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Research Article

Transformation of Economics Learning in High Schools with Problem Based Learning Modules

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Abstract

Developing learning modules as teaching materials involves four stages: Definition, Design, Development, and Dissemination. Well-structured materials are crucial for supporting and enhancing student motivation to master subjects. Common teaching problems, curriculum, and student needs are analyzed in the Definition stage. The Design stage includes creating a structured economics module for management topics. The Development stage involves expert validation and trials in small and regular class settings. The Evaluation stage assesses the module's effectiveness. Validated by four experts, the module scored an overall average of 4.42, which was deemed valid. Experts rated presentation feasibility at 4.60, graphical feasibility at 4.22, and content and language feasibility at 4.50 and 4.36, respectively. Student field trial assessments showed scores of 4.41 for presentation, 4.61 for graphics, 4.50 for content, and 4.53 for language. The module significantly increased student motivation and reduced boredom, with high engagement in class activities. Observations showed active student participation, attendance, and cooperation. Implementing the module resulted in significant performance improvements, with 83.33% of students scoring between 85-100 and 86.11% achieving mastery, surpassing the 85% success criteria. The economics learning module effectively enhances student motivation and academic success through its comprehensive design and validation process, ensuring quality and suitability for educational purposes.

Keywords: academic performance; motivates; educational quality; Problem-Based Learning

1. INTRODUCTION

Education in Indonesia plays a crucial role in shaping high-quality human resources capable of competing globally. As a country with a large population and significant economic potential, the need to enhance the quality of education is pressing. Efforts to improve educational standards include continuous curriculum reforms, the development of more interactive teaching methods, and enhancing teacher competencies (Darling-Hammond, 1997; Goertz, 2007; Porter, 1994). These initiatives aim to prepare students with the knowledge, skills, and attitudes necessary to face global challenges effectively.

Curriculum reforms are ongoing to align with evolving times and the increasingly complex demands of the job market. A relevant and dynamic curriculum is expected to equip students with the competencies needed to thrive in the global arena. The focus on developing more interactive teaching methods is pivotal in creating a learning environment that motivates and actively engages students in the learning process (Barkley & Major, 2020; Blumenfeld et al., 2006; Brophy, 2004). Additionally, enhancing teacher competencies is paramount, as teachers play a central role in

curriculum implementation and facilitating effective learning processes (Anderson & Planning, 1991; Hunt et al., 2009; Reimers & Chung, 2019; Stronge, 2018).

To achieve the goal of improving educational quality effectively, the education system needs to continuously adopt relevant and innovative teaching methods (Suarlin & Ali, 2020; Wahrini et al., 2019). Appropriate teaching methods can enhance student engagement, deepen their understanding of subject matter, and develop skills relevant to the modern workplace. Therefore, research is continuously needed to evaluate and develop optimal learning methods within the context of Indonesian education (Idkhan & Idris, 2021; Rachmaniar et al., 2021; Suarlin et al., 2021).

Various studies have highlighted the effectiveness of Problem-Based Learning (PBL) methods in various educational contexts. According to (Hmelo-Silver, 2004), Problem-Based Learning (PBL) not only improves students' understanding of concepts but also develops critical thinking skills and the ability to solve problems independently. This finding aligns with other research demonstrating that PBL enhances student engagement and motivates them to learn (Hung et al., 2008; Savery, 2015).

Problem-Based Learning (PBL) has proven particularly effective in teaching critical thinking skills and problem-solving, which are crucial in the context of economic education. (Barrows & Tamblyn, 1979), emphasizes that Problem-Based Learning (PBL) integrates theory with practical applications in real-world situations, enabling students to develop a deeper and more relevant understanding of the subject matter.

However, despite strong evidence of Problem-Based Learning (PBL) success in general educational contexts, its specific application to management topics within economic education requires further in-depth research. Problem-Based Learning (PBL) can be adapted and applied differently depending on the educational context and student characteristics. Therefore, more focused research is necessary to explore the potential of Problem-Based Learning (PBL) in teaching management topics at the high school level.

This study aims to address this gap by designing, developing, and testing a Problem-Based Learning (PBL) module specifically tailored for management topics in economic education. By focusing on active and collaborative learning methods, significant contributions are expected in developing best practices in economic education in Indonesia.

Despite ample evidence of Problem-Based Learning (PBL) effectiveness in enhancing economic education in general, there remains a significant gap in the literature regarding its implementation specifically for management topics at the high school level. Previous studies indicate that Problem-Based Learning (PBL) enhances student engagement, deeper learning motivation, and better understanding of economic concepts (Hung et al., 2008; Savery, 2015). However, specific applications of Problem-Based Learning (PBL) for management topics are minimally identified in the literature.

