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Developing Observation Report Text Teaching Materials Using Flip HTML5 Application

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ABSTRACT

Indonesian language learning implements an independent curriculum, making students the subjects and centers of learning. This curriculum emphasizes developing students' thinking skills in solving problems and projects that can shape character according to the Pancasila student profile and 21st-century skills. In this digital era, education should take advantage of this situation by developing teaching materials, such as converting texts into electronic formats that make it easier for students to access them at school or home. This study aims to produce an e-module of observation report texts for grade X vocational school students. The method used is research and development (R&D) with the ADDIE development model, which includes analysis, design, development, implementation, and evaluation. The study results indicate that this e-module is considered very valid by material and media experts and suitable for digital teaching. This e-module can be accessed online, allowing students to learn anytime and anywhere. Expert validation shows that this e-module effectively increases student accessibility and involvement in learning.

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1. INTRODUCTION

In the learning process in the classroom, teaching materials are one of the supporting components for achieving learning objectives. Teaching materials are components of the message content that must be conveyed to students. Teaching materials are all materials, information, tools, and texts arranged systematically, which display a complete picture of the competencies that students will master and are used in the learning process with the objectives and review of the implementation of learning [1]. Teaching materials are arranged according to planning, reviewing, and implementing learning objectives, such as textbooks, modules, handouts, LKS, models, audio, etc.

Currently, there are still many teachers who have not used electronic modules. Teachers find it difficult to develop teaching materials, so they only use books published by the Ministry of Education and Culture, revised edition 2020, available in schools as the leading learning source [2]. This is evidenced by the interviews obtained from two Indonesian language teachers. It is known that the learning source used in the learning process only uses one teaching material produced by the Ministry of Education and Culture entitled "Bahasa Indonesia Revised Edition 2020". Therefore, other teaching materials are needed to help students understand the material when writing observation report texts in theory and practice. The world of education today has developed in accordance with the times.

Along with the development of increasingly sophisticated technology, teachers must be able to compile teaching materials according to their needs, namely digital teaching materials [3]. Digital teaching materials have many benefits for students, including students who are no longer bothered to carry books, can be accessed without time and place restrictions, and can study independently or in groups because they can be accessed via the cell phones they always carry. In addition, exciting teaching materials will motivate students to be more active in learning. In this case, other and new learning resources are needed to increase knowledge and shape students' character. Therefore, teachers must be able to create and produce learning resources for students through digital teaching materials so that they can be accessed anytime and anywhere, such as modules that are developed into electronic modules.

Based on the Independent Curriculum for Vocational High Schools (SMK), learning materials are arranged by prioritizing a digital-based approach. Teaching or learning materials generally contain knowledge, skills, and characters that students must learn to achieve the predetermined competency standards. In detail, the types of learning materials consist of knowledge, namely facts, concepts, principles, procedures, skills, and attitudes or values [4].

Teaching materials are tools in the learning process. Teaching materials are media to achieve learning objectives and become relevant reference sources for teachers and students. Teaching materials are learning plans that develop teaching materials such as in digital form. It is stated that one of the tasks of educators is to plan learning. In the digital era, teachers should use digital teaching materials in teaching and learning activities [5].

One of the teaching materials in Indonesian language material is the observation report text. This observation report text learning material will discuss the content and language of the observation report text. This learning includes knowledge, writing skills, and competencies for observing and reporting texts according to learning outcomes. Currently, teachers are trying to implement digital teaching materials as the leading learning source. The learning process is hoped to be more exciting and enjoyable through digital observation report teaching materials. Students solve problems in groups by discussing them with other students. Therefore, digital observation report teaching materials must be arranged as attractively as possible. The teaching materials for writing observation report texts in question contain the following materials: content or structure of the text, language, and examples of observation report texts [6].

Teaching materials that follow the progress of the times are necessary so that the learning process can run optimally and efficiently. Currently, students use their gadgets to

search for important information, including the learning materials they are studying. Students access various [7].

2. METHOD

Research methods used in the study include R&D (Research and Development). Research and development methods are interpreted as scientific methods for research, design, manufacturing, and testing validation products that have been produced [8]. This is because the researcher will study to create new products and test the effective products produced.

