Website:https://worldsiencepub.com/index.php/Imc Volume:5,Issue 02,September-2026

DEVELOPING EFL LEARNERS' READING COMPETENCE THROUGH GAMIFIED READING QUESTS

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DOI:https://doi.org/10.5281/zenodo.23071358

Abstract

Gamification - the use of game elements and design in non-game contexts - has been increasingly applied to EFL reading instruction with quasi-experimental studies showing improved understanding and engagement. However, most such interventions employ isolated mechanics (quizzes, points, badges) rather than an overarching narrative quest framework, and few investigate potential differences in the effects on various reading sub-skills. This thesis aims to discover the question: "Does the inclusion of a narrative quest in a gamified EFL reading program yield different results than a program involving isolated game features?" The paper reviews gamification theory, empirical studies of gamified EFL reading, and theories of reading engagement and motivation, and argues that a quest-based approach- involving a sustained narrative progression demanding extensive reading- might foster reading competence in ways that isolated mechanics do not. The thesis proposes research questions and mixed methods of design for surveying a gamified reading quest interrelation with upper-secondary EFL students.

Keywords: gamification, quest-based learning, EFL reading competence, reading engagement, motivation, and upper-secondary education.

Introduction

Relevance: Research on Gamification is varied but leads to the conclusion that yet the impact of Gamification is tangible; it is situational and design specific. The question of interest shifts from being "does gamification help reading" to “which design on which sub-skills yield lasting results.” The design of reading quests (comprehension tasks framed as a continuous narrative with progression) have not been singled out as a separate category in EFL reading research, even though they are often used in commercial game-based learning products.

Aim: To find out the extent to which a quest design (a continuous narrative with progression) can foster upper-secondary EFL learners’ reading competence compared to single-mechanic gamification and non-gamified design, and to explore the changes in motivation and engagement throughout the quest.

Literature Review (Key Sources)

Deterding, Dixon, Khaled, and Nacke (2011) defined gamification as the use of game design elements in non-game contexts, establishing the vocabulary (points, badges, levels, narrative) used throughout the subsequent literature.

Hamari, Koivisto, and Sarsa (2014), reviewing empirical gamification studies, found generally positive effects that depend heavily on implementation context and user characteristics rather than being guaranteed by game elements alone.

Kapp (2012) argued that effective learning gamification requires alignment between mechanics and instructional objectives, distinguishing surface-level "pontification" from deeper structural gamification such as narrative and quest progression.

Several EFL studies report reading-comprehension gains from single-mechanic gamification: Al-Khamaiseh and Al-Jamal (2022) with Kahoot among Jordanian ninth graders; Abusa'aleek and Baniabdelrahman (2020) among Jordanian sixth graders; Castillo-Cuesta (2022) using Genially in online EFL instruction.

Matyakhan, Chaowanakritsanakul, and Santos (2024), studying 70 Thai university EFL students, found the gamified group significantly improved in both comprehension and engagement over a

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traditionally taught control group. Cheng, Lu, and Xiao (2025), applying broaden-and-build theory with Chinese undergraduates, found gamification improved both reading proficiency and language-learning enjoyment, suggesting an affective mechanism alongside direct instructional effects.

Guthrie and Wigfield (2000) proposed that reading engagement is the joint product of motivational processes and cognitive strategy use — directly applicable to why narrative-embedded reading tasks might affect comprehension through engagement rather than mechanics alone. Ryan and Deci (2000) identified autonomy, competence, and relatedness as drivers of intrinsic motivation; quest-based gamification maps onto this framework more directly than isolated point-scoring.

Together, these sources define that gamification produces countable but context-dependent gains in EFL reading, and that existing studies mostly test single-mechanic or story-embedded gamification rather than isolating sustained, sequential quest structures — the gap this research addresses.

