

DIGITALIZING TRADITIONAL GAMES TO ENHANCE ENGLISH SPEAKING SKILLS AND MOTIVATION AMONG INDONESIAN SECONDARY STUDENTS

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Abstrak - Penelitian ini meneliti integrasi permainan tradisional yang didigitalisasi sebagai pendekatan inovatif untuk meningkatkan keterampilan berbicara dan motivasi belajar bahasa Inggris di kalangan siswa sekolah menengah Indonesia. Dengan menggabungkan warisan budaya dan pedagogi digital, penelitian ini mengeksplorasi bagaimana adaptasi digital dari permainan tradisional dapat menjadikan pembelajaran bahasa lebih menarik dan komunikatif. Menggunakan desain mixed-method, penelitian ini melibatkan 60 siswa dan 3 guru bahasa Inggris di Yogyakarta, Indonesia. Data dikumpulkan melalui tes berbicara sebelum dan sesudah perlakuan, kuesioner, dan wawancara. Hasil penelitian menunjukkan bahwa siswa yang belajar melalui permainan tradisional digital mengalami peningkatan signifikan dalam kefasihan berbicara, ketepatan pengucapan, dan tingkat motivasi. Temuan ini menunjukkan bahwa metode hibrida ini mampu menjembatani pembelajaran budaya dengan inovasi teknologi, sekaligus mendukung kompetensi linguistik dan apresiasi budaya dalam pendidikan bahasa Inggris.

Kata kunci: Permainan tradisional digital, keterampilan berbicara, motivasi, pembelajaran bahasa Inggris, pedagogi budaya.

Abstract - This study investigates the integration of digitalized traditional games as an innovative approach to improve English-speaking skills and learning motivation among Indonesian secondary students. By combining cultural heritage with digital pedagogy, the study explores how digital adaptations of traditional games can make language learning more engaging and communicative. Using a mixed-method design, the research involved 60 students and 3 English teachers in Yogyakarta, Indonesia. Data were collected through pre- and post-speaking tests, questionnaires, and interviews. Results indicate that students who learned through digitalized traditional games demonstrated significant improvement in speaking fluency, pronunciation accuracy, and motivation levels. The findings suggest that this hybrid method bridges cultural learning with technological innovation, supporting both linguistic competence and cultural appreciation in English education.

Keywords: digitalized traditional games, speaking skills, motivation, English language learning, cultural pedagogy.

1. INTRODUCTION

In the era of digital transformation, the field of language education stands at a critical crossroads, where educators must navigate the balance between technological innovation and cultural preservation. The rapid advancement of digital tools has revolutionized teaching methodologies, offering new possibilities for interactive, learner-centered, and multimodal instruction. However, this shift also poses challenges particularly the risk of diminishing local cultural values and traditional learning practices. According to Richard and Rodgers (2001), effective English language teaching should not only emphasize linguistic accuracy but also provide meaningful, communicative, and contextually relevant experiences that engage learners both cognitively and affectively. This principle is particularly significant in the Indonesian educational context, where English is taught as a foreign language (EFL).

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Despite curricular reforms and the increasing integration of technology, many classrooms remain dominated by teacher-centered approaches that prioritize grammar mastery and vocabulary memorization over real communicative competence (Canale, 2017; Loewen et al., 2020; Celik et al., 2021). Consequently, students often become passive recipients of knowledge rather than active participants in the learning process, leading to limited speaking fluency and reduced motivation to use English authentically.