Research methods aim to produce product-specific and test-effective products that have been made. Research This will produce products in digital teaching materials, text report results observation, and will be tested for support activity learning.

a. Research Design

Research and development products that are useful in a particular field of education through research and development. The research procedure adapts the ADDIE development model, which consists of five stages: analysis, design, development, implementation, and evaluation [9]. The researcher's research design is as follows, as shown in Figure 1 below.

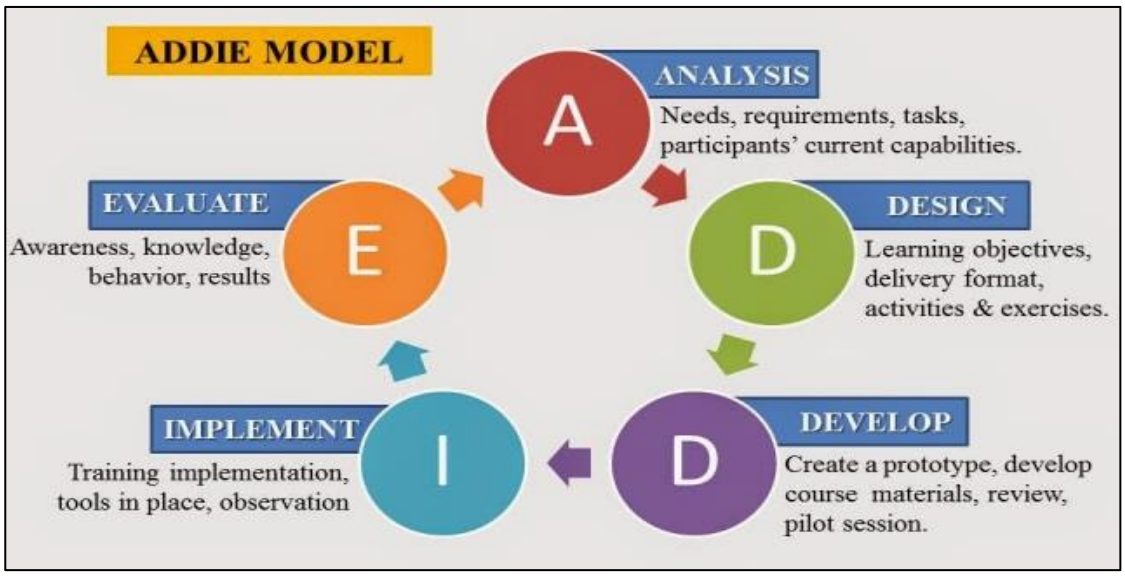

Figure 1. Steps in the ADDIE development model

Steps research and development model ADDIE is as follows [10]

1) Stage Analysis

At this stage, the main activity is to analyze the need for developing teaching materials and the feasibility and requirements for developing teaching materials. At the analysis stage, the researcher conducted independent curriculum learning, which contained material from observation report texts. Then, an interview was conducted on February 22, 2024, resulting in data that the teaching materials used were only in the form of textbooks and LKS, so students felt less enthusiastic during the learning process, students felt reluctant to spend money to buy books, students felt inconvenienced if they had to bring books. And so on. Therefore, to

overcome these problems, it is necessary to develop digital teaching materials that can be accessed without time and place restrictions and via their gadgets.

2) Design Phase (Design)

The design of the teaching materials to be developed is described in the following stages.

a) Create a flowchart for designing teaching materials to facilitate the preparation of teaching materials that will be developed systematically.

b) Develop a plan for making teaching materials through teaching material designs or modules.

3) Development Stage

The product design that has been prepared is then developed based on the following stages.

a) Researchers developed observation report text teaching materials with various modifications and then changed them into digital teaching materials in electronic modules.
b) Create a product validity questionnaire for material and media experts and a teacher response questionnaire.
c) Revise teaching materials according to suggestions and input from validators.