This gap presents challenges for educators in designing captivating and relevant learning strategies for students. The scarcity of Problem-Based Learning (PBL) modules available for management topics limits teachers' ability to deliver engaging and contextual learning experiences for students in Indonesia. This underscores the need for more in-depth research to develop PBL modules that align with the national curriculum and meet the specific needs of Indonesian students (Gandhi & Dass, 2019; Heong et al., 2020).

This research holds significance because developing PBL modules for management topics is expected to address several key challenges in economic education in Indonesia. One of the primary challenges is students' lack of interest in management topics, often perceived as abstract and difficult to understand. By leveraging the PBL approach, it is anticipated that the quality of education can be enhanced by providing deeper and more relevant learning experiences.

Moreover, shallow understanding of concepts often impedes the learning process. Problem-Based Learning (PBL) allows students to actively engage in solving real-world problems, which can help them internalize management concepts more effectively. Thus, it is expected that this research will not only contribute theoretically to the education literature but also provide practical solutions for teachers and educators to improve the quality of economic education in Indonesia.

The main objective of this research is to design, develop, and test a Problem-Based Learning (PBL) module specifically for management topics in economic education at the high school level in Indonesia. This study also aims to evaluate the effectiveness of the Problem-Based Learning (PBL)

module in enhancing students' understanding of concepts and learning motivation. By focusing on developing best practices in economic education, this scholarly article aims to make a significant contribution to advancing education in Indonesia.

Through this research, a strong foundation is expected to be established for the implementation of PBL modules in economic education, producing students who are not only well-versed but also equipped with relevant skills needed in the modern workplace. Additionally, this scholarly article is expected to provide practical guidance for educators and policymakers in enhancing the quality of economic education in Indonesia.

2. RESEARCH METHOD

2.1 Research Design

Research and Development (R&D) in educational contexts, particularly in developing learning modules, involves a systematic process of designing, testing, and refining educational materials. In this study, the focus is on creating modules for teaching management subjects using Problem Based Learning (PBL) methodologies. PBL emphasizes active learning, where students engage in solving real-world problems and scenarios, fostering critical thinking, collaboration, and practical application of knowledge.

The module development process, based on the Four D (4-D) model proposed by (Thiagarajan, 1974), comprises several distinct stages that ensure systematic and effective development and implementation of learning modules, particularly focusing on Problem Based Learning (PBL) in management education.

- Define Stage: This initial phase begins with a thorough analysis of the existing curriculum and the specific learning objectives that the module aims to address. The goal here is to pinpoint the precise educational needs that the module will fulfill. This stage involves (1) Curriculum Analysis: Reviewing the current curriculum to understand its structure, goals, and how the new module will integrate with existing educational frameworks; (2) Learning Objectives Specification: Defining clear and measurable learning objectives based on curriculum analysis. This step ensures that the module aligns with educational standards and addresses essential learning outcomes; (3) Student and Material Analysis: Conducting detailed analyses of students' characteristics, including their academic abilities, age, maturity level, and motivational factors. Similarly, analyzing the content and materials to be taught helps in identifying the core concepts and skills that the module should cover.
- Design Stage: Once the learning objectives are defined, the focus shifts to designing the module and associated assessments. Key activities in this stage include (1) Module Development: Creating a structured and coherent learning module that effectively delivers the identified content and achieves the specified learning objectives. This involves organizing content, determining instructional strategies, and selecting appropriate learning resources; (2) Assessment Design: Designing assessments, such as tests and evaluations, that accurately measure students' achievement of the learning objectives. These assessments are aligned with the competencies defined in the Define stage; (3) Media Selection: Choosing suitable instructional media that cater to the characteristics of the students and facilitate effective learning. Media selection considers factors like accessibility, engagement, and alignment with the instructional goals.
- Develop Stage: In this phase, the module undergoes refinement and enhancement based on expert feedback and validation. Key activities include (1) Expert Feedback Integration: Gathering feedback from subject matter experts and educational specialists to improve the module's content, instructional design, and assessment strategies; (2) Validation and Pilot Testing: Conducting validation processes to ensure the module's accuracy, relevance, and effectiveness in achieving learning objectives. Pilot testing involves limited trials with actual students to identify any practical issues and refine the module further.
- Disseminate Stage: The final stage focuses on deploying the developed module in real-world educational settings to evaluate its practical application and impact. This stage involves (1)

Implementation and Evaluation: Introducing the module into different classrooms and schools to assess its effectiveness in diverse learning environments. This step includes monitoring student engagement, learning outcomes, and teacher feedback to gauge the module's success; (2) Scaling and Adaptation: Scaling up the module's implementation across multiple educational settings and adapting it based on ongoing evaluation and feedback. This process ensures that the module remains relevant and beneficial in various educational contexts.

