

# The Reading Strategist: Quest for Academic Comprehension

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## ABSTRACT

The Reading Strategist: Quest for Academic Comprehension is a gamified online platform designed to address persistent challenges in online academic reading among ESL undergraduates. Grounded in research on reading strategy awareness, the innovation targets three domains: Global, Problem-Solving, and Support, through interactive, story-driven missions. Unlike conventional comprehension tools, The Reading Strategist focuses on developing metacognitive skills, enabling learners to identify, practise, and reflect on their strategy use in real time. The platform's uniqueness lies in its integration of narrative-based gameplay with explicit reading strategy training. A built-in analytics dashboard tracks strategy usage patterns, that provides personalised recommendations and enables instructors to monitor progress. This approach is hoped to transform passive reading into an active, self-regulated learning experience. The relevance to language education is clear: online academic reading is important for higher education success. However, many ESL learners lack the skills or confidence to engage effectively. By gamifying strategy instruction, this innovation addresses motivational barriers, fosters learner autonomy, and supports long term retention of strategies. Key benefits include increased reading engagement, comprehension, and awareness of strategy application. The platform has the potential for commercialisation through institutional adoption, adaptable to various text genres, and commercially viable through integration with learning management systems and publisher partnerships.

**Keywords:** Gamification, Metacognitive Skills, Online Academic Reading, Reading Strategies

## INTRODUCTION

Reading is recognised as a way to gain knowledge, develop intellectual growth, and create a better understanding of the world around us (Abdullahi & Rouyan, 2018; Lai, 2021). For students, good reading comprehension skills are crucial because they often work on research tasks (Chen, 2023). The COVID-19 pandemic sped up the move to online learning, leading to a quick rise in digital platforms that provide access to reading materials. As a result, higher education institutions have normalised online reading. This shift has significantly influenced students' reading habits and preferences, with an increasing dependence on digital and screen-based reading modes (Mangen, Walgermo, & Bronnack, 2013; Azmuddin, Nor, & Hamat, 2017).

In today's digital world, reading increasingly competes with numerous distractions for readers' attention (Firth et al., 2019; Terranova, 2012). Staying focused on long texts is often disrupted by constant digital distractions (Baron, 2021). Hence, The Reading Strategist: Quest for Academic Comprehension is aimed to address persistent online reading challenges among Malaysian ESL undergraduates.

## Problem Statement

Educators have consistently expressed concerns over ESL learners' difficulties in interpreting and engaging with academic texts, where comprehension breakdowns are often linked to inadequate strategy use (Jincheng & Rahmat, 2022). Evidence suggests that reading instruction should extend beyond comprehension testing and

include development of strategic awareness so that less competent readers can improve by modelling the practices of more proficient ones (Sani & Ismail, 2021; Lamo, Dhuli, & Larsari, 2021).

In Malaysia, online reading has become a necessity in higher education, yet it frequently exposes students to additional barriers, including reduced focus, disrupted attention, and surface-level processing of digital texts (Belaman et al., 2023). Although digital platforms offer unparalleled accessibility to academic resources, prolonged reading on screens is associated with reduced attention spans, ineffective skimming, and lower comprehension compared as compared to printed materials (Clinton, 2019; Baron, 2021). Research highlights that these challenges are intensified when students lack the ability to use strategic reading habits, leading to passive engagement with text (Delgado et al., 2018). Additionally, the absence of guided strategy application in most online platforms worsens these challenges, leaving many undergraduates unprepared for independent academic reading.

In response to these challenges, our group developed The Reading Strategist: Quest for Academic Comprehension, a gamified platform that integrates explicit instruction of Global, Problem-Solving, and Support strategies into immersive, story-driven missions. The main aim of this innovation is to transform passive reading methods into active, strategy-focused involvement. This change improves learners' self-awareness, increase comprehension, and keeps students motivated when tackling complex academic texts. By incorporating strategy practice into real tasks, the platform fills a significant gap in current teaching methods. It provides learners with organised chances to use and improve their strategies in meaningful situations.. Moreover, The Reading Strategist fosters learner autonomy, alleviates reading-related anxiety, and supports the development of long-term self-regulated reading habits, all of which are essential for academic success.

