

Developing Innovative Learning Module Based on Digital Learning to Facilitate Students' Literacy Activities at SMP Muhammadiyah Limbung, Gowa

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ABSTRACT: This study identifies essential topics and content for improving the reading comprehension skills of ninth-grade students at SMP Muhammadiyah Limbung. Using the ADDIE model, a digital e-module was developed and evaluated. The research revealed that the "Friendship" theme was the most engaging, while "Moral Dilemmas" attracted the least interest. The e-module effectively enhanced students' ability to identify literal elements in narrative texts, as shown by an N-Gain score of 0.58. Feedback indicated that the e-module increased student engagement, highlighting the importance of digital tools and teacher guidance in supporting independent learning.

KEYWORDS -Digital Learning, E-Module Development, and Reading Comprehension.

I. INTRODUCTION

The introduction of the paper should explain the nature of the problem, previous work, purpose, and the contribution of the paper. The contents of each section may be provided to understand easily about the paper. The Technology plays an important role in improving learning effectiveness, including in reading comprehension skills. According to (Anggraeni Dan Sole, 2018.), technological advances can improve the efficiency and effectiveness of the teaching and learning process. Integrating technology in reading learning has the potential to improve students' skills through interactive teaching materials, such as text, tables, audio, images, and animations (Laiyusa et al., 2020) Although technology has great potential, e-learning implementation often faces obstacles such as limited resources and technical issues (Zuhri et al., 2020), which affect the effectiveness of using technology in learning.

Preliminary data from SMP Muhammadiyah Limbung showed challenges in the innovative learning methods currently applied, such as students' lack of engagement and low motivation in learning narrative texts (Utami & Drajadi, 2024) This indicates the need for more relevant and interesting reading topics to improve students' comprehension. E-modules, as an innovative learning medium, are proposed to address these issues by providing more appropriate and interesting materials (Mahmudin et al., 2022).

The use of e-modules is expected to improve learning effectiveness by integrating educational literary works and innovative learning methods). It can help students understand abstract concepts better through interactive and project-based materials (Mahmudin et al., 2022), Previous research shows that PjBL-based e-

modules are effective in improving student engagement and learning outcomes, thus becoming a potential solution to the problems faced at SMP Muhammadiyah Limbung (Rini & Cholifah, n.d.), Student motivation is also a key factor in improving reading comprehension skills. emphasised that motivation can affect the effectiveness of learning, including in the context of reading comprehension. The integration of digital literacy, as a 21st century skill, can play an important role in designing materials that suit students' needs and maximise learning effectiveness (Suyoso & Nurohman, 2014).

Several references indicate that the topics needed to improve students' reading comprehension skills at SMP Muhammadiyah Limbung should focus on relevant and interesting material. Students' lack of reading interest is often caused by an unsupportive school environment and limited reading materials (Osman & Lee, 2014). Therefore, e-modules that integrate educational literary works can play an important role in improving student engagement and learning outcomes (Mahmudin et al., 2022).

By utilising digital technology and engaging materials, it is expected that students can be more motivated and effective in understanding narrative texts and literary works. E-modules that focus on interactive, project-based, and contextualised topics can significantly improve students' reading comprehension skills (Utami & Drajiati, 2024). The development of e-modules that suit the needs of students at SMP Muhammadiyah Limbung is important to achieve better learning objectives.

To determine the topics needed by students in reading comprehension skills at SMP Muhammadiyah Limbung, this research focuses on the creation of literary works as additional reading materials. Preliminary data shows that current innovative learning methods face challenges such as lack of student engagement and low motivation (Utami, 2024). The use of e-modules is proposed to address these issues and provide more interesting and relevant reading materials (Mahmudin et al., 2022). The importance of developing reading materials that are relevant to students' interests and teaching strategies that can increase their motivation and engagement in understanding narrative texts is the main focus. This research aims to identify appropriate and effective topics to improve students' reading comprehension skills at SMP Muhammadiyah Limbung (Hajrawati, 2012).

