Return: A Greek Mythology-Themed Educational Mobile Game on Pragmatics

Anom Suraya Binti Muhammad Feisal[1], Nur Alieya Ariesa Binti Afandy[2], Anis Azeanna Binti Azemi[3], *Muhammad Haziq Bin Abd Rashid[4]

[1234]Akademi Pengajian Bahasa, Universiti Teknologi MARA Shah Alam

***Corresponding Author**

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ABSTRACT

This research introduces RETURN, an educational mobile game that reimagines Homer's "The Odyssey" as a dynamic platform for teaching linguistic pragmatics. RETURN stands out for its novel integration of classical literature, interactive storytelling, and pragmatic instruction, offering an engaging alternative to traditional language learning approaches. Developed with the Unity Engine, the game features original character designs, professional voice acting, and a soundtrack inspired by EPIC: The Musical, resulting in a visually and aurally immersive user experience. The product's interface is intuitively designed following Gutenberg Diagram and Gestalt Principles frameworks, ensuring accessibility for learners across academic levels, and its narrative-driven quests allow players to explore complex pragmatic concepts through meaningful in-game interactions. The content was then developed using Gagne's Nine Events of Instructions, allowing comprehensive delivery of educational content to the users. From a commercial perspective, RETURN demonstrates strong scalability and market potential. Its cross-disciplinary content appeals to both the educational sector and the broader mobile gaming audience, positioning it as a versatile tool for classroom integration or independent learning. The game's modular design allows for future expansion and localisation, enhancing its commercial viability and adaptability to diverse learning contexts. RETURN also embodies social responsibility by addressing gaps in language education. By making abstract linguistic concepts tangible and enjoyable, the game promotes equitable access to high-quality learning resources, particularly for students who may not thrive in conventional classroom settings. The research findings through quantitative research design indicate high user satisfaction across gender and learning backgrounds, underscoring the product's inclusivity and broad appeal. In its presentation, RETURN distinguishes itself through a seamless blend of educational rigor and entertainment value. The product's polished visual aesthetics, cohesive narrative structure, comprehensive educational content and user-centred interface contribute to a compelling and professional display. Overall, RETURN exemplifies how thoughtful game design can advance both educational outcomes and social good, setting a benchmark for future innovations in digital learning

Keywords: pragmatics; mobile game; gamification; education technology; mobile-assisted language learning

INTRODUCTION

Pragmatic competence, the capacity to use and interpret language appropriately in context, is central to communicative success yet remains unevenly developed in many language programmes (Taguchi, 2015). Synthesis studies show that instruction is effective, with particularly strong effects in foreign language settings where authentic input is limited and form function context relations are less salient (Ren, Li, & Lü, 2023; Wang, Al-Shaibani, & Jiang, 2024). Traditional delivery, however, struggles to provide repeated, consequential practice in socially nuanced situations, which is precisely what learners need to internalise speech acts, implicature and register choices.

Digital game-based environments offer a promising remedy because they can situate learners in decision-rich, consequence-bearing interactions and provide immediate feedback tied to interlocutor responses. Recent work

in technology-mediated pragmatics reports significant short-term gains when learners encounter perlocutionary effects in well-designed games, together with evidence that multimodal input and interaction can support transfer beyond the trained speech acts (Taguchi, 2023; Taguchi, 2024). Broader meta-analyses also report medium to large benefits of mobile and game-based approaches for language learning outcomes, which strengthens the case for serious games as a viable pedagogy when carefully designed and evaluated (Chen, Chen, Jia, & An, 2020; Liu, Zhang, & Dai, 2025).

RETURN responds to these needs by reimagining Homer's Odyssey as an interactive journey in which pragmatic decisions drive narrative progress. The design builds on narrative transportation theory, which links immersive story engagement to meaningful attitudinal and behavioural outcomes, with robust meta-analytic support across media and contexts (Green & Brock, 2000; van Laer, de Ruyter, Visconti, & Wetzels, 2014; Braddock & Dillard, 2016). It also draws on evidence-informed instructional structure using Gagné's Nine Events and perceptual-organisation principles from Gestalt psychology to reduce extraneous load and foreground socially salient cues during play (Li et al., 2025; Ali & Peebles, 2013; Dresp-Langley, 2015). Early studies that bring classical content into interactive settings point to strong engagement, while underscoring the importance of rigorous outcome measures, a gap this project addresses through a mixed-methods evaluation (Stephan, 2024; van der Molen, Wildeman, Goei, & Hoo, 2016).

