

Submission date: 20-Oct-2025 11:05AM (UTC+0900)

Submission ID: 2589758168 **File name:** GEM.docx (1.09M)

Word count: 6424 Character count: 38029

Development of GEM (Go Explore Malang) to Enhance Understanding of Natural Tourism Potential in Board Game **Based Social Studies Learning**

Bintang Muhammad Sahara Efendi^{1*}, Arista Wati², Bima Wahyu Pratama³, Tuti Mutia⁴, Ravinesh Rohit Preto d⁵

1*.2.3Program Pendidikan Profesi Guru, Sekolah Pascasarjana, Universitas Negeri Malang, Malang,

Indonesia

⁴Program Studi Pendidikan Geografi, Fakultas Ilmu Sosial, Universitas Negeri Malang, Malang, Indonesia

⁵Social Sciences Department, School of Arts and Humanities, Fiji National University, Suva 0069-004, Fiji

Article Info

Article history Received Jul 14, 2025 Accepted Aug 12, 2025 Published Online Oct 20, 2025

Keywords: Board Game Game-Based Learning Instructional Media Social Studies Learning Natural Tourism Potential

ABSTRACT

This study aims to develop an innovative learning medium called GEM (Go Explore Malang), a board game designed to enhance students' understanding of natural tourism potential in the Greater Malang area. The research seeks to improve contextual and engaging Social Studies learning by integrating local content with a game-based approach. The clopment employed the ADDIE model, consisting of Analysis, Design, Development, Implementation, and Evaluation stages. The product was validated by material and media experts and tested on 22 teen ninth-grade students at SMP Negeri 13 Malang. Data were collected using expert validation sheets, student response questionnaires, and learning achievement tests, and analyzed using descriptive statistics. The validation results indicated that GEM achieved 95.71% feasibility from material experts and 81.33% from media experts, categorized as "highly feasible." Field implementation showed active student participation, increased motivation, and a perfect learning mastery rate. The game effectively enhanced geographical literacy, collaboration, and critical thinking skills through enjoyable play-based interaction. The study was limited to a small sample from one school; future research should expand the testing scope and explore digital adaptations of GEM for wider implementation. GEM can be used as an alternative learning medium that contextualizes S 1 Studies content, strengthens local awareness, and promotes 21st-century competencies such as collaboration and problem-solving. This research introduces a novel integration of local tourism content into a board game framework, providing a "glocal" innovation that bridges local identity with global ning strategies in Social Studies education.pertama.

This is an open access under the CC-BY-SA licence



Corresponding Author:

Bintang Muhammad Sahara Efendi, Program Pendidikan Profesi Guru, olah Pascasarjana,

Universitas Negeri Malang, Malang, Indonesia

Jalan Semarang No.5, Lowokwaru, Kota Malang, Jawa Timur, Indonesia

Email: bintang.muhammad.2331747@students.um.ac.id

How to cite: Efendi, B. M. S., Wati, A., Pratama, B. W., Mutia, T., & Prasad, R. R. (2025). Development of GEM (Go Explore Malang) to Enhance Understanding of Natural Tourism Potential in Board Game Based Social Studies Learning. Jurnal Riset Dan Inovasi Pembelajaran, 5(3), 970-986. https://doi.org/10.51574/jrip.v5i3.3782

Development of GEM (Go Explore Malang) to Enhance Understanding of Natural Tourism Potential in Board Game Based Social Studies Learning

1. Introduction

A common phenomenon in Indonesian education indicates that although students' literacy and numeracy achievements have improved, the quality of understanding in certain subjects including Social Studies still faces significant challenges. According to data from the 2024 National Assessment, only 70.3% of junior high school students reached the minimum literacy competency, and 68.1% achieved the minimum numeracy standard (Kemendikbudristek, 2024). Meanwhile, the 2023 Education Report revealed that only 59% of students possessed literacy skills above the minimum standard, and 40.6% did so in numeracy. A survey conducted by Puspendik (2022) also found that more than 60% of students considered Social Studies learning uninteresting and irrelevant to their daily lives. This issue is exacerbated by the dominance of lecture-based approaches and the lack of innovation in utilizing learning media. Therefore, more contextual and interactive media are needed to enhance students' engagement and understanding of Social Studies materials.

Social Studies learning aims to shape students into critical, active, and environmentally conscious citizens (Efendi & Wiradimadja, 2024; NCSS, 1994; Wiradimadja, 2021). In practice, however, Social Studies education often faces various contextual challenges (Dewi et al., 2025). One of these challenges is the gap between the learning materials and students' daily lives. Abstract content and a lack of diverse teaching approaches can lead to low interest and poor understanding among students toward the subject matter (Agusta et al., 2025; Efendi & Insani, 2024; Siregar, 2025). Therefore, Social Studies learning needs to be developed to become more contextual and connected to students' real-life experiences, particularly those related to their local environment. Various efforts have been made to improve the quality of Social Studies learning, one of which is through the introduction of innovative and interactive learning media. Appropriate learning media can not only enhance conceptual understanding but also foster students' emotional and cognitive engagement (Srimuliyani, 2023). In the context of 21st-century education, the use of Game-Based Learning (GBL) has emerged as an appealing alternative that accommodates the learning needs of the current generation (Yusuf, 2023).