2.2 Data Collection Techniques

Validation Sheet for Learning Modules: This validation sheet is used to obtain data about expert validation results regarding the learning module. Validators write scores corresponding to checkmarks in the appropriate rows and columns. They are then asked to provide a general conclusion about the learning module, categorized as good, fair, or sufficient.

Observation Sheet of Teacher's Learning Management Activities: To understand the teacher's activities during the learning process, an observation sheet is used to assess classroom management activities using the prepared module. Evaluation aspects include introduction (informing objectives), group management, and closure (awarding groups).

Observation Sheet of Student Activities: To gather data on student activities during learning, an observation sheet is used to observe student activities during core activities to closure. Observations are conducted by two observers on four students in a group, presumed to represent the entire class. Activities observed include listening, reading student books, reading modules, completing worksheets, discussing, taking quizzes, and engaging in activities unrelated to the learning process. Student activities are observed to assess the suitability of activities performed during learning using PBL-based learning modules or to evaluate the effectiveness of learning modules on management material with the application of PBL-based learning modules.

Student Motivation Questionnaire: The student motivation questionnaire consists of responses to the learning module. It is used to understand student feedback on the module used and is filled out after the last meeting to assess student responses to the module.

2.3 Data Analysis

In this research, data analysis techniques play a crucial role in validating and developing Problem Based Learning (PBL) modules for management subjects. The approach involves in-depth qualitative and quantitative analyses to gain comprehensive insights into the module's effectiveness and student responses.

Firstly, qualitative analysis is conducted to explore various dimensions of module development. This includes content analysis from interviews with education experts and validators, providing insights into module design and its relevance to the existing curriculum. Additionally, document analysis is performed to investigate relevant educational literature and existing management materials, forming a deep understanding to structure appropriate modules.

Secondly, quantitative analysis is used to measure the module's effectiveness more quantifiably. This involves descriptive statistical analysis to summarize data from student response surveys, revealing their perceptions of the learning experience using PBL modules. Moreover, comparative analysis is employed to compare test results or student performance before and after module use, evaluating their improved understanding of management topics and their ability to apply knowledge in real-world contexts.

Validation of instruments and reliability analysis are also crucial parts of this process, ensuring that the evaluation tools used are reliable and consistent in measuring the established variables. This is done through limited trials with students and using statistical analysis to test the validity and reliability of the collected data.

Finally, an interactive analysis approach is applied, where results from each stage of module development are used for iterative and continuous improvement. Feedback from experts and outcomes of student trials are utilized to adjust module designs to meet specific learning needs and achieve expected learning objectives.

3. RESULT AND DISCUSSION

3.1. Research Results

a. Definition Stage

- Initial-End Analysis In this stage, fundamental issues needed in learning are identified. Based on observations, issues related to the use of teaching materials in learning and students' difficulties in understanding the learning material were identified. Hence, the idea to develop teaching materials that could facilitate and motivate students in learning emerged. The analysis conducted in this stage includes curriculum analysis, student needs analysis, and economic material analysis. The curriculum analysis involves adjusting the content of the learning module to the K-13 curriculum and syllabus used in High School.
- Student Analysis In the student needs analysis stage, it was found that students require learning materials that can facilitate their learning and enhance motivation, which is marked by improved learning outcomes after tests. The economic material presented in the learning module focuses on management.
- Material Analysis The content of the learning module includes material related to the theme to be developed, specifically management. Material compilation was sourced from various relevant books and materials.
- Learning Objective Specifications To produce a module that facilitates teachers and students in using learning materials. The developed learning material is attractive and practical in its use, aiming to enhance student learning motivation, thereby improving learning outcomes.

b. Design Stage

- Test Preparation In the second stage, the learning module is designed according to the format of module development. The module is designed with an attractive layout and easily understandable language, containing materials and exercises or problems that relate to common issues encountered or experienced by students.
- Selection of Suitable Materials After selecting materials aligned with the analysis of tasks, material analysis, and student characteristics, books that serve as references in creating the learning module are gathered.
- Format Selection Once books are ready as reference materials, the design or structure of the learning module, including strategy selection, approach, learning methods, and learning resources, is developed based on Problem Based Learning.
- Initial Design Initial design is conducted to draft the learning module. The content of the learning module is aligned with the basic competencies. The framework in the module draft includes:
  - ✓ Module Title: The module title is designed to be attractive and relevant to the developed content, which is management. An engaging title motivates students to engage with the module.
  - ✓ Basic Competencies: The developed module contains competencies that students must achieve in learning the material, including knowledge, skills, and attitudes. Basic competencies are aligned with the school's syllabus.
  - ✓ Content: The module's content covers topics related to the developed theme, specifically management. Content compilation is sourced from various collected books.
  - ✓ Illustrations: Illustrations presented in the module are aligned with the developed content. These images are sourced from the internet. Including illustrations in the learning module aids student understanding of the material and enhances engagement.
  - ✓ Problem-Based Exercises or Questions: Exercises or questions in the module are based on everyday problems encountered by students, challenging them to solve each exercise presented.

c. Development Stage

During the development stage, the production of the module used in teaching is initiated. The production of teaching materials starts from printing and binding. Below are the results of the

module creation process, including validation results from instructional experts and subject matter experts.