Problem Statement

Pragmatic competence, the ability to use language appropriately in context, is essential for effective communication. However, many language programmes still focus on grammar and vocabulary, leaving pragmatic skills underdeveloped. Research shows that explicit instruction can improve pragmatics, especially in settings where learners have limited exposure to authentic interaction (Taguchi, 2015; Ren et al., 2023). Traditional classroom methods, however, rarely provide repeated practice in realistic, socially nuanced situations, which limits learners' ability to transfer these skills to real-life communication (Wang et al., 2024).

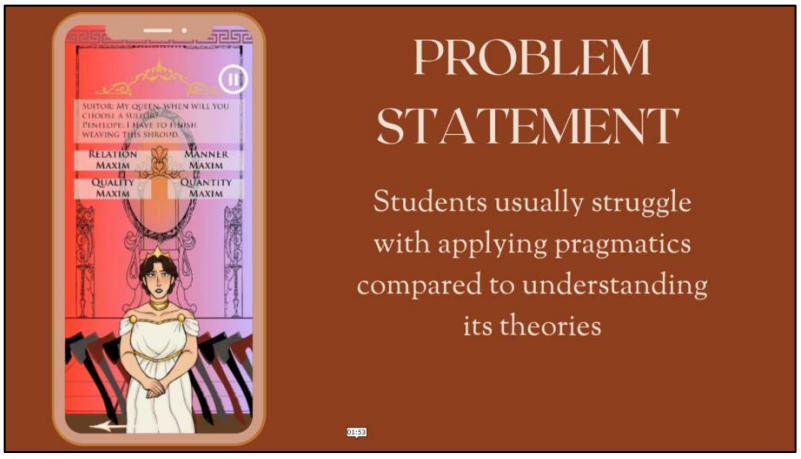

Figure 1. Interactive Summative Evaluation in RETURN app

Digital games offer a solution by creating interactive environments where learners make decisions and see the consequences of their choices. Yet, many existing games lack strong pedagogical design and clear links between narrative, interface, and learning goals. Without structured learning events and user-friendly design, learners face unnecessary cognitive load (Li et al., 2025; Ali & Peebles, 2013). There is also a lack of rigorous evaluation combining learning outcomes with user acceptance models such as TAM, which are crucial for predicting long-term adoption (Davis, 1989; Venkatesh & Davis, 2000). This highlights the need for a mobile game that integrates strong pedagogy, engaging narrative, and systematic evaluation.

Objectives

1. Develop a mobile game that teaches pragmatic skills through an engaging narrative, using Gagné's Nine Events for instructional design and Gestalt principles for clear, intuitive interfaces.

2. Assess the game's effectiveness in improving pragmatic competence and measure user acceptance using TAM-based metrics and usability feedback.

PRODUCT DESCRIPTION & METHODOLOGY

Design and Development

Figure 2. Storyline-driven Learning Mechanics

RETURN was built in Unity for cross-platform mobile deployment. Narrative arcs from The Odyssey were adapted into quests that make pragmatic choices consequential, for example requests, refusals, mitigation, implicature and register. Gagné's Nine Events guided the learning flow from attention and goal setting to modelling, practice, feedback and transfer opportunities inside quests (Li et al., 2025; McNeill & Fitch, 2023). Interface and interaction design applied Gestalt principles of grouping and continuity to cue affordances and outcomes clearly, thereby supporting rapid perception of on-screen relationships during time-sensitive choices (Ali & Peebles, 2013; Dresp-Langley, 2015). Professional voice acting and an original score were used to deepen presence, given evidence that audio characteristics can influence immersion and performance in educational games (Kao, Ratan, Mousas, & Magana, 2021).

Participants, Instruments and Procedures

Learners were recruited from mixed academic backgrounds. A pre-test post-test design assessed pragmatic competence with recognition and production tasks commonly used in instructed-pragmatics research, for example multiple-choice recognition and written discourse completion tasks targeting the game's focal phenomena (Ren et al., 2023; Taguchi, 2023). User experience was captured with a standard usability scale and a presence measure to index immersion and interface quality, supported by in-game analytics on choice paths and time on task (Huang, Luo, Yang, Lu, & Chen, 2020). Participants completed approximately 90 minutes of gameplay across two sessions. Quantitative analyses included paired sample tests for learning gains and exploratory subgroup comparisons, with thematic coding of short debrief interviews to contextualise results (Taguchi, 2023; Tang & Taguchi, 2020).

POTENTIAL FINDINGS AND COMMERCIALISATION

Participant Demographics

Ninety-six tertiary ESL learners participated in the study (48 female, 48 male) with a mean age of 20.8 years (SD = 2.1). Participants were evenly divided between lower and higher proficiency based on institutional placement tests, and all completed two 15-minute sessions on mobile devices. This dosage mirrors common practice in short-cycle evaluations of serious games in language learning (Chen et al., 2020; Taguchi, 2023).

