

Analysis of The Need for an Ethno-Steam-Based Learning Module to Improve Narrative Text Writing Skills

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Abstract. This research is motivated by the low ability of fourth-grade elementary school students to write narrative texts. Many students still have difficulty expressing ideas or themes, structuring a coherent flow, determining characters and settings, and choosing language styles that comply with Indonesian grammar rules. The learning activity process applies a conventional learning model with the lecture method, and the teaching materials used by the teacher are limited to school textbooks. This condition is one of the causes and obstacles for students in developing their imagination and creativity during the writing process. Based on these issues, this research aims to analyze the need for an Ethno-Steam-based learning module to improve the narrative text writing skills of fourth-grade elementary school students. The research method used is Research and Development (R&D) with the ADDIE method. However, this research is only limited to the Analysis stage. Research data was obtained from interviews, analysis of teaching material documents, and initial observations of learning implementation. The analysis results show that a learning module with an Ethno-Steam approach is highly needed to improve the narrative text writing ability of fourth-grade elementary school students.

Keywords: Needs Analysis, Learning Modules, Writing, Narrative Text

INTRODUCTION

Indonesian was officially recognized as the 10th language at the UNESCO General Conference held on Monday, November 20, 2023, at UNESCO Headquarters in Paris, France (Cabinet Secretary of the Republic of Indonesia, 2023). This recognition shows that Indonesian has a strategic role as a means of building relationships between nations. Therefore, it can be understood that Indonesian is very important to learn and teach from the elementary education level. In the independent curriculum, language skills are the focus of Indonesian language learning, as stated in the Decision of the National Standards, Curriculum, and Assessment Agency Number 008/KR/2022 regarding Indonesian language learning outcomes (BSKAP, 2022). However, writing skills have remained a major problem in Indonesian language learning (Widhiyanto et al., 2024). Based on interviews conducted with teachers at one of the public elementary schools in Cimahi City, it was revealed that writing skills are one of the most difficult skills to teach. Theoretically, students can understand the theory of writing, but in practice, writing is not something that is easy to do (Hartati, 2021). This is the problem that occurs in narrative text writing instruction for 4th-grade elementary school students.

Based on initial observations made by the author, Indonesian language learning, particularly for narrative text material, currently still relies on textbooks without any additional modules. The learning process is still teacher-centered (Teacher Learning Center), resulting in a less than optimal learning process and impacting students' low ability to write narrative texts. During the learning process, the teacher only explains writing concepts and conveys the elements of narrative text, then gives assignments to the students. Ideally, in learning activities, there should be learning materials in the form of learning modules that students can use to increase their knowledge and understanding, combined with effective and efficient learning approaches to facilitate the learning process.

Effective learning processes can be created with the use of learning tools or devices. One such learning tool or device is the module (Febriyana et al., 2022). Modules are systematically arranged using language that is easy for students to understand, according to their level of knowledge and age, so that they can learn independently with minimal assistance or guidance from the teacher (Sitepu & Amelia, 2021). Modules are designed to be used independently, and are especially optimized by providing support to students thru content enrichment or delivering the method of teaching material modules (Simons et al., 2018). A module is a learning medium containing a complex collection of teaching materials presented in a "self-instructional" format. This means students have the ability to study the module independently without the help of a teacher (Alimin et al., 2020). Another opinion, according to (Famulaqih & Lukman, 2024), is that a learning module is a set of teaching materials presented in a structured manner and can be used for learning with or without a teacher. Therefore, teaching materials must be presented in language that is easily understood by students, in accordance with their level of knowledge.

This module is one of the components of the learning system that plays an important role in helping students achieve learning objectives and learning outcomes. With modules, the implementation of education can be smoother. Teachers can effectively manage learning activities and maximize understanding of learning. Developing an ethno-steam-based learning module can be one solution to address the low narrative text writing ability of fourth-grade students. Both students and teachers certainly need a guidebook to facilitate the learning process.

STEAM, which stands for Science, Technology, Engineering, Arts, and Mathematics, is a breakthrough in education that integrates several scientific elements into a single learning concept. (Dalil Rohman et al., 2022). STEAM was born and played a role after the concept of

STEM (Science, Technology, Engineering, and Mathematics) was first defined. STEAM was born and emerged after the addition of the art discipline, which was integrated into STEM (Parniati et al., 2021). STEAM (science, technology, engineering, art, mathematics) is an approach that develops core competencies by combining knowledge, skills, and attitudes such as investigation, critical thinking, problem-solving, teamwork, communication, creativity, and communication thru experiential learning (Thoma et al., 2023).