The instructional experts involved in this study are Dr. Andi Tenri Ampa, a lecturer at Universitas Negeri Makassar, and Dr. Abdul Gani, a supervising officer for high schools at the Education Office of South Sulawesi Province, VIII Region. Validation was conducted concerning the presentation suitability and graphical validity of the developed economics learning module using a 1-5 scale questionnaire. In addition to assessing the suitability, instructional experts also provided suggestions and feedback to enhance the quality of teaching materials. Recommendations included improving writing quality, developing higher-order thinking skills (HOTS) questions, adding learning objectives to the module, and using real-life images on the cover.

Table 1. Learning Module Expert Validation Results

Indicator	Expert 1		Expert 1		Average
	Total	Average	Total	Average	
Presentation Feasibility	25	50	21	4.20	4.60
Graphic Feasibility	36	4.00	40	4.44	4.22
Total	61	4.50	61	4.32	4.41
Category		Valid		Valid	Valid

Based on the table above, it is known that the average score for the presentation feasibility aspect holds the highest rank at 4.60, which falls into the very valid category ($4.5 \leq M \leq 5$). The second highest indicator is content feasibility with an average score of 4.50, which also falls into the valid category. The third place is occupied by the language feasibility indicator with an average score of 4.36, followed by the graphical feasibility indicator at the lowest level with a score of 4.22, both of which fall into the valid category. Assessments by instructional material experts and subject matter experts for each indicator are included in the valid category, indicating that the learning module is suitable for use. Overall, the average score obtained is 4.42, which falls within the range of $3.5 \leq M < 4.5$, indicating that the economics learning module for management material is valid and suitable for use.

d. Disseminate Stage

After conducting several stages of development research, the design of the teaching materials for the economics learning module of management materials that have been developed is then applied to actual conditions. Initially, the economics learning module was piloted to students who were subject to a small group trial after the revision process and the module was considered feasible by the validators. Then the module is piloted to the main student who is the subject of the research

- Small Group Trial

  After the validation process of material experts and teaching material experts, the economics learning module with management materials was piloted to small group students. This trial aims to find out and identify both the strengths and weaknesses of the module teaching materials from potential users. Data collection was carried out by giving questionnaires to 8 students or 2 groups as research respondents. With the questionnaire, data will be obtained regarding the assessment of the quality of the module from prospective users and as input for revision in field trials. This small group trial was carried out on February 3, 10 and 17, 2023. The following are the results of students' assessment of the management material economics learning module for each indicator in the small group trial.

Table 2. Assessment of Learning Modules in Trial Classes on The Appropriateness of The Content

No.	Indicator	Average	Description
1	Clarity Of Basic Competencies and Learning Objectives	4.25	Valid
2	The Connection of Material with Everyday Life	4.38	Valid

No.	Indicator	Average	Description
3	Material Completeness	4.13	Valid
4	Material Attractiveness	4.00	Valid
	Total	16.75	
	Average	4.19	Valid

Table 3. Assessment of Small Group Trial Learning Modules on Linguistic Appropriateness

No.	Indicator	Average	Description
1	Accurate use of terms and symbols	4.38	Valid
2	Sentence clarity	4.13	Valid
3	Communicative use of language	4.25	Valid
4	Presentation sequence	4.25	Valid
5	Ability to stimulate motivation	4.00	Valid
	Total	21.00	
	Average	4.20	Valid

Table 4. Assessment of Learning Small Group Trial Learning Modules on Feasibility of Presentation

No.	Indicator	Average	Description
1	Presentation of material according to systematic writing	4.25	Valid
2	Logical presentation	3.88	Valid
3	Presentation sequence	4.25	Valid
4	Presentation of images, tables and symbols	4.13	Valid
5	Presentation equipment	4.38	Valid
	Total	20.88	
	Average	4.18	Valid

Table 5. Assessment of Small Group Trial Modules on Graphic Feasibility

No.	Indicator	Average	Description
1	Module Size	4.00	Valid
2	Attractive module design	4.38	Valid
3	Practicality of the module	3.88	Valid
4	Use of letters	4.25	Valid
5	Readability of sentence writing	4.13	Valid
6	The size of the letters is proportional to the size of the book	3.75	Valid
7	Attractive module cover	4.50	Valid
	Total	28.88	
	Average	4.13	Valid

Table 2 shows that the total score for the content appropriateness indicators of the learning module is 16.75, resulting in an average score of 4.19. This average falls within the range of $3.5 \leq M < 4.5$. According to the conversion table, the quality of the learning module for the content appropriateness indicators is categorized as valid.