II. RESEARCH METHOD

In this study, the main instruments used include questionnaires, tests, and group discussions. The questionnaire was designed to collect data on students' and teachers' views regarding the topics required in reading comprehension skills at SMP Muhammadiyah Limbung. In addition, the questionnaire also included questions regarding the relevance of the topics taught and students' engagement in learning. Tests were used to measure students' reading comprehension skills before and after the use of e-modules covering topics identified as key needs. Group discussions were conducted to get in-depth feedback from students regarding their experience with the topics in the e-modules and to explore their challenges and recommendations regarding the most needed topics.

a. Data Collection

Data was collected through three main methods:

1. Questionnaires: Questionnaires were distributed to students and teachers to collect data on their perceptions of the topics taught in the e-module as well as the effectiveness of the topics in improving reading comprehension skills. The questionnaire included questions regarding the clarity of the material, the relevance of the topics, and the level of student engagement in the learning process.
2. Test: Tests were conducted to assess changes in students' reading comprehension skills related to the topics identified as key needs. The test was conducted before the implementation of the e-module (pre-test) and after the implementation of the e-module (post-test) to measure the effectiveness of the topics in the e-module on improving students' reading skills.
3. Group Discussion: Group discussions were held with students and teachers to gain further insight into their experiences with the topics in the e-modules. These discussions aimed to explore how the topics affected students' engagement and motivation, as well as get feedback on the strengths and weaknesses of the materials taught.

b. Analysis Techniques

The data analysis techniques used in this research include three main approaches:

1. **Questionnaire Analysis:** Data from the questionnaires were analysed quantitatively using descriptive statistics to obtain an overview of students 'and teachers' perceptions regarding the topics needed in reading comprehension skills at SMP Muhammadiyah Limbung. This analysis aimed to identify the topics that are considered most relevant and effective in improving students' reading skills.
2. **Test Analysis:** The results of the pre-test and post-test were analysed to measure the improvement in students' reading skills after the implementation of the e-modules covering the topics that have been identified as the main needs. The t-test or analysis of variance (ANOVA) was used to determine the significance of the difference between the pre-test and post-test results, so that it could be known which topics had the greatest impact on improving students' reading skills.
3. **Group Discussion Analysis:** Data from the group discussions were qualitatively analysed using the thematic analysis method. Key themes that emerged from the discussion transcripts were identified and analysed to gain an in-depth understanding of the topics that students and teachers considered most relevant and effective. This analysis helps reveal students' views on the topics that helped them the most in improving their reading comprehension skills, as well as suggestions for future improvements to the e-module.

III. RESULT

The analysis phase is the initial stage conducted in this research, aiming to gather information related to the learning activities and their obstacles implemented in class IX at SMP Muhammadiyah Limbung. The information is obtained using two methods: observation and interviews with teachers at the school. The information gathered includes an analysis of Core Competencies (KI) and Basic Competencies (KD) in the English subject, the learning resources used, and the skill indicators to be achieved. The information obtained indicates that during the learning process, English textbooks provided by the school are still being used, along with conventional teaching methods such as lectures and discussions. This has resulted in students not being able to improve their learning outcomes and experiencing a decline, particularly in cognitive aspects such as critical thinking skills and digital literacy. Field observations were conducted in April 2024 by examining the conditions and facilities available at the school and distributing questionnaires related to students' favorite narrative text topics.

The results of the analysis of students' reading favorites are as follows:

The students are asked to choose 10 topics from the 20 points given according to what you like by giving a 'Tick Mark' in the selection column.