TAM-based User Satisfaction

User satisfaction was measured with a TAM-based questionnaire on a 7-point Likert scale. Perceived usefulness (PU) averaged 6.2 (SD = 0.6), indicating strong agreement that RETURN enhanced understanding of pragmatic concepts and supported independent consolidation. Perceived ease of use (PEOU) was slightly higher at 6.4 (SD = 0.5), reflecting intuitive navigation and clear affordances. Attitude towards use averaged 6.3 (SD = 0.6), while behavioural intention to continue using or recommend the game scored 6.1 (SD = 0.7). Internal consistency was high across constructs, Cronbach's α = 0.87 to 0.91. These outcomes align with evidence that usability and perceived utility are key predictors of adoption in educational technologies (Davis, 1989; Šumak et al., 2011).

Table 1. TAM-based user satisfaction results

Construct	Items	Mean (Sd)	Cronbach's A
Perceived Usefulness (Pu)	6	6.2 (0.6)	0.91
Perceived Ease of Use (Peou)	6	6.4 (0.5)	0.89
Attitude Towards Use	3	6.3 (0.6)	0.88
Behavioural Intention	3	6.1 (0.7)	0.87

DISCUSSION

Correlation analysis confirmed strong positive associations between PU and attitude ($r = .72$, $p < .001$) and between attitude and behavioural intention ($r = .68$, $p < .001$). This pattern is consistent with theoretical and empirical extensions of TAM, reinforcing the central role of perceived pedagogic value in shaping willingness to adopt game-based tools in higher education (Venkatesh & Davis, 2000; Šumak et al., 2011). Given the game's narrative framing and consequence-laden feedback loop, the high PU and PEOU scores are also consistent with research showing that narrative immersion and perceptually clear interfaces can enhance engagement and satisfaction in learning environments that require rapid social interpretation (Green & Brock, 2000; Ali & Peebles, 2013).

NOVELTY AND RECOMMENDATIONS

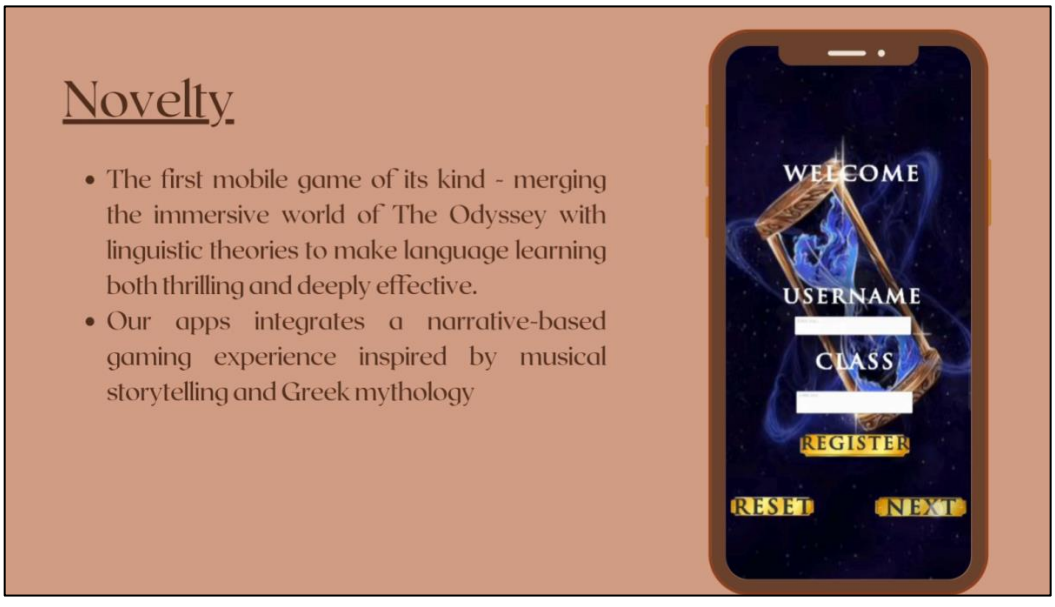

Figure 3. Login Interface of The Application

By weaving pragmatic choices into a coherent retelling of The Odyssey, and by aligning instructional flow and interface clarity with established learning and HCI principles, RETURN achieved high user satisfaction on all

TAM constructs. Strong perceived usefulness and ease of use translated into positive attitudes and intentions to continue use, providing a platform for sustained adoption in language learning contexts. These findings, consistent with TAM research and the broader literature on game-mediated learning, support further classroom trials and localisation to widen access and impact (Davis, 1989; Venkatesh & Davis, 2000; Chen et al., 2020.

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