Methodology

- Participants: intact groups of intermediate-level Upper Secondary EFL students, divided into three groups — quest-based gamification (sequential narrative + progressive unlocking), single-mechanic gamification (points/badges/quiz-based), and a non-gamified comparison group.
- Instrument: pre/post comprehension tests regarding four subskills — main idea, detail location, vocabulary in context, and relationships, with subskill-specific scoring across groups.
- Motivation measurement: Reading Engagement Questionnaire (Guthrie & Wigfield adaptation) administered both before and after the intervention.
- Qualitative data: Semi-structured interviews and observations with a representative sample of the quest-based group regarding the perceived sense of autonomy, competence, and relatedness.
- Materials control: Consistently used material (text excerpts, subskills) across all three interventions differing only in the type of gamification.
- Analysis: Statistical comparison (ANOVA) of the pre/post test results for each subskill, qualitative themes identified.

Expected Results

- Both gamified groups expected to outperform the comparison group on comprehension and engagement, consistent with prior EFL gamification studies.
- The quest-based group expected to show an advantage on sub-skills requiring sustained comprehension (relationships between ideas, main-idea identification), while the single-mechanic group may perform comparably on detail location.
- Higher reported autonomy and competence expected in the quest-based group, consistent with self-determination theory, versus a more extrinsic engagement pattern in the single-mechanic group.

Discussion

If confirmed, these results would support the premise that the structural form of gamification — sustained narrative quest versus isolated point-scoring — matters for which reading sub-skills improve, not merely whether gamification is present. This would extend Hamari et al.'s (2014) context-dependence finding by identifying design structure as a measurable moderating variable and would connect Cheng et al.'s (2025) affective mechanism to a concrete design choice rather than treating gamification as undifferentiated.

Gamified reading quests are a design category that has not yet been discriminated against single-mechanic approaches in EFL reading research, despite having theoretical grounds to offer a different engagement and comprehension profile. A comparison of quest-based and single-mechanic gamification, sub-skill by sub-skill, provides a more nuanced understanding of what gamification design brings to the table in terms of reading competence.

Conclusion and Recommendations

- For curriculum designers: consider narrative quests, not just point/badge mechanics, for long-term comprehension goals

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- For teachers: combine quest-based tasks with explicit learner autonomy and choice within the narrative
- For future research: consider longitudinal study across an entire academic year to evaluate sustained engagement gains, and analyze transfer to non-gamified reading tasks

References

1. Abusa'aleek, R. A., & Baniabdelrahman, A. A. (2020). The effect of gamification on Jordanian EFL sixth grade students' reading comprehension. International Journal of Education and Training (InjET), 6(1), 1–11.
2. Al-Khamaiseh, H. S., & Al-Jamal, D. A. (2022). The effect of using Kahoot on Jordanian EFL ninth-grade students' reading comprehension. Journal of Positive School Psychology, 6.
3. Castillo-Cuesta, L. (2022). Using Genially games for enhancing EFL reading and writing skills in online education. International Journal of Learning, Teaching and Educational Research, 21(1).
4. Cheng, J., Lu, C., & Xiao, Q. (2025). Effects of gamification on EFL learning: A quasi-experimental study of reading proficiency and language enjoyment among Chinese undergraduates. Frontiers in Psychology.
5. Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." Proceedings of the 15th International Academic MindTrek Conference.
6. Guthrie, J. T., & Wigfield, A. (2000). Engagement and motivation in reading. In M. L. Kamil & P. B. Mosenthal (Eds.), Handbook of reading research (Vol. 3, pp. 403–422). Erlbaum.
7. Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. Proceedings of the 47th Hawaii International Conference on System Sciences, 3025–3034.
8. Kapp, K. M. (2012). The gamification of learning and instruction: Game-based methods and strategies for training and education. Pfeiffer.
9. Matyakhan, T., Chaowanakritsanakul, T., & Santos, J. A. L. (2024). Implementing gamification to enhance reading engagement and reading comprehension of Thai EFL university students. LEARN Journal, 17(1), 212–239.
10. Nitiasih, P. K., & Budiartha, L. G. R. (2021). Increasing students' reading comprehension through gamification based on Balinese local stories. Proceedings of the 5th Asian Education Symposium (AES 2020).
11. Nitiasih, P. K., Permana, I. G. Y., & Budiartha, L. G. R. (2022). Enhancing students' reading comprehension with gamification of local wisdom stories during emergency online learning. Journal of Education Technology, 6(3), 515–520.
12. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55(1), 68–78.

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