THE DEVELOPMENT OF CULTURAL LITERACY FOR INDONESIAN FOR FOREIGN SPEAKERS (BIPA) STUDENTS THROUGH RPG GAMES WITH A GAMIFICATION APPROACH

Renda Yuriananta¹
Imam Suyitno²
Imam Agus Basuki³
Gatut Susanto⁴

ABSTRACT

Purpose: This research aims to describe the BIPA learning process using RPG games with a gamification approach to enhance the cultural literacy of BIPA students.

Method: Qualitative methods were employed in this study, which was conducted in the BIPA KNB program at Universitas Brawijaya. Three students and one teacher participated in the study. Data was collected through observation and interviews. The observation aimed to understand the students’ learning process through RPG games, while the interviews were conducted to assess the response of BIPA students towards game-based learning. The games used in this research are the Legend of Malang, which incorporates Malang culture.

Results and conclusion: The study revealed that the learning process began with the development of a schema for Malang culture. Subsequently, students were tasked with playing the Legend of Malang games in the classroom under the teacher's supervision. At the end of the learning session, a question-and-answer session was conducted to reinforce the learning material.

Research implications: The findings demonstrated that game-based learning effectively enhanced students' comprehension of Malang culture as the learning session was both enjoyable and meaningful.

Originality/value: This research contributes to the field of BIPA learning by demonstrating the effectiveness of incorporating RPG games with a gamification approach to enhance the cultural literacy of BIPA students. The study provides insights into the learning process, highlighting how the use of the Legend of Malang game facilitated the development of a schema for Malang culture.

Keywords: Cultural Literacy, Foreign Learner, Game, Gamification, Indonesian Language Teaching.

RESUMO

Objetivo: Esta investigação tem como objetivo descrever o processo de aprendizagem do BIPA utilizando jogos de RPG com uma abordagem de gamificação para melhorar a literacia cultural dos alunos do BIPA.

¹ Universitas Negeri Malang, Malang, Java, Indonésia. E-mail: rendayuriananta@gmail.com
Orcid: https://orcid.org/0009-0004-4959-5196

² Universitas Negeri Malang, Malang, Java, Indonésia. E-mail: imam.suyitno.fs@um.ac.id
Orcid: https://orcid.org/0000-0001-7733-3637

³ Universitas Negeri Malang, Malang, Java, Indonésia. E-mail: imamagus@um.ac.id
Orcid: https://orcid.org/0000-0001-5148-2044

⁴ Universitas Negeri Malang, Malang, Java, Indonésia. E-mail: gatutsusanto.fs@um.ac.id
Orcid: https://orcid.org/0000-0003-0068-875X
Método: Foram utilizados métodos qualitativos neste estudo, que foi realizado no programa BIPA KNB da Universitas Brawijaya. Participaram no estudo três alunos e um professor. Os dados foram recolhidos através de observação e entrevistas. A observação teve como objetivo compreender o processo de aprendizagem dos alunos através dos jogos de RPG, enquanto as entrevistas foram realizadas para avaliar a reacção dos alunos do BIPA à aprendizagem baseada em jogos. Os jogos utilizados nesta investigação são o Legend of Malang, que incorpora a cultura de Malang.

Resultados e conclusão: O estudo revelou que o processo de aprendizagem começou com o desenvolvimento de um esquema da cultura Malang. Posteriormente, os alunos foram incumbidos de jogar os jogos da Lenda de Malang na sala de aula, sob a supervisão do professor. No final da sessão de aprendizagem, foi efectuada uma sessão de perguntas e respostas para reforçar o material de aprendizagem.

Implicações da pesquisa: Os resultados demonstraram que a aprendizagem baseada em jogos melhorou efectivamente a compreensão da cultura Malang por parte dos alunos, uma vez que a sessão de aprendizagem foi agradável e significativa.

Originalidade/valor: Esta investigação contribui para o campo da aprendizagem BIPA ao demonstrar a eficácia da incorporação de jogos RPG com uma abordagem de gamificação para melhorar a literacia cultural dos alunos BIPA. O estudo fornece informações sobre o processo de aprendizagem, destacando a forma como a utilização do jogo Legend of Malang facilitou o desenvolvimento de um esquema para a cultura Malang.