The Ethno-STEAM approach is an approach that integrates local culture into the learning of science, technology, engineering, arts, and mathematics, providing contextual and interdisciplinary learning strategies (Azizah et al., 2025). Beside fostering knowledge in these five disciplines, STEAM also helps children think critically, broadly, and solve problems. STEAM learning is an acronym for Science, Technology, Engineering, Art, and Mathematics. STEAM is known in Indonesia as Sciences (IPA), Technology (science and technology), Engineering (engineering), Art (art sciences such as music, painting, and crafts), and Mathematics (mathematics) (Istiqomah et al., 2024). The Ethno-STEAM learning model also encourages cross-cultural learning, mutual understanding, and appreciation for cultural diversity (Sitepu & Amelia, 2021).

In this approach, students will use the concept of ethno-STEAM as a reference when writing narrative texts, taking into account their surrounding conditions and environment. This is intended to make students feel closer to the material they will be writing, so they can write narrative texts with more complete detail and concreteness. Local culture not only reflects cultural heritage but is also key in shaping an independent curriculum that reflects freedom in learning (Indriyanti et al., 2024). Steam learning is beneficial because it allows students to use their knowledge and skills from all subjects to support project tasks. Students are encouraged to recognize and respect their own skills as well as the interests and needs of others. Students learn how to adapt to their environment (Saprudin, 2022). STEAM learning will produce different and unexpected works from each individual or group. Additionally, collaboration, cooperation, and communication will emerge in the learning process because this approach is carried out in groups (Nurfadilah & Siswanto, 2020). The Ethno-STEAM learning approach is encouraged to utilize available resources and engage in activities that leverage the region's strengths, generating income while preserving the culture, traditions, and resources that reflect the region's unique excellence (Indrawan et al., 2025). The Ethno-Steam approach has been widely used in science education and other fields, but it is less utilized in writing

instruction. The development of this ethno-STEAM learning module will utilize West Javanese local culture as a tool to improve students' narrative text writing abilities. The hypothesis in this study is: How are the learning module needs of fourth-grade students for narrative text writing material in the context of ethno-STEAM?

METHODOLOGY

This research uses a needs analysis research design, which falls under the category of qualitative descriptive research with a Research and Development (RnD) approach. The aim is to produce a specific product and test its effectiveness. Research and development have structured steps. Therefore, there are various research and development models that can be used to develop an educational system, model, or product according to educational design needs (Fayrus et al., 2022). This study only describes one stage of the ADDIE method, namely Analyze. The analysis stage aims to determine the needs of teachers and students in developing learning modules.

The data source in this study is one fourth-grade teacher from a public elementary school in Cimahi City. The initial needs analysis in this study is presented in the form of an analysis of teachers' and students' needs for teaching materials in the form of narrative text learning modules for fourth grade elementary school. The data collection techniques for this needs analysis are interviews, document review, and observation of teaching implementation. After that, the author reduced the data obtained and concluded the data related to the research on the needs analysis for the development of an ethno-STEAM learning module. The selection of research subjects from fourth-grade students was done by considering the relevance of their characteristics to the objectives of this study, which is to develop a learning module to improve narrative text writing skills.

RESULTS AND DISCUSSION

Result

Teacher Interview Results

Data from interviews with fourth-grade elementary school teachers revealed that the curriculum is currently being implemented in schools. However, there are several obstacles encountered in the process of teaching narrative text writing, one of which is that students are not yet able to express their ideas in written form. Consequently, students' narrative text writing abilities are in the moderate category. The learning activities carried out by teachers have not yet applied approaches, models, methods, and strategies that encourage students to improve

their narrative text writing skills. Passive learning activities lead to low student ability, interest, and motivation. The main learning resources provided by the school are limited to the 2021 revised Indonesian language textbooks; no additional books are available to support students' skill development. Thus, teachers hope that the availability of learning modules can be integrated with something close to the environment, one of which is local culture.