4) Implementation Phase (Implementation)

At this implementation stage, the following steps are carried out.

a) Expert validation

Two expert lecturers validated the teaching materials: a material expert and a media expert.

b) Indonesian Language Teacher Fellow Eligibility Test

This feasibility test was conducted on fellow Indonesian language teachers. The teaching materials were tested on eight fellow Indonesian language teachers by providing an online feasibility test questionnaire via the Google Form application to determine the feasibility of its use. The results of this feasibility test are to measure the feasibility standards obtained.

5) Evaluation Stage (Evaluation)

Evaluation is analyzing teaching materials at the feasibility test stage to determine whether there are still deficiencies and weaknesses. If there is no further revision, the teaching materials are suitable.

3. RESULTS AND DISCUSSION

3.1 Designing Teaching Materials for Observation Report Texts

The initial step in this research is to study the Merdeka curriculum, which states that Indonesian language material is text-based and contains various types of texts. Understanding the relationship between each competency in learning, especially text-based Indonesian

language material will develop students' creative and critical thinking skills. In addition, Indonesian language learning serves as a significant catalyst and integrator of knowledge across various domains, enhancing linguistic skills and cognitive and cultural competencies. The phonological transparency of the Indonesian language, as highlighted by Winskel and V, provides a foundational advantage for beginner readers, facilitating the development of literacy skills through a clear correspondence between letters and sounds [11]. This phonetic clarity aids learners in grasping the fundamental aspects of language, which is crucial for effective communication and comprehension in broader educational contexts [11].

Moreover, integrating Indonesian language education in higher education institutions emphasizes the importance of effective communication skills essential for academic success and professional development. Alfiati et al. [12] argue that proficiency in Indonesian is not merely about passing exams but involves communicating accurately and effectively, thereby enriching students' overall knowledge and experiences. This aligns with the findings of Nugraheni, who notes that language learning encompasses both transactional and interactional functions, further underscoring the role of Indonesian as a medium for cultural expression and national identity [13].

In addition to fostering communication skills, Indonesian language education promotes critical thinking and analytical abilities. The curriculum's focus on text-based learning, as discussed by Zabadi, encourages students to engage with various texts, enhancing their understanding and creation of written materials [14]. This approach develops language skills and cultivates a deeper appreciation for literature and its role in shaping cultural narratives [15]. Furthermore, the pragmatic approach to language learning, as explored by Pratiwi and Rohmadi, emphasizes the importance of context in communication, thereby preparing students for real-world interactions [16].

The role of Indonesian language learning extends beyond linguistic proficiency; it also serves as a vehicle for integrating knowledge from diverse fields. For instance, incorporating local wisdom into language education, as noted by Misriani, enriches the learning experience by connecting students to their cultural heritage and fostering respect for human values [17]. This holistic approach to language learning enhances students' linguistic capabilities and nurtures their identity and sense of belonging within the Indonesian cultural landscape.

In conclusion, Indonesian language learning acts as a catalyst and integrator of knowledge by enhancing literacy, communication skills, critical thinking, and cultural awareness. Its phonological transparency facilitates early literacy development, while its application in higher education fosters effective communication and critical engagement with texts. Moreover, integrating local wisdom and cultural narratives enriches the learning experience, making Indonesian language education a vital component of personal and academic growth.

A flow diagram for designing teaching materials was created based on the Indonesian Language Learning Outcomes (CP) in Phase E in the Independent Curriculum, which contains material from observation report texts. This flow diagram was created to make it easier to design observation report text teaching materials and then design teaching materials as module designs in the form of words that are as attractive as possible to attract students' attention [18], [19], [20], [21].

The following is a flowchart for designing teaching materials for observation report texts for class X students of Vocational High Schools (SMK).