1 INTRODUCTION

In the 21st century, technology has thrived, with digital technology dominating and becoming a defining characteristic of modern society (Murillo-Zamorano et al., 2021). Furthermore, there are specific skills deemed essential in the 21st century, including active participation, critical thinking, creativity, inclusivity, and a sense of justice (Taylor & Kearney, 2018). Purnawarman et al. (2016) have stated that the continuous development of technology has had a significant impact on education, particularly in the field of language learning. Chong (2018) has identified ten trends and innovations in technology-based English teaching, encompassing Blended Learning, Mobile Learning, Gamification, Embodied Learning, Inquiry-Based Learning, English as a Lingua Franca (EFL), Multi-literacies and Trans-language, Supporting Learning of Specific Needs, Creating and Sharing Content, and Learning and Teaching Management Platforms. These innovations utilize technology as the foundation for language learning.

Among these innovations, gamification has emerged as a teaching approach that incorporates elements from games or video games, aiming to motivate students to engage in learning by creating an enjoyable learning experience (Jusuf, 2016). In essence, gamification adopts game or video game patterns as a learning approach.

Playing games has become an alternative way to spend leisure time, providing a means to relieve stress and alleviate boredom in daily routines (Sørensen & Meyer, 2007). Furthermore, games have been employed as a teaching strategy to enhance students’ understanding of educational materials, often referred to as learning games or educational games. Maulidina et al. (2018) use the term "Games Based Learning" to describe the development of learning games.

One game utilized in the gamification approach is RPG (Role-Playing Games), which incorporates a storyline. Fathoni and Delima (2017) argue that RPGs enable players to immerse
themselves in interactive fictional narratives featuring missions, clues, character communication, and rewards upon mission completion. Developers have the flexibility to construct stories in RPG games ranging from simple to complex narrations. Within the game, players can control the main character, simulating real-life contexts within a virtual world (Saputri & Pratiwi, 2016). These games provide a virtual simulation of real-life experiences, and their implementation can assist students in comprehending learning materials presented through narratives.

The storyline of RPG games can effectively encompass various cultures in Indonesia. This aspect further enhances the benefits of such games in fostering cultural literacy among Foreign Speakers (BIPA) students. The in-game settings can be tailored to reflect the social and cultural contexts of specific cultures. Therefore, by developing games with Indonesian cultural backgrounds and narratives derived from fables, legends, and folklore, they can serve as alternative media for introducing Indonesian culture in BIPA learning.

The objective of this research is to describe the utilization of RPGs in BIPA learning. The game used in this study is the Legend of Malang, developed by Renda Yuriananta, the author of this research in 2018. This game was designed with ten pivotal missions that revolve around Indonesian dialogue, with the primary mission involving the Malang Raya rescue channel. It features 15 event settings, including Pucung, Pajen, Liyep Beach, Kabang Beach, Gunung Kawi, Pujon, Malang City, Cangar, Wonosari, Sono Beach, Kusumo, Sumawe, Medium Blue Beach, Sempu Island, and Singosari Temple. Each event encompasses various social and cultural aspects of the indigenous people in Malang (Gao, 2023).

1.1 BIPA

BIPA is a program designed to teach Indonesian language and culture to foreign learners. The learning provided through BIPA aims to develop not only Indonesian language competency but also an understanding of Indonesian culture. This aligns with Suyitno's (2005) assertion that BIPA learning focuses on mastering the Indonesian language for practical communication purposes. Thus, the emphasis of BIPA learning extends beyond language skills to include communication abilities.