## Objectives

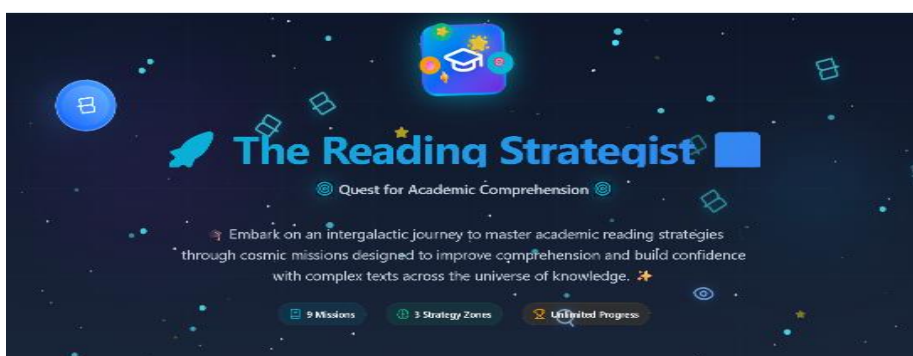
This innovation seeks to:

1. Cultivate learners' metacognitive awareness of Global, Problem-Solving, and Support strategies during online academic reading.
2. Increase strategic, self-regulated engagement with complex expository texts.
3. Improve reading comprehension and persistence in screen-based contexts.
4. Provide instructors with actionable analytics on strategy use to inform targeted scaffolding.
5. Deliver a scalable, LMS-integrated solution suitable for institutional adoption.

## PRODUCT DESCRIPTION & METHODOLOGY

The Reading Strategist: Quest for Academic Comprehension is a browser-based platform that embeds strategy instruction within narrative quests. Each quest focuses on a target reading strategy cluster. The Global Quest includes skimming, scanning, and identifying main ideas. The Problem-Solving Quest covers re-reading, using contextual clues, and ensuring sentence clarity. The Support Quest involves finding the right tools to assist reading, such as note-taking, using glossaries, and dictionary skills. Learners encounter authentic academic texts and complete tasks that incorporate the respective strategies to be used in real time.

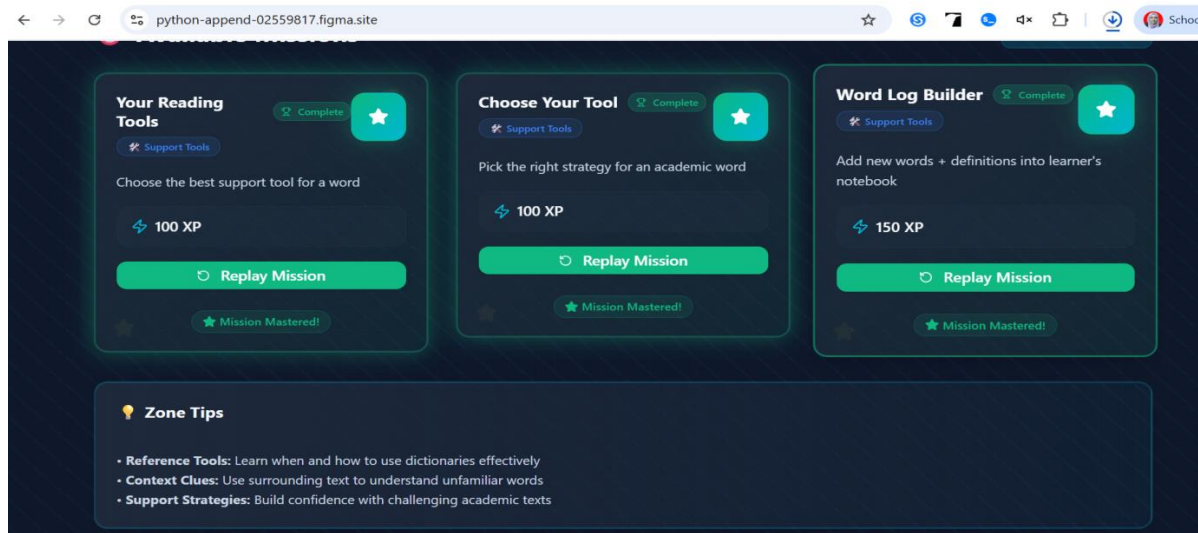
**Figure 1** The landing page of The Reading Strategist