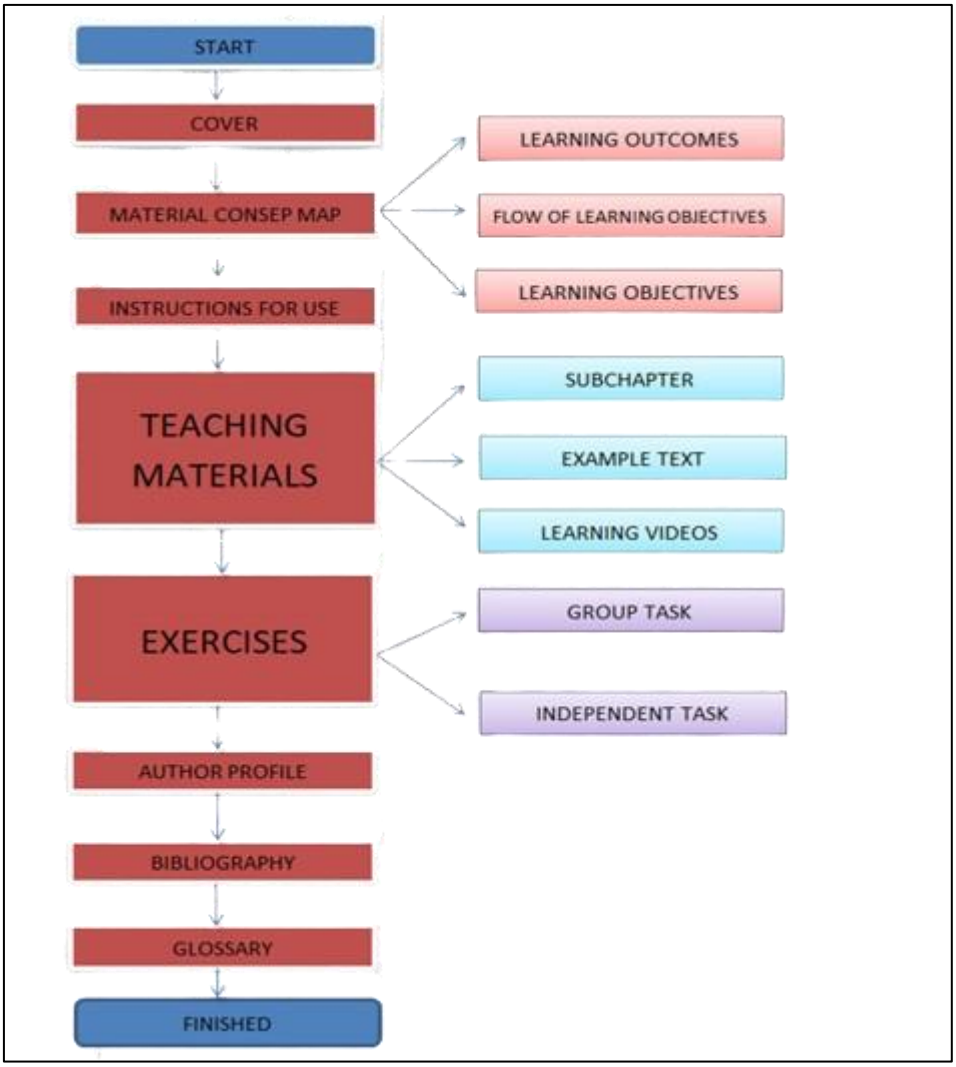

Figure 2. Flowchart for design of teaching materials text report on observation results

The steps for designing teaching materials for observation report texts based on the flowchart above are as follows [22].

a. Start

   At this stage, everything that will be needed to compile the module is prepared so that it can be carried out smoothly.

b. Cover

   We will start by determining the title and cover of the module so that the cover can attract readers' attention. The title of the designed module is "Indonesian Language Module for Observation Report Text Class X SMK."

c. Concept Map of Material

   Create a material concept map based on Learning Outcomes (CP), Learning Objective Flow (ATP), and Learner Objectives (TP) for Indonesian in Phase E. This material

concept map is created to provide an overview of all the material that will be delivered by the teacher and will be studied by students in the next few meetings.

d. Module Usage Instructions

Next, it contains instructions for using the module. The module usage instructions are designed to be easier to use. These module usage instructions are intended for teachers and students, and their contents explain the initial learning activities, the process until the end of the learning, and the procedures for using the module correctly.

e. Teaching Materials

Compiling materials and determining examples of observation report texts are core things that must be done carefully and precisely. This module contains several examples of observation report texts. Examples of observation report texts come from the author's work, and some come from the internet, which has been refined.

f. Exercises

The module has group and independent assignment exercises to test students' competence in understanding the material.

g. Author Profile

The module contains the author's profile so that his/her educational background can be known, even briefly. In addition, it is essential to know the author's whereabouts.

h. Bibliography

The module must have a bibliography to find the references used in compiling the module.

i. Glossary

This module is also equipped with a glossary to make it easier for readers to understand the terms in this module.