1.2 Cultural Literacy

Cultural literacy is a facet of literacy that encompasses knowledge and skills related to cultural attitudes. In Indonesia, cultural literacy is combined with citizenship literacy, which pertains to knowledge and skills necessary for exercising rights and fulfilling obligations as Indonesian citizens. Ochoa and McDonald (2020) define cultural literacy as follows:

“With increasing frequency, we encounter colleagues or acquaintances with cultural or disciplinary backgrounds that may be entirely different from our own, individuals hailing from the most remote corners of the Earth (e.g., Australia), for whom one's well-known and perfectly 'normal' environment may appear entirely unfamiliar. The skills, knowledge, and abilities required to comprehend and interpret these differences, and to approach them as potential sources of enrichment in intercultural and interdisciplinary collaborations, constitute what we refer to as cultural literacy”

This quote underscores that interactions between individuals from diverse cultural backgrounds and academic disciplines can lead to misunderstandings regarding what is considered "normal" due to differing perspectives. To address this, it is essential to possess skills, knowledge, and the ability to understand and interpret these differences (Azizah et al., 2022). Furthermore, learning should be approached as a means to tap into the rich potential
inherent in intercultural and interdisciplinary collaborations. These skills, knowledge, and abilities collectively constitute cultural literacy.

1.3 RPG Game

Role-Playing Game (RPG) is a popular game genre played worldwide. In Indonesian language, this game is known as a type of role-playing game. According to Abror (2012), an RPG is a game where players assume the roles of imaginary characters and collaborate to create a story together (Barbosa et al., 2022).

RPG games feature plots that resemble real life (Subrahmanyam & Renukarya, 2015). These plots can be carefully planned and arranged according to the creator's vision. Game developers are attracted to the ability to craft unique stories within the game based on their imagination. Players have the freedom to choose their roles in the game and control the actions of the main character. However, the main storyline is predetermined by the game creator, and players need to follow it to complete the game. By adhering to the set storyline, players can progress through the game quickly. On the other hand, players may also choose to play the main character as they wish, disregarding the creator's storyline. However, this approach will not lead to game completion since it deviates from the intended plot set by the game creator. Leow et al. (2016) explains that RPGs offer flexibility, meaning they are not bound solely by the plot.

1.4 Gamification

Gamification can be viewed from both narrow and broad perspectives. The narrow perspective defines gamification as an approach and a set of activities that are incorporated into a game to enhance motivation, user experience, and engagement in achieving goals. On the other hand, the broad perspective considers gamification as a learning approach that utilizes video game systems and elements to boost motivation, user experience, and engagement in an activity. Kapp (2016) defines gamification as "using game-based mechanics, aesthetics, and game-thinking to engage people, motivate action, promote learning, and solve problems." This definition implies that gamification employs game-based mechanics, aesthetics, and game-thinking to engage individuals, drive action, foster interest in learning, and address problems.

2 METHODS

This research utilized a qualitative method to describe the BIPA (Indonesian for "Indonesian Language for Non-Native Speakers") learning process using RPG (Role-Playing Games) and explore the response of BIPA students towards RPG games. The study was conducted as part of the Developed Countries Partnership (KNB) program at Universitas Brawijaya, during the 2021-2022 academic year. The participants of the study were from the BIPA beginner class, consisting of one teacher named Dini and three students: Darwish from Afghanistan, Gawin from Thailand, and Alith from South Sudan.

Data collection was carried out through observation and interviews. The observation focused on investigating the learning process using RPG games, aiming to understand the dynamics of learning and the overall learning environment created by the game. Subsequently, interviews were conducted with the students to gather their responses to the learning process. Once the data was collected, it was subjected to analysis.

Data analysis followed Miles and Huberman's interactive model analysis, which involved three main components: data reduction, data presentation, and conclusion or verification (Miles & Huberman, 1992). The analysis began during the data collection phase.
and proceeded in a cyclical manner. The researcher continuously collected data and conducted analysis until reaching the final conclusion.

3 RESULTS AND DISCUSSION

3.1 Gamification and Legend of Malang

Gamification, as an innovative approach to language learning, has gained prominence in the 21st century. The term "gamification" originated from the digital industry and has been widely utilized in various aspects of life globally (Deterding et al., 2011). According to Fathian et al. (2020), gamification has been applied in several areas, including education, e-commerce, social interactions, innovation, and health. This trend suggests that gamification is continually evolving and may eventually be implemented across all sectors of life.