Table 3 illustrates that the total score for the linguistic appropriateness indicators of the learning module is 21.00, resulting in an average score of 4.20. This average also falls within the range of $3.5 \leq M < 4.5$. Based on the conversion table, the quality of the learning module for the linguistic appropriateness indicators is classified as valid.

Table 4 indicates that the total score for the presentation feasibility indicators of the learning module is 20.88, with an average score of 4.18. This average is within the range of $3.5 \leq M < 4.5$. According to the conversion table, the quality of the learning module for the presentation feasibility indicators is considered valid.

Table 5 shows that the total score for the graphic feasibility indicators of the learning module is 28.88, resulting in an average score of 4.13. This average falls within the range of $3.5 \leq M < 4.5$.

Based on the conversion table, the quality of the learning module for the graphic feasibility indicators is categorized as valid.

The learning module has been evaluated across four key indicators: content appropriateness, linguistic appropriateness, presentation feasibility, and graphic feasibility. Each indicator's average score falls within the range of $3.5 \leq M < 4.5$, thereby classifying the module as valid in all aspects. This comprehensive assessment confirms that the learning module is of high quality and suitable for use.

- Field Trials

After the trial in a small group, namely in class X IPS 1 and considered feasible, the economic learning module for management material was then tested on large group trial students or a real class, namely in class X MIPA 1. The trial was carried out to find out the students' response to the special economics learning module of management material. Data was collected using questionnaires. The questionnaire was used to obtain data on the assessment of the quality of the economic learning module developed as suggestions and input for the revision of the final product. Field trials or in actual classes were carried out on Monday, February 27, March 6 and 13, 2023. The respondents in the trial were 36 students.

Table 6. Evaluation of Teaching Materials for Modules in Field Tests Based on Content Suitability Indicators

No.	Indicator	Average	Description
1	Clarity of Basic Competencies and learning objectives	4.47	Valid
2	The connection of material with everyday life	4.42	Valid
3	Material completeness	4.50	Valid
4	Material attractiveness	4.14	Valid
	Total	17.53	
	Average	4.38	Valid

Table 7. Assessment of Learning Module Is Reviewed from Linguistic Appropriateness Indicators

No.	Indicator	Average	Description
1	Accurate use of terms and symbols	4.44	Valid
2	Sentence clarity	4.42	Valid
3	Communicative use of language	4.53	Valid
4	Presentation sequence	4.33	Valid
5	Ability to stimulate motivation	4.14	Valid
	Total	21.86	
	Average	4.37	Valid

Table 8. Assessment Of Teaching Materials for Modules on Appropriateness of Presentation

No.	Indicator	Average	Description
1	Presentation of material according to systematic writing	4.50	Valid
2	Logical presentation	4.39	Valid
3	Presentation sequence	4.31	Valid
4	Presentation of images, tables and symbols	4.36	Valid
5	Presentation equipment	4.47	Valid
	Total	22.03	
	Average	4.41	Valid

Table 9. Assessment of Graphic Feasibility Indicator Module Teaching Materials

No.	Indicator	Average	Description
1	Module Size	4.17	Valid
2	Attractive module design	4.56	Valid
3	Practicality of the module	4.28	Valid

No.	Indicator	Average	Description
4	Use of letters	4.56	Valid
5	Readability of sentence writing	4.33	Valid
6	The size of the letters is proportional to the size of the book	4.17	Valid
7	Attractive module cover	4.61	Valid
	Total	30.67	
	Average	4.38	Valid

Table 10. Average Value of The Learning Module Assessment Score for Each Aspect of Feasibility

No.	Indicator	Small Group		Field trials		Average
		Aspect	Average	Aspect	Average	
1	Contents	134	4.19	631	4.38	4.29
2	Language	168	4.20	787	4.37	4.29
3	Presentation	167	4.18	793	4.41	4.30
4	Graphics	231	4.14	1104	4.38	4.26
	Average	4.17		4.39		4.29
	Description	Valid		Valid		Valid

Table 6 shows that the total score for the content appropriateness indicators of the module is 17.53, resulting in an average score of 4.38. This average falls within the range of $3.5 \leq M < 4.5$. According to the conversion table, the quality of the learning module for the content appropriateness indicators is categorized as valid.

Table 7 illustrates that the total score for the linguistic appropriateness indicators of the learning module is 21.86, resulting in an average score of 4.37. This average also falls within the range of $3.5 \leq M < 4.5$. Based on the conversion table, the quality of the learning module for the linguistic appropriateness indicators is classified as valid.