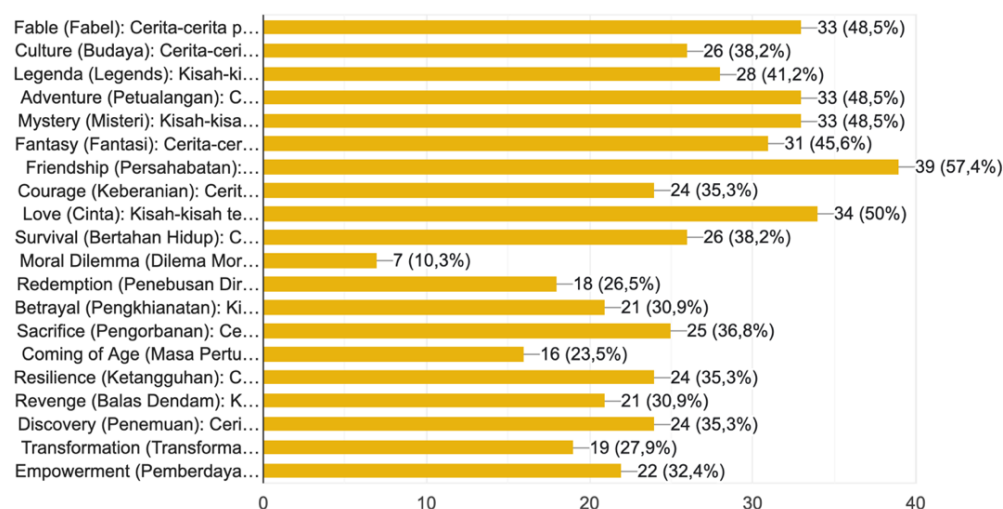


Fig. Students' Needs

Based on the various story categories selected by checkbox, the Friendship category took the top spot with 39 votes (57.4%), highlighting the importance of strong relationships and shared adventures. The Fables category, which contains moral messages with animal characters, and Adventure, which is full of action and challenges, both attracted interest with 33 votes (48.5%). Mystery, with puzzles that need to be solved, and Love, which depicts a moving romance, also received 33 and 34 votes (48.5% and 50%) respectively. Fantasy with its fantastic worlds, and Culture depicting the traditions of a society, followed with 31 and 26 votes (45.6% and 38.2%). Survival Stories and Legends received 26 and 28 votes (38.2% and 41.2%) respectively, while Resilience, which highlights the ability to bounce back from failure, gained 24 votes (35.3%). On the other hand, the category with the least interest was Moral Dilemmas, which features inner conflict, with only 7 votes (10.3%), indicating a lower preference for stories with complex moral themes. Overall, these results reflect learners' tendency to seek out stories that offer strong relationships, adventure, and inspirational life lessons.

This was followed by interviewing English teachers about the implementation of English learning in the ninth grade at SMP Muhammadiyah Limbung. The results of the observations indicated that the school still showed interest in the topics chosen by students in learning narrative texts. However, facilities such as the library were categorized as good. The interview results revealed that the learning activities carried out by the teachers still relied on textbooks provided by the school, and the narrative text material was presented by the teacher in the form of PowerPoint presentations. The methods frequently used in learning included teacher-centered lectures and discussions conducted by students after reading the textbooks.

Furthermore, analysis is carried out based on the information obtained to use English E-books on narrative text material which is expected to help students' learning in improving their learning abilities, especially in determining literal elements in reading. The analysis stage carried out includes several analyses, namely student analysis, task analysis, concept analysis, and specification of learning objectives.

1. Learner Analysis

Student analysis is carried out to determine the characteristics of students in learning activities so that there is a match between the characteristics of students and the narrative text E-book product. The results of the analysis of students who will be research subjects are class IX students with a level of cognitive understanding which is expected to be in the logic and abstract thinking phase. Apart from that, students' tendency to use technology such as PCs/Laptops and Smartphones shows the suitability between the characteristics and the product to be developed.

2. Task Analysis

Task analysis was carried out by reviewing the Core Competencies (KI) and Basic Competencies (KD) in accordance with the 2013 Curriculum implemented in the school.