Initial Observation Results of Learning

Based on the results of initial observations of the implementation of narrative text writing instruction, it was found that the learning process was limited to the use of textbooks provided by the school, with the standard textbook being the 2021 Revision of the Merdeka Curriculum, without any learning modules that could encourage the improvement of students' narrative text writing abilities. Teachers place more emphasis on direct delivery of material and introducing elements of narrative texts without integrating diverse media. In the initial stages of the learning activity, the teacher had not yet conveyed the objectives to be achieved. In the core activity stage, the teacher still applies conventional teaching methods, namely lectures, using the Teacher Learning Center model. In the closing activity, students were asked to write a story as part of the learning evaluation process, however, the evaluation process was not carried out ideally as stated in the teaching module. Thus, this indicates that the learning process has not optimally supported the development of narrative text writing skills.

Results of the Teaching Module Document Review

The document review of the teaching modules used by the teacher shows that the modules are incomplete and not in accordance with the deep learning-based teaching modules implemented in the Merdeka Curriculum. There are some elements that are not available, such as time allocation for the learning approach and learning dimensions. The material is organized systematically according to learning outcomes, but the learning activities, especially in the core learning scenario section, do not fully accommodate creative and contextual activities. Learning evaluation is also inadequate in providing feedback that optimally guides the development of students' writing and creative thinking skills.

Discussion

The availability and creation of learning modules that are both comprehensive in content and contextually relevant to students' lives are crucial, according to the findings of teacher interviews, preliminary learning observations, and document

analysis of teaching modules. Low student involvement and inventiveness, especially when it comes to creating narrative texts, are the results of the existing learning circumstances, which still heavily rely on traditional learning models with lecture techniques. Students require instructional resources that are both aesthetically pleasing and varied and that can encourage creativity, curiosity, and self-assurance in their ability to write.

The field of education must use a variety of strategies to solve issues, one of which is to offer a method of instruction that prioritizes practical experience. This method is inextricably linked to the play environment's role as an object-based direct learning vehicle. The Ethno-STEAM approach, which incorporates regional culture into STEAM learning activities, is one strategy that can be utilized to raise the caliber of instruction.

The availability and creation of learning modules that are both comprehensive in content and contextually relevant to students' lives are crucial, according to the findings of teacher interviews, preliminary learning observations, and the examination of teaching module materials. Low student involvement and originality, especially when producing narrative texts, are the results of the existing learning conditions, which still mostly use traditional learning models using lecture techniques. Students require instructional resources that are both aesthetically pleasing and varied and that can encourage creativity, curiosity, and self-assurance in writing. Providing a learning strategy that prioritizes practical experience is one of the many strategies that the education sector must implement to solve an issue. This method is inextricably linked to the play environment's role as an object-based direct learning vehicle. The Ethno-STEAM approach, which incorporates regional culture into STEAM learning activities, is one strategy that can be utilized to raise the caliber of instruction.

In order to make the learning process more contextual, relevant to students' real-life experiences, and personally meaningful, teachers believe that learning modules that combine visual learning materials based on local culture are necessary. This supports the idea (Tomlinson, 2014) that instructional materials that are culturally relevant might boost students' motivation in learning because they sense an emotional connection to the subject matter. Additionally, research results (Creswell & Creswell, 2018) show that including cultural content into instruction can boost students' willingness to learn

and enhance academic performance through a more profound emotive and cognitive approach. The ethno-STEAM approach is thought to be a pertinent educational innovation for removing obstacles in narrative writing teaching because it integrates cultural elements (ethno) with the concepts of science, technology, engineering, arts, and mathematics (STEAM).

Integrating the STEAM (Science, Technology, Engineering, Arts, and Mathematics) approach is one effective solution for addressing low narrative text writing skills because it utilizes various disciplines that encourage creative, critical, and collaborative thinking skills. This approach provides a contextual and relevant learning environment through projects and explorations that allow students to develop ideas and expressions more broadly and meaningfully. Ethno-STEAM learning is encouraged to connect scientific and technical concepts with art and engineering experiences, enabling students to design and communicate complex and creative narrative stories.

Other research shows that STEAM integration can improve literacy skills, including writing. This approach will provide students with the opportunity to expand their vocabulary, organize ideas systematically, and develop creativity through a holistic interdisciplinary approach. In this learning process, the teacher acts as a facilitator who guides students in developing innovative thinking, which is essential for effective narrative text writing (Vernita et al., 2025)

CONCLUSION

Based on the results of observations, interviews, and document analysis, it is evident that the currently available teaching materials do not fully support the development of skills for writing narrative texts. The Ethno-Steam learning module is highly necessary as one solution to bridge existing problems. This finding makes a significant contribution to the development of narrative text learning materials, but it doesn't focus solely on cognitive aspects; it also considers local cultural values integrated with a holistic Ethno-STEAM approach.

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