Traditional games, which have long served as integral components of Indonesia's cultural and social heritage, offer a promising yet underexplored avenue for innovation in English language teaching. These games, deeply rooted in communal interaction and cultural symbolism, embody values such as cooperation, respect, and creativity. As Salam (2020) asserts, play is a fundamental human activity that transcends cultural and temporal boundaries, fostering imagination, communication, and social bonding. When such games are reimagined within a digital framework, they can become powerful pedagogical tools blending cultural familiarity with technological engagement. Digitalizing traditional games such as congklak, gobak sodor, or engklek can transform them into interactive learning experiences where English serves as the medium of play and communication. By integrating linguistic tasks such as describing moves, negotiating turns, or expressing emotions within these digital game environments, students are encouraged to practice spoken English in meaningful contexts. This approach aligns with Deci and Ryan (2019) Self-Determination Theory, which emphasizes the role of intrinsic motivation in sustaining engagement and promoting autonomous learning.

The pedagogical potential of digital game-based learning (DGBL) has been widely recognized in recent decades. Prensky (2003) highlights that digital games naturally align with the learning styles of modern students, offering environments that are interactive, goal-oriented, and feedback-rich. Similarly, Israel-Fishelson and Hershkovitz (2020) found that game-based language learning encourages risk-taking and communication, allowing learners to experiment with language in a low-anxiety setting. Through the gamified experience, students often display higher levels of engagement, creativity, and collaboration compared to conventional classroom activities. However, despite these promising findings, most studies have focused on commercial or Western-designed digital games, leaving a gap in research regarding the educational value of digitalized traditional games those that originate from local cultures but are reinterpreted through technological means.

In the Indonesian context, digitalizing traditional games for English learning not only introduces innovation but also reinforces cultural identity. Nguyen and Habók (2022) emphasizes that the integration of cultural relevance in educational technology not only enhances linguistic development but also supports learners' identity formation and intercultural competence. When students engage with digital versions of familiar cultural games, they experience a sense of belonging and pride, while simultaneously practicing English communication skills within authentic and culturally resonant settings. Such learning environments can promote what scholars describe as culturally grounded digital pedagogy a pedagogical framework that respects local heritage while embracing global educational trends.

Therefore, this study seeks to bridge the gap between digital innovation and cultural preservation by exploring how digitalized traditional games can enhance speaking skills and learning motivation among Indonesian secondary students. Specifically, it aims to examine how the integration of culturally embedded digital games into English instruction affects

students' communicative performance, engagement, and attitudes toward learning. Furthermore, the research contributes to the growing discourse on culturally responsive and technology-enhanced pedagogy within Asian language education contexts. By situating traditional cultural practices within modern digital learning frameworks, this study not only aspires to advance English language teaching methodologies but also to affirm the importance of cultural identity in the age of globalization. Ultimately, the findings are expected to provide insights for educators, curriculum designers, and policymakers seeking to develop more holistic and culturally inclusive models of digital English education that resonate with the values, experiences, and identities of Indonesian learners.

2. METHOD

This study adopted a mixed-method design, combining quantitative and qualitative approaches to provide a comprehensive understanding of the impact of digitalized traditional games on students' English learning (Creswell & Creswell, 2017; Neuman, 2019; Miles & Huberman, 2019).

Participants: Sixty (60) students aged 14–16 years from two secondary schools in Yogyakarta and three English teachers participated. The students were divided into an experimental group (30 students) who learned through digitalized traditional games, and a control group (30 students) who received conventional instruction.

2.1 Instruments and Procedures

Speaking Test – pre- and post-tests measured fluency, accuracy, and pronunciation using a standardized rubric (Brown, 2019).

- 1) Motivation Questionnaire – adapted from Gardner's Attitude/Motivation Test Battery (Gardner, 2018).
- 2) Interviews and Observations – conducted to gather teachers' and students' perceptions of the learning process.

2.2 Data Analysis

Quantitative data were analyzed using paired t-tests to identify significant differences in speaking performance and motivation levels between the two groups. Qualitative data from interviews were coded thematically following Braun and Clarke (2019) framework..