Furthermore, a survey conducted by Chong (2018) revealed that gamification ranked among the top ten popular English learning innovations in 2018. Chong's concept of gamification emphasizes the integration of technology into the language learning process, focusing on the use of games as learning media. Initially, gamification was narrowly defined within the context of language learning. However, Goehle (2013) distinguishes gamification from video games in the educational context, highlighting that they cannot be directly compared.

In a broader sense, gamification is considered a learning approach. Jusuf (2016) defined gamification as "a learning approach that incorporates elements of games or video games to motivate students in the learning process and enhance their enjoyment and engagement." In essence, gamification serves as a learning medium that adopts game-like elements, aiming to motivate, capture students' interest, and inspire continuous learning. This aligns with Sambung et al. (2017) assertion that gamification aims to actively involve and motivate users, ultimately increasing their achievements. Yousefi & Mirkhezri (2020) specifically explains that gamification fosters internal motivation. Additionally, Heryadi & Muliamin (2017) state that the objective of gamification is to create an enjoyable learning experience.

From the explanations provided above, this research focuses on a specific aspect of gamification: the utilization of games for BIPA learning, specifically the Legend of Malang. The selection of this game was based on its comprehensive incorporation of gamification elements, including the player, learning style, behavior, and skill. Additionally, other experts have categorized gamification elements differently. For instance, Toda et al. (2019) divided them into Points, Badges, and Ranks, but in the educational context, it was adapted to include the four elements mentioned above: player, learning style, behavior, and skill (Rozi et al., 2019). Consequently, these four elements were deemed essential in the implementation of the Legend of Malang.

Within the game, BIPA students assumed the roles of characters and actively participated in the game's progression, thereby gaining motivation to complete missions. Nicholson (2014) argued that the purpose of gamification is to motivate individuals to engage in a specific context. This context refers to real-life situations presented in a virtual world, where students are encouraged to solve problems just as they would in real-life scenarios.

RPG games have the potential to incorporate various cultural elements as they can be based on real-life experiences. Koentjaraningrat (1985 in (Prijono, 2016)) categorized cultural elements into seven categories, while Ahimsa-Putra (2005) expanded it to ten points. Game developers have the opportunity to utilize and develop all categories of cultural elements, making the games rich in cultural content. The Legend of Malang is an example of a game that includes cultural elements.
The Development of Cultural Literacy for Indonesian for Foreign Speakers (BIPA) Students Through RPG Games with a Gamification Approach

The Legend of Malang features a complex storyline interwoven with native Malang folktales. The intricate narrative revolves around the mission of rescuing Malang City from impending disaster. Through this storyline, BIPA students can gain insights into various aspects of Malang’s social and cultural fabric. Additionally, they can directly experience and engage with Malang folklore through the journeys of the game’s main characters.

Playing the Legend of Malang provides BIPA students with simultaneous benefits. Firstly, they can enhance their mastery of the Indonesian language by reading the in-game text within the storyline. Secondly, they gain a deeper understanding of various Malang folktales, contributing to their cultural literacy. Consequently, RPG games with local folklore storylines serve as valuable teaching tools to enhance the cultural awareness and knowledge of BIPA students. Furthermore, RPG games can be utilized as supplementary learning materials in informal class settings.

3.2 The Use of RPG Games in Learning to Improve Cultural Literacy of BIPA Students

In the BIPA learning program at UB, RPG games, specifically the Legend of Malang, were used as the primary learning media during class sessions. The class comprised three beginner-level students: Darwish from Afghanistan, Gawin from Thailand, and Alith from South Sudan.

The teacher made necessary preparations prior to each class session, including setting up the Legend of Malang game on their laptop for the students to play. Additionally, the teacher planned the learning flow, which involved various activities. The session began with question-and-answer activities to review the previous day’s lessons and tasks completed by the BIPA students. Subsequently, the teacher facilitated the building of schemata related to Malang’s culture, encouraged the students to play the Legend of Malang game together, conducted question-and-answer sessions to address any challenging vocabulary, allowed the students to share their experiences and reflections on the day’s activities, provided instructions for the students to continue exploring the game as homework, and concluded the teaching and learning session for the day.

