.93% from material experts, 98.43% from teaching material experts, and 90% from teachers. In addition, the e-module was considered interesting to be used in learning when it was tested three times for students in grade V-E SDN 002 West Balikpapan, with the results of 100% of individual trials, 95.33% of small-scale trials, and 95.33% of large-scale trials. Based on this, the e-module with the Canva Heyzine application on the material seeks the main idea in paragraphs for grade V elementary school students that has been developed to be suitable for use without revision.

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