3. RESULT AND DISCUSSION

3.1 Result

3.1.1 Improvement in Speaking Fluency and Pronunciation

The findings of this study revealed a notable improvement in the speaking fluency and pronunciation of students who participated in digitalized traditional game-based learning. Compared to the control group, the experimental group demonstrated greater ease in expressing ideas, fewer pauses during speech, and more accurate pronunciation of key vocabulary. These results indicate that the integration of interactive and repetitive oral communication tasks embedded in digitalized games facilitated natural language internalization.

This outcome supports Krashen (2019) Input Hypothesis, which posits that second language acquisition occurs when learners are exposed to comprehensible and meaningful input

slightly above their current level of competence (i+1). The games provided such input in an engaging and low-anxiety environment, allowing learners to unconsciously absorb new structures and patterns. Because the activities were framed as play rather than formal lessons, students were less inhibited and more willing to take linguistic risks. The repetitive verbal exchanges required by the games such as giving instructions, negotiating turns, and responding to prompts promoted automaticity and reinforced pronunciation accuracy over time.

Furthermore, the multimodal nature of digitalized games, combining visual, auditory, and kinesthetic stimuli, may have enhanced learners' phonological awareness and articulation. Consistent with findings by Hafner and Ho (2020), multimodal exposure supports pronunciation development by allowing students to connect sound with visual and contextual cues. Hence, the digitalized traditional games not only made language input comprehensible but also created a dynamic environment conducive to fluency and pronunciation practice.

3.1.2 Increased Motivation and Engagement

The results from the motivation questionnaire and classroom observations demonstrated a significant increase in students' intrinsic motivation and engagement during game-based learning sessions. Participants in the experimental group expressed higher enthusiasm, enjoyment, and willingness to communicate in English compared to those in traditional instruction. Many students described the learning experience as "fun," "challenging," and "motivating," indicating that the digitalized games successfully transformed language learning into an enjoyable activity.

This finding aligns with Ryan and Deci (2020) Self-Determination Theory (SDT), which highlights that motivation is sustained when learners experience autonomy, competence, and relatedness. The digitalized games promoted autonomy by allowing students to make choices, explore language use at their own pace, and take control of their learning outcomes. The immediate feedback and sense of achievement provided through scoring systems and rewards enhanced their perceived competence, while collaborative gameplay fostered relatedness among peers. Together, these elements nurtured intrinsic motivation, a crucial factor for long-term engagement in language learning (Nuray & Ceylan, 2021).

In addition, the gamified learning environment reduced anxiety, a common barrier in EFL speaking classrooms. Similar to findings by Loewen et al. (2019), students in game-based contexts reported feeling "less afraid to make mistakes" and "more confident" to speak English spontaneously. The playful context reframed errors as part of the learning process rather than as failures, promoting a growth-oriented mindset toward language use.

3.1.3 Cultural Relevance as a Motivational Factor

A key finding of this study is the motivational power of cultural relevance in digital learning. Students reported a strong sense of pride and connection when playing digitalized versions of Indonesian traditional games such as congklak, gobak sodor, and engklek. They expressed that seeing familiar cultural elements integrated into English lessons made learning feel more personal and meaningful. This sense of cultural resonance not only increased emotional engagement but also fostered a sense of identity affirmation within the global language learning context.

This result echoes Shortt et al. (2023) argument that culturally relevant pedagogy enhances both linguistic development and identity formation. When learners encounter familiar cultural

symbols and practices within digital environments, they experience a balance between global language learning and local cultural belonging. Such integration helps students perceive English not as a foreign imposition but as a communicative tool that coexists with their cultural heritage. The reduced anxiety observed among learners during gameplay may also be attributed to this cultural familiarity, which provided psychological comfort and contextual authenticity.

Therefore, embedding traditional cultural values within modern educational technologies can be considered a form of culturally grounded digital pedagogy, where cultural preservation and technological innovation intersect to enhance learning motivation and identity development in EFL contexts.