Teaching and learning sessions commenced when both the teacher and students were ready. The question-and-answer session took place in Bahasa Indonesia, focusing on discussing the students’ activities from the previous day. They took turns sharing their experiences with the class. Whenever the students made mistakes, the teacher corrected them orally and prompted them to repeat the correct utterances. This approach aimed to enhance the students’ memory of proper language structures. This method is referred to as drilling, a teaching technique that provides students with repetitive practice to develop automatic habits or patterns (Mulati et al., 2014).

The next step in BIPA teaching and learning involved building schemata related to the cultures in Malang. It was important to recall information about Malang and thoroughly discuss new information with each BIPA student and the teacher. Al-Issa (2006) states, ”The reader brings information, knowledge, emotion, and culture - that is schemata, to the printed word.” This quote highlights the role of students’ information, knowledge, emotion, and culture as schemata that can be used to comprehend new information. Therefore, the process of building schemata becomes an activity that enables the integration of old and new information for BIPA students.

During the schemata-building process, the teacher presented various pictures depicting Malang’s culture, such as the Topeng dance, Singosari temple, beaches, the Suroan event in Kawi Mountain, and ceramics. Each picture was described individually by the teacher, and BIPA students were encouraged to ask questions about any unclear information. Additionally,
the teacher asked students individually about aspects of their own original culture that may be similar to the culture of Malang. This interactive discussion took several minutes.

Once the schemata were built, the teacher proceeded to play the Legend of Malang game. The game was displayed on a projector for all students to see, and a student was chosen to operate the game. This student became responsible for starting the game. As the game progressed, dialogues containing information necessary to answer the game's questions appeared. All students read the dialogues together, and the teacher guided them in answering the questions based on the information they had read. The students were enthusiastic about participating and the game motivated them to engage with the plot. If the game's characteristics were well-designed, it would create a conducive environment that supports the learning process (Denham & Guyotte, 2018). In other words, the game captured the interest of BIPA students and kept them engaged throughout the learning process.

The game was played together for approximately 30-45 minutes. Afterward, the learning process continued as the game characters received various missions related to folklore in Malang. The teacher addressed any unclear information from the game, and BIPA students asked about difficult words encountered in the game. The teacher provided explanations using concrete examples in a natural context. Additionally, BIPA students were encouraged to continue playing the game at home or in their boarding houses to practice their speaking skills and expand their knowledge of Malang's culture.

After the learning session concluded, the teacher provided the BIPA students with important information or reflections on the day's session as a form of encouragement. This step was crucial as it enhanced the students' interest and fostered positive behavior (Ningsih, 2021). Furthermore, it ensured that positive reinforcement and information confirmation were given, allowing the BIPA students to retain a deeper understanding in their memory. Once the teaching and learning session ended, BIPA students could proceed with their duties, such as attending tutorials or resting at their boarding houses, while the teacher prepared for the next learning session.

3.3 BIPA Students’ Response Toward Learning Session Using the RPG Games with Gamification Approach

BIPA students enthusiastically participate in the learning sessions that incorporate RPG games, such as the Legend of Malang. They actively engage in playing the games and feel happy when involved, interested, and enthusiastic. This active participation contributes to the achievement of learning objectives and improves student learning outcomes (Meja, 2017). This demonstrates that direct involvement of students can enhance their learning outcomes.

Furthermore, BIPA teachers can facilitate interactive learning activities through question-and-answer sessions to develop the Malang cultural schema of BIPA students. Holmes (1995) identified five steps in the interactive learning model: introduction, activity or problem-solving, sharing and discussing, summarizing, and assessment of learning materials. These steps meet the requirements for interactive learning activities and help students better comprehend the content. Nurhasanah (cited in (Shalihat et al., 2021)) also pointed out the advantages of interactive learning activities for students, such as the opportunity to express curiosity through question-and-answer sessions and engage in exploration and investigation. Moreover, the teacher can assume the roles of facilitator, motivator, and learning activity designer. In summary, these interactive learning methods can significantly enhance the learning outcomes of BIPA students, particularly in cultural knowledge.