Table 8 indicates that the total score for the presentation feasibility indicators of the learning module is 22.03, with an average score of 4.41. This average is within the range of $3.5 \leq M < 4.5$. According to the conversion table, the quality of the learning module for the presentation feasibility indicators is considered valid.

Table 9 shows that the total score for the graphic feasibility indicators of the learning module is 30.67, resulting in an average score of 4.38. This average falls within the range of $3.5 \leq M < 4.5$. Based on the conversion table, the quality of the learning module for the graphic feasibility indicators is categorized as valid.

Table 10 presents the results of the trials conducted in class X IPS 1 and the field test in class X MIPA 1, indicating that the indicators for content appropriateness, linguistic appropriateness, presentation feasibility, and graphic feasibility are all in the "Valid" category with average scores of 4.29, 4.29, 4.30, and 4.26, respectively, all within the range of $3.5 \leq M < 4.5$. This assessment demonstrates that each indicator of the economics learning module, particularly for management material, is rated as "Valid" and is suitable for use as teaching material.

The assessments of the learning module across various indicators consistently demonstrate its validity. The average scores for content appropriateness, linguistic appropriateness, presentation feasibility, and graphic feasibility all fall within the valid category, indicating that the module is of high quality and suitable for educational purposes.

e. Student Response Data

The results of observation of the behavior that is the subject of the research during the teaching and learning process by using the learning module on management materials as teaching materials can be seen by increasing learning motivation from the results of the learning motivation questionnaire using the Likert scale interval 1 – 5. In the final stage, it is carried out using student responses in the real class. The questionnaire was filled out after economic learning on management material was carried out 3 times using the economics learning module as a teaching material.

Table 11. Student Learning Motivation in Using Teaching Material Modules in Field Test Classes

No	Declaration	Average	Description
1	I am more enthusiastic about working on economic questions	4.92	Very positive
2	I want to ask the teacher when there is material that I don't understand	4.92	Very positive
3	I want to repeat the material I have studied at home	4.83	Very positive
4	I do my assignments at school more on time	4.83	Very positive
5	I am trying more to complete notes that are not in the module	4.83	Very positive
6	I am more confident that I can do economic questions	4.92	Very positive
7	I want to get a score high	4.89	Very positive
8	I can understand management material better	4.86	Very positive
9	I am more enthusiastic about learning by using the economics module as learning material	4.97	Very positive
10	I prefer to chat with my classmates while learning is taking place	4.94	Quite positive
11	I feel happier taking part in learning	4.86	Very Positive
12	I feel bored and sleepy more quickly when learning is going on	4.94	Quite positive
13	I am more interested in the module teaching materials in learning	4.94	Very Positive
	Total	100,73	
	Average	7.74	Very Positive

Based on Table 11, the data that has been collected and processed indicates that the use of the module as a teaching material is able to increase students' learning motivation. The average score of 7.74 falls into the very positive category, which is within the range of $3.5 \leq X \leq 4$ (SP), meaning that the students' learning motivation in the field test class is very high or has a positive impact. Additionally, bad habits such as frequent chatting and getting bored quickly during lessons no longer occur among students.

Reliability testing shows that the learning module can indeed enhance learning motivation, as it meets the reliability requirements with a Cronbach's alpha value greater than 0.70 (0.784). This confirms the module's effectiveness in improving students' motivation to learn.

Table 12. Results of observations of behavior during the teaching and learning process

No	Declaration	Average	Percentage
1	Students who were present during the lesson	36	100%
2	Students who pay attention to learning material	29	80%
3	Students who ask the teacher for guidance in completing their assignments	31	86%
4	Students who are less active in their groups	12	33%
5	Students who collaborate with other groups	29	81%
6	Students who are unable to complete assignments in groups given by the teacher	11	31%
7	Students who ask questions, responses to other groups	29	81%
8	Students who do not pay attention to the percentages of other groups	12	33%
9	Students who actively express ideas and thoughts in their groups	28	77%
10	Students who show cohesiveness in their groups	29	81%
11	Students who present their group's investigation results well	29	81%
12	Students end the presentation with a conclusion regarding the results of their group's investigation obtained	28	79%

Based on Table 12, observational data on student motivation and engagement during lessons indicate significant improvement. The average percentage of positive aspects is above 70%, while the percentage of negative aspects is below 50%. This suggests that using the economics module as a teaching material in the learning process has a positive impact on students.