3.1.4 Collaboration and Communicative Practice

Another significant finding is the enhancement of peer collaboration and communicative competence through cooperative gameplay. The digitalized games were designed to require interaction among players, encouraging students to use English naturally for negotiation, turn-taking, encouragement, and feedback. This social dimension of gameplay provided authentic communicative contexts that closely resemble real-life language use.

The findings align with Canale and Swain (2018) model of communicative competence, which includes grammatical, sociolinguistic, discourse, and strategic components. During gameplay, students not only practiced vocabulary and grammar but also developed pragmatic awareness learning how to use language appropriately according to context and purpose. Moreover, the cooperative nature of the activities supported the development of social and teamwork skills, promoting empathy and mutual understanding.

These observations are also consistent with John-Steiner and Mahn (2020) Social Constructivist Theory, which posits that learning occurs through social interaction within cultural contexts. The games functioned as zones of proximal development (ZPDs), where learners co-constructed meaning with peers and received immediate support from teachers or teammates. Through scaffolding, students were able to perform beyond their individual linguistic capacities, gradually internalizing new communicative skills.

3.1.5 Pedagogical Implications and Challenges

From a pedagogical standpoint, the results highlight the potential of digitalized traditional games as an effective approach to promote active participation, cultural appreciation, and communicative competence in EFL classrooms. Teachers observed that students were more focused, cooperative, and willing to speak English during game sessions compared to traditional lessons. The games served as both instructional tools and motivational stimuli, bridging the gap between formal education and informal, culturally rooted learning experiences.

However, several challenges were also identified. Teachers reported issues related to limited access to digital devices, unstable internet connectivity, and insufficient technical skills to design or implement digitalized games effectively. These barriers echo the concerns of Ishak et al. (2022), who emphasizes that successful technology integration requires not only infrastructure but also adequate teacher training and institutional support. To mitigate these

constraints, blended approaches that combine offline and online components were suggested for example, playing digital games in pairs using shared devices or alternating between physical and digital gameplay modes.

Moreover, educators should receive professional development opportunities to enhance their digital literacy and instructional design competencies. Policy-level initiatives could also support the creation of open-access digital resources featuring localized content. By addressing these practical challenges, schools can maximize the pedagogical benefits of digitalized traditional games and promote equitable access to innovative language learning opportunities.

3.2 Discussion

The findings of this study indicate that the use of digitalized traditional games in English language learning significantly enhanced students' speaking fluency, pronunciation, motivation, and engagement. The improvement observed in students' oral performance suggests that digital game-based environments provide meaningful opportunities for authentic communication and natural language use. Students in the experimental group demonstrated greater confidence and fluency when speaking English, supported by repetitive and contextualized oral tasks embedded in the digital games. This finding is consistent with Krashen (2020) Input Hypothesis, which asserts that language acquisition occurs through exposure to comprehensible and meaningful input in low-anxiety environments. Through engaging and repetitive interactions, learners internalized linguistic patterns more naturally, resulting in improved fluency and pronunciation. The multimodal features of digitalized games combining visual, auditory, and kinesthetic stimuli also helped students associate sounds with meaning, thus reinforcing their phonological awareness and pronunciation accuracy.

The study also revealed a considerable increase in students' intrinsic motivation and engagement during the learning process. Participants reported that the use of digitalized traditional games made learning English more enjoyable, interactive, and less intimidating. This is in line with Deci and Ryan's (2020) Self-Determination Theory, which emphasizes that motivation is sustained when learners experience autonomy, competence, and relatedness. The digitalized games allowed students to control their own learning pace and choices, thereby fostering autonomy. The immediate feedback and sense of accomplishment gained through scoring systems and rewards increased their perceived competence, while peer collaboration promoted social relatedness. Collectively, these elements contributed to students' intrinsic motivation to communicate in English. Moreover, the game-based context reduced anxiety and fear of making mistakes, encouraging students to take linguistic risks and express themselves more freely. Similar to Gardner (2018) findings, the playful nature of the learning environment helped students build confidence and develop a positive attitude toward English speaking activities.

