

Development of Teaching Modules and Assessments Using Maritime and Culturally Responsive Approaches for Bintan Junior High Teachers (2024/2025)

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Abstract. This study develops Teaching Modules and Independent Curriculum Assessments through Teaching at the Right Level and Culturally Responsive Teaching Approaches Based on Maritime Affairs for Bintan Junior High School Teachers for the 2024/2025 School Year. This study reviews the validity and practicality levels of the use of teaching modules and assessments. Quantitative descriptive is based on questionnaire validation of assessment experts and material experts (modules) as well as questionnaire sheets of practicality test, while qualitative descriptive is based on the results of analysis of comments, and input in the form of suggestions and criticism. The assessment validation results obtained a score of 89.3% with very valid criteria and the teaching module validation results obtained a score of 88% with very valid criteria. After conducting validation, a practicality test was carried out on Bintan Junior High School class teachers obtaining a score of 87.6% with very practical criteria.

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1 Introduction

Education is one of the techniques for humans to survive, as it has been proven that humans must adapt to the acceleration of the times. Every human being must receive competent education. Law No. 20 of 2003 states that education aims to develop students' potential to become individuals who are faithful and devoted to God Almighty, competent, creative, independent, noble in character, healthy, knowledgeable, and responsible democratic citizens. A medium that can effectively achieve education is needed, namely the curriculum [1]. Teachers have a very important role in classroom learning activities. One of those tasks is to prepare a pleasant and high-quality learning environment. One way teachers can make learning activities enjoyable and of high quality is by preparing teaching modules and assessments based on the needs and developmental levels of students, known as the principle of differentiated learning. In preparing differentiated teaching modules, teachers must plan lessons and assessments that align with the level of thinking/Teaching at the Right Level (TaRL) and the cultural background/Culturally Responsive Teaching (CRT) of the students. TaRL is a learning approach that refers to the achievement level or ability of students. This learning approach does not refer to the grade level of students. Instead, the learning is adjusted to the achievements, ability levels, and needs of the students to achieve the expected learning outcomes. The main goal of the TaRL learning approach is to tailor teaching to the individual needs and abilities of each student, so they can gain a better understanding and avoid learning gaps [2]. The field of education is inseparable from evaluation. Evaluation is used to review students' academic success. Not only that, evaluation is also used to determine the effectiveness of learning, the quality of the educational program, and to identify needs or challenges within the education system.

Assessment in the education system aims to conduct selection among students to determine their learning outcomes. By knowing the results, teachers can also understand their students' weaknesses. In addition, assessment also aims to determine the extent to which a program has been successfully implemented. This success is influenced by factors such as the curriculum, the way teachers teach, students' learning styles, the methods used, as well as the facilities and administrative systems [3].

Differentiated teaching modules are more effective when used in learning, as evidenced by research showing that materials infused with Malay maritime local wisdom are effective in enhancing students' critical literacy skills. Additionally, students' learning outcomes are significantly better compared to before the implementation of teaching materials infused with Malay maritime local wisdom. This certainly helps students achieve learning objectives more easily. The Minister of Education, Culture, and Technology's Decree No. 56/M/2022 on the use of the independent curriculum, which provides teachers with the flexibility to create quality learning according to the needs and learning environment of students. One of the learning tools that includes a lesson plan, to help teachers direct the learning process to achieve Learning Outcomes (LO) in the independent curriculum, is teaching modules and assessments. A teaching module is a learning design based on the curriculum applied with the aim of achieving the established competency standards. In addition to teaching modules, the preparation of assessments is crucial for the success of the learning activities. If in the learning process the assessments designed by the teacher do not align with the Learning Outcomes (LO) and Teaching Points (TP), then the learning activities will not be achieved effectively. Assessment can be conducted in three ways: diagnostic, formative, and summative assessment [1].

2 Results and Discussion

2.1 Results

The type of research used in the study is R&D development research. (Research and Development). Development research is a process used for validating and developing products. Additionally, according to Ichey, development research is a study that encompasses design, evaluation, and processes that must meet effective criteria. The product developed in a research study can be an existing product or a new product. The product designed in this research is a teaching module with the Merdeka curriculum. The model used in this development research is the 4D model. The 4D development model developed by Thiagarajan consists of four stages: define, design, development, and dissemination. (diseminasi). This research focuses on the development of teaching modules.

This research develops Teaching Modules and Assessments for the Independent Curriculum through the Teaching at the Right Level and Culturally Responsive Teaching Approaches Based on Maritime for Bintan Junior High School Teachers for the 2024/2025 Academic Year, reviewing the validity and practicality of using these teaching modules. The model used in developing the teaching modules and assessments for the Independent Curriculum through the Teaching at the Right Level and Culturally Responsive Teaching Approaches is the 4D model, with stages of definition, design, development, and dissemination. (disseminate).

2.2 Discussion

This research is a development study aimed at developing a teaching module for the Merdeka curriculum for Indonesian language learning for teachers at Bintan Public Junior High Schools, which will undergo testing phases, specifically the levels of validity and practicality. The development model chosen by the researcher and suitable for developing this teaching module is the 4D model, and it only reaches the development stage. The first stage is definition, which aims to define the requirements that must be met in the development of learning media. At this stage, the analysis of the needs in the field is conducted by interviewing teachers from Bintan State Junior High School regarding the learning needs and problems that occur. After conducting interviews with the teachers, the result obtained was the need for learning media as a support for teaching to attract students' attention.