Game-Based Learning (GBL) is an instructional model that utilizes the principles and elements of games to achieve learning objectives. This concept has evolved since the early 2000s and has become increasingly relevant in the context of 21st-century education due to its ability to effectively integrate entertainment and education. According to Yusuf (2023), GBL can enhance student engagement, foster curiosity, and strengthen conceptual maskey through enjoyable and challenging learning experiences. Furthermore, research by Wijaya et al. (2023) indicates that the use of games as learning media, including board games, can significantly improve students' motivation and learning outcomes. Therefore, the integration of media such as board games serves as a potential intervention to address the challenges of Social Studies learning, which is often perceived as monotonous and impractical.

Board games, as a form of non-digital learning media, have advantages in creating an enjoyable, competitive, and collaborative learning atmosphere (Putra & Mansoor, 2023). Through board games, students not only learn Social Studies concepts thematically but also develop critical thinking, problem-solving, and teamwork skills. In the local context, the development of board games that highlight regional potential such as natural tourism in the Greater Malang area can strengthen the connection between Social Studies materials and students' surrounding environments. This aligns with the spirit of contextual learning and the

reinforcement of national character education. Game-based media, including board games, can enhance students' motivation, active participation, and conceptual understanding across various subjects, including social studies (Dahlena & Mulyana, 2022; Wijaya et al., 2023). Several studies have also highlighted the effectiveness of board games in developing geographical literacy, environmental awareness, and social values through educational gameplay mechanisms (Hidayati, 2020; Kurniawati et al., 2021). However, the development of similar media that integrate local content and are designed using systematic approaches such as the ADDIE model aimed at ensuring quality and effectiveness in the learning process remains limited.

To strengthen the urgency of developing this medium, a needs analysis conducted among prospective users junior high school students in Indonesia revealed a pressing need for more interactive and contextual Social Studies learning media. According to a study on the analysis of digital learning media needs for junior high school students (Kurniasih et al., 2024), approximately 75% of students stated that conventional media are uninteresting and that they require game-based approaches to increase learning interest, particularly in topics related to needs and local potential. This finding is supported by a study on the needs analysis for developing educational game media (Kusmirah et al., 2025), which revealed that the pedagogical, technical, cognitive, and aesthetic aspects of social Studies media remain low, with more than 65% of student respondents indicating the need for engaging and life-relevant learning media. This theory aligns with the concept of Game-Based Learning (GBL), which has been proven effective in improving Social Studies learning outcomes, as demonstrated by research on the effectiveness of the Game-Based Learning model on students' learning outcomes in seventh-grade Social Studies (Maharani et al., 2024), where the use of GBL increased motivation by up to 30% and conceptual understanding by 25%. These data reinforce the research gap, namely the lack of non-digital, game-based media integrated with local context thereby emphasizing the urgency of developing media such as GEM to fill this gap.

he novelty of this study lies in the integration of an educational board game with the local context of natural tourism in the Greater Malang area, which has not been specifically explored before. Although there have been developments of board games with historical or heritage themes in Malang City (Farhandika & Hanaru, 2024; Wibowo, 2023), the focus on natural tourism potential along with conservation and socio-economic aspects through an interactive board game represents a new innovation. This distinguishes it from previous studies that generally focused on digital GBL or non-local themes. Therefore, this research contributes to a glocalization approach in Social Studies education, where the local values of the Greater Malang area are integrated with global gene elements to enhance students' environmental appreciation and geographical literacy. Based on the bove statement, this development research aims to develop the GEM (Go Explore Malang) learning media in the form of a board game as an innovative alternative in Social Studies education. The development of this medium is not only intended to enable students to identify the natural tourism potential in the Greater Malang area but also to encourage them to analyze its benefits and conservation efforts through a collaborative and enjoyable approach. The urgency of this research lies in the importance of providing learning media that are locall relevant, educational, and easily implemented in the classroom, while also making a tangible contribution to improving the quality of Social Studies learning at the junior high school level.

2. Method

This study was conducted using the ADDIE approach, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. This approach was chosen because it is well-suited for developing and testing a learning product in this case, Social Studies

ORIGINA	ALITY REPORT	
1 SIMILA	2% 10% 9% 5% student F	PAPERS
PRIMAR	Y SOURCES	
1	Submitted to Universitas Muria Kudus Student Paper	3%
2	fkip.unri.ac.id Internet Source	1%
3	ejournal.joninstitute.org Internet Source	<1%
4	Arista Nufus Afifah, Sri Sukasih. "Ethnoconstructivism-Based E-module: Design, Implementation, and Contextualization of Local Wisdom-Based Procedural Text Learning in Elementary Schools", Jurnal Pendidikan Progresif, 2025 Publication	<1%
5	Desiana Rizki Retno Pratiwi, Moh. Fathurrahman. "Development of a Monopoly-Based Educational Game to Enhance Elementary Students' Understanding of Indonesia's Geographical Location", Jurnal Pendidikan Progresif, 2025 Publication	<1%
6	www.mdpi.com Internet Source	<1%
7	Retno Febrianti, Pinkan Amita Tri Prasasti, Naniek Kusumawati, Nico Irawan. "Development of SETS Based E-book Teaching Materials in Strengthening Science Literacy in Elementary School", IJECA (International	<1%