The use of the economics module in the classroom has yielded several benefits. At the beginning of the lesson, the teacher motivates and encourages students to cooperate and help each other in solving problems from the module. This cooperative approach fosters a supportive learning environment. Observations show that the average percentage of positive behaviors exceeds 70%,

indicating high levels of student engagement. Students actively participate in group activities and discussions, driven by the content and structure of the module. Negative behaviors such as chatting and lack of focus have decreased, with percentages falling below 50%. The module's interactive and engaging content keeps students interested and involved in the learning process.

The teacher rewards groups with the highest scores, which boosts the morale and motivation of all students. This recognition creates a healthy competitive spirit among the groups, encouraging them to strive for better performance. The module encourages students to work together, fostering a sense of community and mutual assistance. Groups work collaboratively to solve problems, enhancing their understanding and retention of the material. The recognition of high-scoring groups inspires other groups to improve their performance. This leads to more interaction and support among group members, further enhancing the learning experience.

The economics module has proven to be an effective teaching tool that positively influences student motivation and engagement. The observational data from Table 12 confirms that the module fosters a positive learning environment by increasing student motivation and active participation, reducing negative behaviors during lessons, encouraging collaborative learning and interaction, and providing incentives that drive performance and engagement. Overall, the economics module is a valuable resource that enhances the quality of education by promoting active, motivated, and collaborative learning among students.

f. Learning Outcomes

Learning outcomes are the results obtained by students as a form of the final result of the motivation that students have during the learning process using the economics module which is used as a teaching material. The value of the test results that show the learning results after the implementation of learning using the learning module of management materials presented in the table.

Table 13. Statistics on Student Learning Outcome Values

No	Category	Statistics
1	Subject	36.00
2	Ideal Score	100.00
3	Highest score	100.00
4	Lowest score	50.00
5	Score Range	50.00
6	Average Score	84.31

From the table above, it shows that the average score of students' economic learning outcomes after using the learning module as a teaching material is 100 out of the ideal score of 100.0 and the lowest score is 50 with a score range of 50 which means that the economic learning outcomes achieved by students are spread from the lowest score of 50 to 100 or range from 50% to 100%. If the student learning outcome scores are grouped into five categories, the distribution of score frequencies are obtained as shown in the following table:

Table 14. Frequency Distribution and Percentage of Student Learning Outcome Scores

No.	Interval score	Category	Frequency	Percentage (%)
1	0 – 34	Very low	0.00	0.00
2	35 – 54	Low	1.00	2.78
3	55 – 64	Moderate	0.00	0.00
4	65 – 84	High	5.00	13.89
5	85 – 100	Very high	30.00	83.33

Based on the table above, it can be concluded that the economic learning outcomes of students by using learning modules on management materials as teaching materials for students are very high because the scores in the range of 85 – 100 are 30 people (83.33%).

Table 15. Completeness of Learning Outcomes

Score	Frequency	Percentage (%)
x < 79	5	13.89
x < 79	31	86.11

Based on the table above that out of 36 students, there are 5 students (13.89%) who have not completed their studies and as many as 31 students (86.11%) who have completed their studies. This indicates that the success indicators have been met. Because learning is said to be classically successful if at least 85% of students get a score above the minimum completeness score (≥ 79).

3.2. Discussion

The development of learning modules as teaching materials involves a comprehensive process encompassing several stages: Definition, Design, Development, and Dissemination. Based on observations, researchers concluded that a well-structured teaching material is essential to support and enhance learning motivation, ultimately leading to the desired learning outcomes, namely mastery of the subject matter.

The initial stage, known as the Definition stage, involves identifying common problems encountered in teaching economics. This stage begins with a curriculum analysis, followed by a needs analysis, and an examination of student requirements. These analyses are crucial to ensure that the module aligns with learning objectives and addresses existing gaps in the current teaching methods (Wiggins & McTighe, 2005).

Following the Definition stage, the Design stage is initiated, wherein an economics learning module is specifically designed for management topics. The format of the module includes an introduction, content sections, exercises, and a conclusion. The design aims to ensure that the module is comprehensive and user-friendly, providing a structured and engaging learning experience for students (François Gagné, 2005; Francoys Gagné, 1985; Renzulli, 2021).

Once the module design is finalized, the Development stage commences. During this stage, the module is developed and subjected to validation by experts in teaching materials and subject matter experts. The purpose of validation is to assess the feasibility and effectiveness of the learning module, based on feedback and revisions from these experts (Molenda, 2003). After incorporating the necessary feedback, the module is tested in a trial class consisting of Class X Social Sciences 1 with 8 students and then in a regular class setting of Class X Natural Sciences 1 with 36 students. This testing phase aims to identify the strengths and weaknesses of the management module and ensure it effectively meets educational goals.

The final stage is the Evaluation stage, where the entire economics learning module is thoroughly assessed. The primary goal of developing this learning module is to increase student motivation, which is indicated by improved learning outcomes and mastery of the subject matter (Bloom et al., 1984).