Next is the stage of concept analysis, where by selecting materials as the content of the learning media, it can create or write in accordance with a good flow. After that, outline the learning objectives that will be achieved with the use of this learning media. The formulation of learning objectives must be aligned with the curriculum learning outcomes applicable in the school. The second stage, namely the design phase, aims to prepare the initial design of the product. At this stage, it begins with the selection of developing teaching modules. Then, the selection of storyboards for designing, which will take the form of teaching modules that will later be accessed. Next, an initial design plan was created, which would later go through a discussion phase by lecturers and validation by experts. The independent curriculum teaching module developed in this research will undergo the expert validation stage. The accumulation of expert material validation assessments uses the formula $P = f \times 100\%$. The validity percentage from developing the teaching module yields an average score of 98.8% with a qualification of very valid, along with suggestions and improvement comments from the material experts.

From the aspect of material relevance to the learning indicator 4.4.2, it received a score of 100% with a qualification of very valid. developing teaching modules has been equipped with learning indicators in accordance with the learning objectives to be achieved. According

to Mauliandri, et al (2021), learning indicators are benchmarks for achieving a basic competency. Therefore, the material is in accordance with the learning indicators because it is related to making students proficient in writing. Based on the aspect of material relevance to the learning objective 4.4.1, it received a score of 100% with a qualification of very valid. developing teaching modules has been equipped with clear learning objectives. The purpose of the researcher creating materials in accordance with the learning objectives is to achieve student learning outcomes. In line with that, according to Sumayah (2006), the material must be adjusted to the applicable learning objectives, aiming to ensure that the material is conveyed clearly and accurately. Therefore, the researcher creates learning media tailored to the existing learning objectives, as the material significantly influences the learning objectives in accordance with the guidance and input from the validator. Observed from the aspect of material relevance to the learning objectives 4.4.2, it received a score of 100% with a qualification of very valid. developing this teaching module has been equipped with appropriate learning objectives. Paying attention to the learning objectives to be achieved is very important within a learning scope. Therefore, the material in developing the teaching module is already considered appropriate, taking into account that students are able to write interesting fantasy stories [4].

Based on the aspect of the material being systematically organized, it received a score of 100% with a very valid qualification. This indicates that the material presented is organized systematically. In line with Ardiansyah's opinion (in Reza 2016), teaching materials or often referred to as instructional materials must be systematically organized and presented in their entirety to be mastered by students in the learning process [5]. Observed from the aspect of the coherence of the material in developing the teaching module, it received a score of 100% with a very valid qualification. The researcher has structured the material within an intelligent video with the aim of enabling students to understand and comprehend the presented material. In this case, it states that the coherence of the material is already considered very valid. According to Hasan (2021), the clarity and coherence of the message or material can stimulate curiosity, making students laugh and think. This indicates that the aspect of student motivation can improve. From the aspect of the sentences used, the communicative approach in developing the teaching module received a score of 100% with a very valid qualification. The teaching module aims for users to understand the material clearly. In line with Nurrita's (2018) opinion, learning media is used for the clear delivery of messages so that there are no difficulties in conveying verbal language or misunderstandings. This indicates that the communicative aspect of the teaching module learning media plays a very important role according to the validator's instructions [6].

Referring to the aspect of clear language use, it received a score of 100% with a qualification of very valid. The researcher has composed sentences and language in detail and clearly so that students can understand what is presented. According to Paramita, et al (2019), the media should be composed using proper and correct language so that readers or listeners can easily understand it. Therefore, this media is very suitable to be implemented for junior high school students considering the appropriate use of language with a very valid qualification [7].

Observed from the aspect of the accuracy of EYD usage in the material, it received a score of 100% with a very valid qualification. In line with Qhadafi's (2018) opinion, the use of good and correct language according to the Enhanced Spelling System (EYD) is the most fundamental and important aspect of writing. Therefore, the teaching module material has been compiled and adjusted according to the Enhanced Spelling System (EYD). The aim is for the material to be easily understood by students. From the aspect of the accuracy of EYD usage in the work instructions, it received a score of 100% with a very valid qualification [8]. The use of language in the student worksheets must conform to the Indonesian language rules

of EYD. Therefore, the researcher has created work instructions in accordance with EYD rules to ensure that students can answer and understand the given instructions.

Viewed from the aspect of the presented material being easy to understand, it received a score of 80% with a valid qualification. This assessment shows that the material presented or explained is easy to understand for all groups, including material experts, media experts, teachers, and students. Furthermore, the material that has been presented is understandable and suitable for implementation at the junior high school level, seventh grade. In addition, there are suggestions and improvements from subject matter experts, but they have been revised according to the validator's instructions. The material in the learning media aims to convey information to users clearly and more easily understood. The improvements made by the researcher include providing structural markers in the work instructions and adding a few color markers to the linguistic features of the teaching module story. The improvements made by the researcher can enhance the appeal to students. The selection of good colors that align with the learning material will be more communicative and aesthetic. Furthermore, according to Bambang, marking is a way of depicting something important, because with the presence of markers, it can later be observed clearly. Based on the assessment results conducted by subject matter experts, it is stated that the material presented in the teaching module is very valid. The teaching module material can be implemented in Indonesian language learning in junior high schools [9,10].

3 Conclusion

The researcher presented an exposition on the development of assessments, product validity by experts, and practicality through product trials. The resulting product is a summative assessment of Indonesian language material for the odd semester of the 8th grade in the 2023/2024 academic year, using the Tester-IZ website. The type of research is development research or research and development (R&D) with a mixed-methods approach (qualitative and quantitative). The research model used is 4D, limited to the third stage, namely definition (define), design (design), and development. (develop). Then, the researcher calculated the practicality validity of the product by conducting validation by assessment and material experts, as well as practicality tests on small and large groups of students.

The assessment validation results obtained a score of 89.3% with very valid criteria and the teaching module validation results obtained a score of 88% with very valid criteria. After conducting validation, a practicality test was carried out on Bintan Junior High School class teachers obtaining a score of 87.6% with very practical criteria.

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