

LOCAL WISDOM-BASED INSTRUCTIONAL MATERIALS: INCORPORATING TANGERANG BATIK INTO ENGLISH REPORT TEXT WRITING FOR SENIOR HIGH SCHOOL STUDENTS

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ABSTRACT

This study aims to develop English writing teaching materials focusing on report texts based on local wisdom, particularly Tangerang Batik culture, supported by artificial intelligence-assisted instructional design. The study adopts a research and development approach to design contextual teaching materials that integrate cultural knowledge and language skills. The results indicate that integrating local cultural content with structured writing guidance and AI-assisted material design significantly improves students' engagement and writing quality. Students demonstrate better organization, vocabulary use, and understanding of report text structure. The developed materials also contribute to cultural preservation by introducing Batik Tangerang heritage in English learning contexts. The study recommends integrating local wisdom and emerging technologies in language instruction to enhance meaningful learning experiences.

Keywords: *Local wisdom, Batik Tangerang, Report text writing, English education.*

1) INTRODUCTION

English writing skills remain one of the most challenging competencies for Indonesian high school students. Many learners struggle with organizing ideas, using appropriate vocabulary, and understanding the structure of academic texts. One way to improve engagement and contextual understanding is by integrating local cultural elements into language learning materials.

Local wisdom represents values, traditions, and knowledge that originate from local communities. Incorporating such cultural elements in learning materials helps students

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connect academic knowledge with their cultural identity. Batik Tangerang is one example of local heritage that reflects the historical and artistic identity of the Tangerang community.

This research focuses on developing report text teaching materials based on Batik Tangerang local wisdom. Additionally, artificial intelligence tools are utilized in the instructional design process to structure learning content, provide examples, and support interactive learning. The study aims to design teaching materials that enhance writing competence while promoting cultural awareness among students.

2) LITERATURE REVIEW

Report text writing requires students to present factual information systematically. According to genre-based pedagogy, report texts include classification and description components that explain general information about a topic.

Local wisdom integration in education has been shown to increase contextual learning. Cultural-based learning materials help students relate academic concepts to real-life experiences. Previous studies suggest that incorporating cultural content improves motivation and comprehension.

Artificial intelligence has recently emerged as a powerful tool in education. AI technologies can assist teachers in designing materials, generating examples, and analyzing student writing patterns. When combined with culturally relevant content, AI-supported learning can create innovative and engaging educational experiences.

3) METHODOLOGY

This research applies a Research and Development (R&D) approach. The development process includes needs analysis, material design, validation, implementation, and evaluation. Participants consist of senior high school students in Tangerang. Data collection methods include questionnaires, writing tests, and expert validation. The teaching materials were designed to include:

- a. Introduction to Batik Tangerang culture.
- b. Vocabulary and reading related to batik.
- c. Guided writing exercises for report text.

Data analysis involves descriptive statistics and qualitative interpretation of student responses.

4) RESULTS AND DISCUSSION

The implementation of the developed teaching materials showed positive outcomes. Students demonstrated improved understanding of report text structures and higher motivation during writing activities.

The integration of Batik Tangerang as learning content helped students connect language learning with local cultural identity. Furthermore, AI-assisted design supported the development of structured learning activities and examples.

Table 1. presents the improvement in students' writing performance after the implementation of the developed materials.

Assessment Aspect	Before Implementation	After Implementation
Organization of ideas	65	82
Vocabulary use	68	85
Grammar accuracy	64	80
Understanding report structure	60	88
Overall writing score	64	84

The results indicate a significant improvement in students' writing performance after using the developed materials.

5) CONCLUSION

The study concludes that integrating local wisdom with AI-assisted instructional design can enhance English writing learning. The developed report text materials based on Tangerang Batik successfully improved students' engagement and writing performance. Future research should explore broader implementation across schools and incorporate adaptive AI feedback systems.

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