3.2 Converting Modules to E-modules

Several steps must be taken to design teaching materials in the form of modules into e-modules. Flip HTML5 functions to change modules into e-modules. The following steps must be taken in designing teaching materials from modules into e-modules [23].

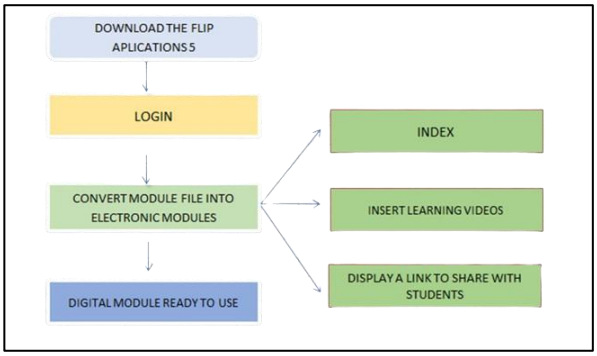

Figure 3. Steps to design a module using Flip HTML5

The first step is to download the Flip HTML5 application and then install the application. After that, the second step is to enter the application. When the screen appears to select the file to enter, the file will be selected to be converted to digital. Then, press the

column at the bottom to convert files.

The third step is to create a table of contents using shortcut keys to make it easier to find the desired page quickly. After creating the table of contents, the fourth step is to include learning videos in the digital teaching materials. Four learning videos are included to improve students' understanding of the teaching materials, including identifying observation report texts, analyzing the content and linguistic aspects of observation report texts, presenting observation report texts, and constructing observation report texts by paying attention to content and linguistic aspects.

The fifth step is to publish digital teaching materials on Android devices. The process takes a few minutes, and a link to the digital teaching materials appears. Digital teaching materials in the form of e-modules can be shared as links to the Whattshap application for student groups and used in teaching and learning activities in the classroom.

3.3 Validation Results

After the initial product in the form of a module has been completed, the next stage is validation with two validators: an Indonesian language material expert validator and a media expert validator.

3.3.1. Subject Matter Expert Validation

The e-module teaching material for observation report texts was validated by creating a validation questionnaire filled out by lecturers who are experts in Indonesian language material [16]. The teaching material that experts have validated is arranged in the form of an e-module. The validation results are as follows.

The product of development is in the form of teaching materials for the text module for reporting observation results. The following are the validation results for the developed module.

The percentage formula used is as follows [9].

$$P = \frac{\sum x}{\sum xi} \text{ x } 100\% \quad 1)$$

Information:

P $=$ Percentage validation per aspect

$\sum x$ $=$ Total percentage of all aspects

$\sum xi$ $=$ Many aspects

Results obtained were interpreted using the table following [9].

Table 1. Criteria Interpretation of Validation Results

Criteria	Value Range
Very Valid	81-100
Valid	61-80
Quite Valid	41-60
Invalid	21-40
Invalid	0-20

Table 2. Percentage of Expert Validation Results

Aspect	Mark	Criteria
Eligibility Content	71.42	Valid
Eligibility Presentation	75	Valid
Language Assessment	75	Valid
Total Average Value	73.80	Valid

The test results from the material expert lecturers obtained an average value of 73.80 with valid criteria. So, based on the total score obtained from the material expert lecturers, this observation report text e-module teaching material is declared suitable for use.

3.3.2 Media Expert Validation

Validation was conducted on expert media lecturers. The teaching materials that experts had validated were arranged as e-modules. The development products were in the form of e-module teaching materials and observation report texts. The following are the validation results for the developed modules. The results obtained were interpreted using the Likert scale in the following table [24].