Additionally, BIPA learners express a preference for learning through games, as it brings them joy during the learning process. This sentiment is supported by a statement from Darwish, a BIPA student from Afghanistan, who said, "Saya rasa senang belajar dan bermain"
gim. Gim itu bagus. Saya tahu budaya Malang dari gim itu" (Translation: "I feel happy learning and playing games. The game is great. I learned about Malang culture from the game."). Fun learning experiences enable students to readily accept learning materials and fall under the category of joyful and meaningful learning concepts. In its implementation, joyful and meaningful learning should be understood by all students, and the activities should be designed in a way that is accessible to all. Furthermore, attention should be paid to students' language development in the instruction process (Siahaan et al., 2020). In other words, games are an effective tool for fostering student happiness and active engagement in learning.

When students learn with games, they become directly involved and feel like the main characters experiencing cultural situations in Malang. This immersion allows BIPA students to acquire new cultural knowledge through direct interactions between the main characters and Non-Player Characters (NPCs) in the games. Alith, a BIPA student from South Sudan, reinforced this idea, stating, "Saya menjadi orang di gim. Saya tahu cerita orang-orang Malang di gim. Ini bagus untuk saya. Saya mendapat informasi banyak" (Translation: "I become a person in the game. I learned about the stories of people from Malang in the game. It’s good for me. I gained a lot of information."). Alith's statement highlights how BIPA students can engage with Malang culture through these games, making their knowledge more concrete. Successful and high-quality learning occurs when students are physically, mentally, and socially active participants in the learning process (Mulyasa, 2002). Therefore, actively involving students in the learning process directly can improve their learning outcomes. By assuming the role of the main character, students can gain a better understanding of Malang culture through the Legend of Malang games.

In addition to fostering happiness and direct involvement, games can also enhance students' reading skills through the inclusion of readable dialogues for BIPA students. To accomplish missions in the games, students must read the various dialogues that appear. BIPA students engage in interactions by choosing from multiple statements to continue the communication. Each statement in the games leads to different outcomes. "Saya bebas memilih komunikasi. Itu membuat saya ingin mencoba pilihan komunikasi lain di gim. Nanti misi di gim juga berbeda" (Translation: "I am free to choose my communication. It makes me want to try selecting different communication options in the game. The missions in the game are also different."). This statement by Gawin, a BIPA student from Thailand, confirms that the chosen communication statements reflect different missions. To Gawin, the freedom to select communication statements provides authentic language practice. BIPA students can practice the language skills they have acquired in the classroom through these language interactions. They can also observe the game's response to their chosen statements.

Based on students' responses, the use of RPG games like the Legend of Malang can serve as an alternative method for learning the language and culture of BIPA students. The game's storyline and dialogues make it easy to acquire cultural knowledge. The positive response from BIPA students supports the argument that RPG games with a gamification approach incorporating cultural elements can be implemented to enhance BIPA students' cultural literacy.

4 CONCLUSION AND SUGGESTION

BIPA learning, which focuses on teaching Bahasa Indonesia to foreign speakers, falls under the category of Second Language Acquisition or Second Language Learning. This type of learning requires students to acquire proficiency in Indonesian language, grammar, and cultural skills. Cultural learning can be effectively incorporated through the use of games. Among various choices, games offer an enjoyable and meaningful learning experience. One such game that can be utilized to teach Indonesian culture is the Legend of Malang, an RPG
game with a gamification approach that encompasses different cultures in Malang. This game is used in the KNB program at Brawijaya University, Malang, East Java, Indonesia. The learning process begins with the establishment of the Malang culture schema. BIPA students are then instructed to play the Legend of Malang games within the classroom, under the teacher's supervision. The session concludes with a question-and-answer session and reinforcement from the teacher. This research has demonstrated that the use of games can enhance students' motivation and engagement during the learning process. Additionally, BIPA students can acquire a wide range of knowledge about Malang culture through the game's plot and character interactions. By actively assuming the role of the game's main character, students are directly involved in the learning experience. In conclusion, BIPA learning using the Legend of Malang games has received a positive response from BIPA students. It can be implemented continuously in BIPA learning, with the game's content adapted to incorporate various aspects of Indonesian

REFERENCES


The Development of Cultural Literacy for Indonesian for Foreign Speakers (BIPA) Students Through RPG Games with a Gamification Approach