3. Specification of Learning

Learning specified from task analyses and concept analyses. The learning activities use a digital-based learning model that is conducted independently in accordance with the e-module function. The learning activity consist of:

Learning Activity

- a) Through learning using the digital-based narrative text e-module, students can determine the literal elements in the reading passage.
- b) Through learning using digital-based narrative text e-module, students can apply learning objectives contained in the reading passage.
- c) Through learning using digital-based narrative text e-module, students can apply the social function contained in the reading.
- d) Through learning using digital-based narrative text e-module, students can apply interesting reading according to the topics that have been learnt.

IV. Conclusion

In the context of reading skill development at SMP Muhammadiyah Limbung, the topic 'Friendship' stands out as the most needed. Friendship-centered narratives resonate with students' everyday lives, featuring strong interpersonal relationships and adventures that motivate engagement in learning. Anggraeni & Sole (2018) highlight that incorporating information and communication technology can enhance learning effectiveness and efficiency, making the learning experience richer for students.

While 'Friendship' is crucial, other topics also offer significant educational benefits. For instance, 'Fairy Tales' convey moral values through simple yet impactful stories, and 'Adventure' captures students' imaginations with dynamic narratives (McKinnon, 2018; Miller, 2020). The topic of 'Mystery' develops critical thinking through complex puzzles (Jones, 2019), while 'Love' aids in understanding emotional connections and empathy (Green, 2021). 'Fantasy' broadens students' imaginative horizons (Tolkien, 1966), and 'Culture' deepens their understanding of diverse traditions (Banks, 2006). Additionally, 'Survival Stories' offer lessons in mental resilience and coping mechanisms (Roberts, 2017), 'Legends' convey rich cultural values (Campbell, 1968), and 'Resilience' teaches the strength to overcome challenges (Masten, 2014). Lastly, 'Moral Dilemmas' encourage ethical thinking and decision-making (Kohlberg, 1981).

Laiyusa et al. (2020) stress the importance of integrating digital literacy into 21st-century education, encompassing skills in media, information technology, and communication. Therefore, topics like 'Friendship,' when combined with digital elements such as interactive videos or educational apps, can be particularly effective in enhancing both reading and digital literacy skills. Research by Zuhri et al. (2020) suggests that e-learning platforms with engaging content significantly boost student participation and learning outcomes. Selecting relevant and appealing topics like 'Friendship' not only aids in text comprehension but also fosters greater overall engagement in the learning process.

This study examined the specific topics needed by students to enhance their reading comprehension skills at SMP Muhammadiyah Limbung, developed a narrative e-module tailored to these needs, and evaluated its effectiveness. The research findings offer crucial insights into which topics are most effective for engaging students and improving their understanding of narrative texts. The e-module was designed using various software to create interactive and engaging content that aligns with the identified needs. Based on the research results, the following conclusions are drawn regarding the most relevant topics for enhancing students' reading comprehension skills at SMP Muhammadiyah Limbung.

From the results of the student needs analysis, it was found that the story category 'Friendship' received the most votes (39 votes or 57.4%), showing the importance of strong relationships and shared adventures. 'Fables and "Adventure"' received 33 votes each (48.5%). The 'Mystery' and 'Love' categories also attracted interest with 33 and 34 votes respectively (48.5% and 50%). The 'Fantasy' and 'Culture' categories received 31 and 26 votes respectively (45.6% and 38.2%). 'Survival Stories' and "Legends" received 26 and 28 votes (38.2% and 41.2%), while "Resilience" received 24 votes (35.3%). 'Moral Dilemmas' received the least votes with only 7 votes (10.3%), indicating a low preference for stories with complex moral themes.

These results reflect students' tendency to seek out stories that offer strong relationships, adventure, and inspirational life lessons. Interviews with English teachers at SMP Muhammadiyah Limbung showed that although the school still shows interest in students' chosen topics, facilities such as the library are good. Teaching and learning activities still rely on textbooks provided by the school, with narrative text material delivered through PowerPoint presentations. The methods often used are teacher-led lectures and discussions by students after reading the textbook.

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