Table 3. Percentage of Media Expert Validation Results

Aspect	Score	Criteria
Eligibility Appearance	100	Very Valid
Total Value	100	Very Valid

Trial results from lecturer media experts obtained a total score of 124 with a maximum of 124, and a percentage of 100% is stated with very valid criteria. So, based on the total score obtained from the lecturer media expert, e-module teaching materials text report observation, this was declared very worth using.

3.4. E-module Text Report on Observation Feasibility Test Results

The feasibility test questionnaire was distributed to eight fellow Indonesian language teachers in eight Vocational High Schools (SMK) online via the Google Form application. The text of the e-module observation report was tested on fellow Indonesian language teachers to determine the feasibility standards of the teaching materials. The feasibility test questionnaire in This study uses a Likert scale with *a checklist method* for each assessment item with valid or invalid criteria [25].

a. Eligibility Test for Teachers

The feasibility test of the e-module of the observation report text was conducted on eight Indonesian language teachers from eight different institutions. The feasibility test was conducted online through the Google Form application sent via email.

This development product is in the form of an e-module of observation report text. The following are the feasibility test results on Indonesian language teachers for the developed module. The results obtained are interpreted using a Likert scale in the table. The following are the results of the teacher feasibility test assessment of the e-module observation report text [9].

Table 4. List of Indonesian Language Teacher E-module Eligibility Test Scores

No.	Teacher Name	Assessment Aspects												Criteria
		Content Eligibility			Presentation			Use of Language			Chart			
		Score	Max Score	(%)	Score	Max Score	(%)	Score	Max Score	(%)	Score	Max Score	(%)	
1.	Teacher 1	67	75	89%	18	20	90%	19	20	95%	28	30	93%	Valid
2.	Teacher 2	75	75	100%	20	20	100%	20	20	100%	30	30	100%	Valid
3.	Teacher 3	70	75	93%	16	20	80%	18	20	90%	29	30	96%	Valid
4.	Teacher 4	65	75	86%	18	20	90%	18	20	90%	27	30	90%	Valid
5.	Teacher 5	60	75	80%	15	20	75%	15	20	75%	23	30	76%	Valid
6.	Teacher 6	75	75	100%	20	20	100%	20	20	100%	30	30	100%	Valid
7.	Teacher 7	70	75	93%	20	20	100%	19	20	95%	27	30	90%	Valid
8.	Teacher 8	60	75	80%	20	20	100%	13	20	65%	20	30	66%	Valid
	Total Score	542	600	90%	147	160	91%	142	160	88%	214	240	89%	Valid
	Final score	1045	1160	90%										
	Criteria		Valid											

Based on Table 4, the feasibility test conducted on eight Indonesian language teachers from eight different agencies produced data, and the results of eight Indonesian language teachers from eight different agencies stated that the e-module of observation report texts was in the valid category for use.

The percentage of the Indonesian language teacher eligibility test with the four assessment aspects as a whole can be described in the following graph.