The feasibility of the economics learning module is determined through rigorous validation by experts. Four experts, comprising two teaching material experts and two subject matter experts, evaluate the module. The indicators assessed include content feasibility, language feasibility, presentation feasibility, and graphical feasibility. The overall validation results in an average score of 4.42, categorized as valid.

Teaching material experts and subject matter experts play a crucial role in this validation process. The teaching material validation focuses on presentation feasibility, which includes five indicators and achieves an average score of 4.60, categorized as valid. The module is structured with an introduction, content, and conclusion. The introduction includes module identity, basic competencies, description, module instructions, and objectives. The content section comprises material, individual exercises, and group exercises, while the conclusion includes summaries, evaluations, and references.

Graphical feasibility is another critical aspect of the validation process. This assessment includes nine indicators and achieves an average score of 4.22, categorized as valid. The graphical assessment reveals that the use of font variations scores lower compared to other indicators (Keller, 1987b, 1987a).

Content validation focuses on content feasibility, which includes nine indicators and achieves an average score of 4.50, categorized as valid. The content aligns with basic competencies, indicators, factual accuracy, and material clarity. Language feasibility, another key component, achieves an average score of 4.36. The highest score in this category is for the suitability with student development, indicating that the module can stimulate student motivation with varied exercises (Piaget, 1973).

Based on these comprehensive assessments, the module achieves an overall score of 4.42, categorized as valid, indicating that the economics learning module is a viable teaching material. High school students serve as the subjects for field trials of the developed learning module. Their responses are critical in determining the module's feasibility as teaching material. The student assessments focus on content, language, and graphical feasibility indicators.

The presentation feasibility aspect includes five indicators, with an average score of 4.41, categorized as valid. The highest score (4.47) is for the completeness of the presentation, categorized as very valid, while the lowest score (4.31) is for the sequence of the presentation, categorized as valid. Graphical feasibility is assessed through seven indicators, with the highest average score (4.61) for the attractiveness of the cover, categorized as very valid. The lowest average score (4.17) is for module size and font size, both categorized as valid. Content feasibility includes four indicators, all categorized as valid. The highest score (4.50) is for content completeness, while the lowest score (4.14) is for content attractiveness, both categorized as valid. Language feasibility is evaluated through five indicators, with the highest score (4.53) for the use of communicative language, and the lowest score (4.14) for the ability to stimulate motivation. Both scores fall within the valid category.

The effectiveness of the economics learning module in increasing learning motivation is also assessed. Student responses are measured based on the feasibility assessment of the module and the level of learning motivation. The research results indicate that the economics learning module is valid and can be effectively used in economics teaching, thereby increasing student motivation and leading to higher learning outcomes. Data from field trials in a real class setting (Class X with 36 students) show that students are highly motivated to achieve higher scores, with the highest average score (5.00) for the statement "I want to get scores above the minimum completeness criteria (KKM)." Additionally, the statement "I quickly get bored and sleepy during lessons" received a low average score (4.94), indicating a reduction in boredom (Clark & Mayer, 2011).

Observation during learning activities provides further insights. It reveals that 100% of students attended three meetings, 80% paid attention to the lesson, 86% sought teacher guidance for tasks, 34% were less active in groups, 81% cooperated with other groups, 31% struggled with group tasks, 81% asked questions, 33% did not pay attention to other group presentations, 77% actively expressed ideas, 81% showed group solidarity, 80% presented group investigation results, and 79% concluded presentations.

These findings collectively indicate that the economics learning module as teaching material can significantly increase student learning motivation. Finally, the learning outcomes after using the economics learning module demonstrate substantial improvements. A significant 83.33% of students scored between 85-100. When categorized, 31 students achieved mastery, representing 86.11% of the class. This indicates the success of the research and development process, as the learning process is considered successful if at least 85% of students achieve scores above the minimum mastery level (≥79). The marked improvement in student performance underscores the effectiveness of the economics learning module in enhancing learning motivation and achieving academic success (Stiggins, 2001).

4. CONCLUSION

The conclusion of the development of the economics learning module shows that the implementation process of the four stages: Definition, Design, Development, and Dissemination has successfully created structured and effective teaching materials. The module, validated by experts with an average score of 4.42, is deemed valid and suitable for use. Student assessments during field trials indicated high feasibility in presentation, graphics, content, and language. The use

of this module significantly boosts student learning motivation, reduces boredom, and enhances active participation in class activities. The implementation results exhibited substantial improvements in student performance, with the majority of students achieving high scores and surpassing the success criteria for mastery. Overall, the economics learning module has proven to be effective in enhancing student motivation and academic success. Its comprehensive design and validation process ensure the quality and suitability of the module for educational purposes.

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