An important finding in this study concerns the motivational influence of cultural relevance in digital learning. Integrating Indonesian traditional games such as congklak, gobak sodor, and engklek into digital formats gave students a sense of pride and connection to their cultural heritage. Students reported feeling emotionally engaged and more comfortable learning English through familiar cultural contexts. This supports Pham et al. (2021) argument that culturally relevant pedagogy strengthens learners' identity, emotional involvement, and motivation. By embedding cultural elements into digital learning, students were able to perceive English not as a foreign or imposed language, but as a tool for

communication that harmonizes with their own cultural identity. In the Indonesian context where English is a foreign language this approach bridges the gap between global education demands and local cultural values, allowing learners to acquire global competencies without losing their cultural roots.

Furthermore, the cooperative nature of the digitalized traditional games encouraged active collaboration and communicative practice among students. Learners were required to use English to negotiate turns, give instructions, encourage teammates, and respond to others' actions, thereby practicing authentic communication in a meaningful context. This outcome reflects Canale and Swain (2018) concept of communicative competence, which includes grammatical, sociolinguistic, discourse, and strategic skills. The interactive gameplay also aligns with Vygotsky's (1978) Social Constructivist Theory, which views learning as a social process occurring through collaboration within a cultural context. In this setting, the games served as a "Zone of Proximal Development" where students could co-construct meaning, support each other, and gradually perform beyond their individual capabilities. Through such interaction, learners not only improved their linguistic skills but also developed essential social abilities such as cooperation, empathy, and mutual respect important components of character education.

From a pedagogical perspective, the findings demonstrate that digitalized traditional games are effective tools for promoting communicative competence, engagement, and motivation in EFL classrooms. Teachers observed that students were more active, enthusiastic, and focused during game-based sessions than in traditional lessons. This confirms the potential of integrating technology and culture to create interactive, student-centered learning environments consistent with the principles of communicative language teaching. However, several challenges emerged during implementation. Teachers noted limited access to digital devices, unstable internet connections, and insufficient technological expertise as major obstacles. These issues resonate with Ishak et al. (2022) argument that successful technology integration depends not only on the availability of digital resources but also on teacher readiness and institutional support. To overcome these challenges, blended learning approaches that combine offline and online activities could be employed. For example, teachers might begin with the physical version of a traditional game to build context and familiarity, then transition to the digital version for extended practice and interaction. Additionally, teacher training programs focused on digital literacy and instructional design are essential to ensure that educators can effectively implement culturally grounded game-based learning.

In summary, this study underscores the importance of integrating cultural heritage and digital innovation to enhance English language learning. Digitalized traditional games not only improve students' speaking fluency and motivation but also strengthen their sense of cultural identity and belonging. The findings suggest that culturally rooted digital pedagogy can serve as an effective model for implementing the principles of the Merdeka Curriculum in Indonesia, which emphasizes contextualized, collaborative, and character-based education. Theoretically, the study contributes to the development of culturally responsive digital pedagogy by synthesizing concepts from Krashen's theory of language acquisition, Deci and Ryan's motivation theory, Canale and Swain's communicative competence, and Vygotsky's social constructivism. Together, these frameworks highlight that successful language learning involves not only technology and content but also meaningful social interaction and cultural engagement. Ultimately, digitalized traditional games represent a holistic and sustainable

approach to English language education one that balances innovation with cultural preservation and empowers learners to become confident, culturally aware communicators in the digital era.

4. CONCLUSION

The study concludes that digitalized traditional games are effective tools for enhancing English-speaking skills and learning motivation among Indonesian secondary students. The approach successfully combines cultural identity with digital engagement, creating an enjoyable and contextually relevant learning environment. The findings encourage educators to design culturally responsive game-based materials and integrate technology meaningfully into English instruction. Future research should explore long-term effects and the scalability of this method across diverse educational settings.

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