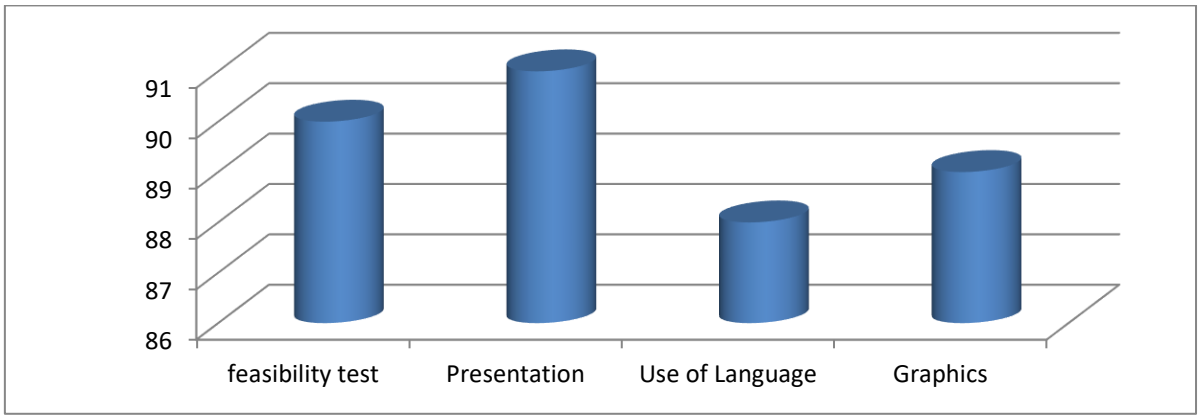

Figure 5. Indonesian Language Teacher Qualification Test Graph

Based on Figure 5, the graph of the e-module feasibility test conducted on eight Indonesian language teachers, in general, the percentage data resulted in the content feasibility aspect getting a score of 542 out of a maximum score of 600, the percentage is 90%, the presentation aspect getting a score of 147 out of a maximum score of 160, the percentage is 91%, the language use aspect getting a score of 142 out of a maximum score of 160, the percentage is 88%, and the graphic aspects getting a score of 214 out of a maximum score of 240, the percentage is 89% with the valid category used.

3.5 DISCUSSION

The results of content validation by subject matter experts show that the e-module developed for observation report texts achieved an average score of 73.80, which falls into the valid category. This indicates that, in terms of content, the e-module has met the eligibility standards and can be used as a learning medium. This validation demonstrates that the

materials presented in the e-module are well-structured and relevant to the intended learning objectives. This success aligns with Hardianti et al. [26] findings that text-based learning can enhance students' critical and analytical thinking skills, as it encourages students to understand the context and substance of the texts deeply.

Regarding media validation, the results were highly satisfactory, with a validation score of 100%, indicating that the appearance and interface of the e-module are highly suitable for use. This is supported by attractive and user-friendly graphics and interactive features such as educational videos that enhance students' understanding of the material. Adding multimedia elements, such as videos, can enrich students' learning experiences and make the learning process more effective, as suggested by Mayer in his cognitive theory of multimedia learning, which states that combining text and visual elements can improve students' comprehension [27].

The feasibility test on eight Indonesian language teachers from eight vocational high schools also yielded positive results. All the teachers gave a valid rating for the e-module, with content eligibility achieving 90%, presentation at 91%, language use at 88%, and graphic design at 89%. This indicates that the e-module has successfully met the learning needs across various institutions with diverse student characteristics. This positive evaluation suggests that the e-module can address the educational needs that demand digital technology in distance or blended learning, especially in the post-pandemic context.

Although this study indicates that the developed e-module is suitable for use, there is still room for improvement. Some teachers suggested adding more varied exercises and contextual case studies to engage students more effectively in learning. Moreover, future development of the e-module could consider additional interactive features such as automated quizzes and discussion forums to facilitate more dynamic student interactions. With these enhancements, the e-module is expected to be an informative learning resource and a truly interactive and engaging learning medium for students.

4. CONCLUSION

Based on the description of the research results, conclusions can be made about the development of observation report text teaching materials in class X of SMK. Here are some conclusions from the development of this teaching material. The observation report text teaching materials are designed based on a previously created flowchart to facilitate the creation process. The teaching materials are designed as attractively as possible based on Learning Outcomes (CP) in Phase E in the independent curriculum. Then, after going through the validation and revision process by experts, the teaching materials in the form of e-modules of observation report texts are declared suitable for use. This is based on the expert validation assessment of the material obtained data on the number of scores obtained, as many as 147 with a maximum score of 192 and a percentage of 76.56% stated in the appropriate criteria and from the results of the assessment of media expert lecturers. The validation assessment data obtained as many as 124, with a maximum score of 124 and a percentage of 100% stated as very suitable criteria. So, based on the total score obtained from the media expert lecturer, this observation report text e-module teaching material is declared very suitable for use. This electronic module can be accessed by students via their gadgets anytime and anywhere, so

they no longer need to bother carrying textbooks while studying. This electronic module is also equipped with learning videos in each sub-chapter to increase their understanding of the material they are studying.

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