## Design Principles.

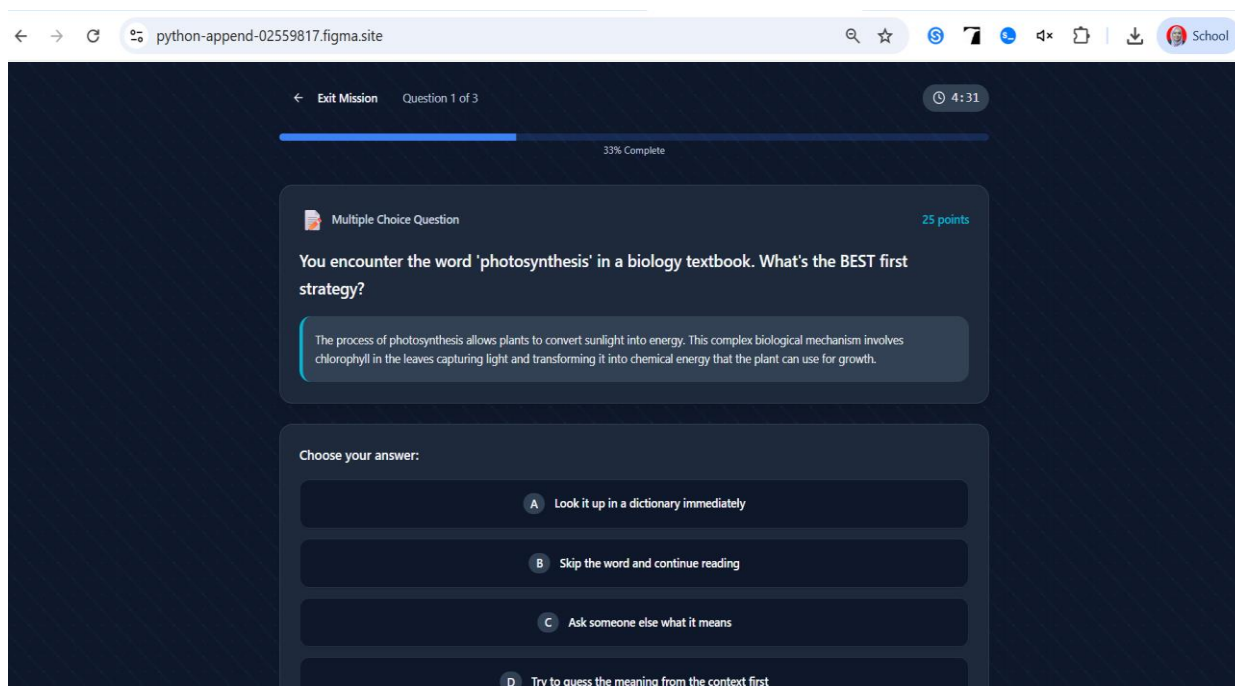
The design of The Reading Strategist: Quest for Academic Comprehension is guided by three pedagogical principles: strategy transparency, consequential practice, and reflective feedback. Strategy transparency refers to making the purpose and application of reading strategies clear to learners by clearly showing what the strategies are, why they are important, and when they should be applied. This ensures that learners do not use strategies mechanically but instead develop metacognitive awareness of their choices.

**Figure 2** Display of specific reading strategies for learners' benefit



Next, consequential practice involves embedding strategies into meaningful, goal-driven missions that mirror authentic academic tasks. Rather than practising skills in isolation, students encounter strategies in contexts that simulate real reading demands, thereby strengthening transferability to academic study.

**Figure 3** Simulation of real reading

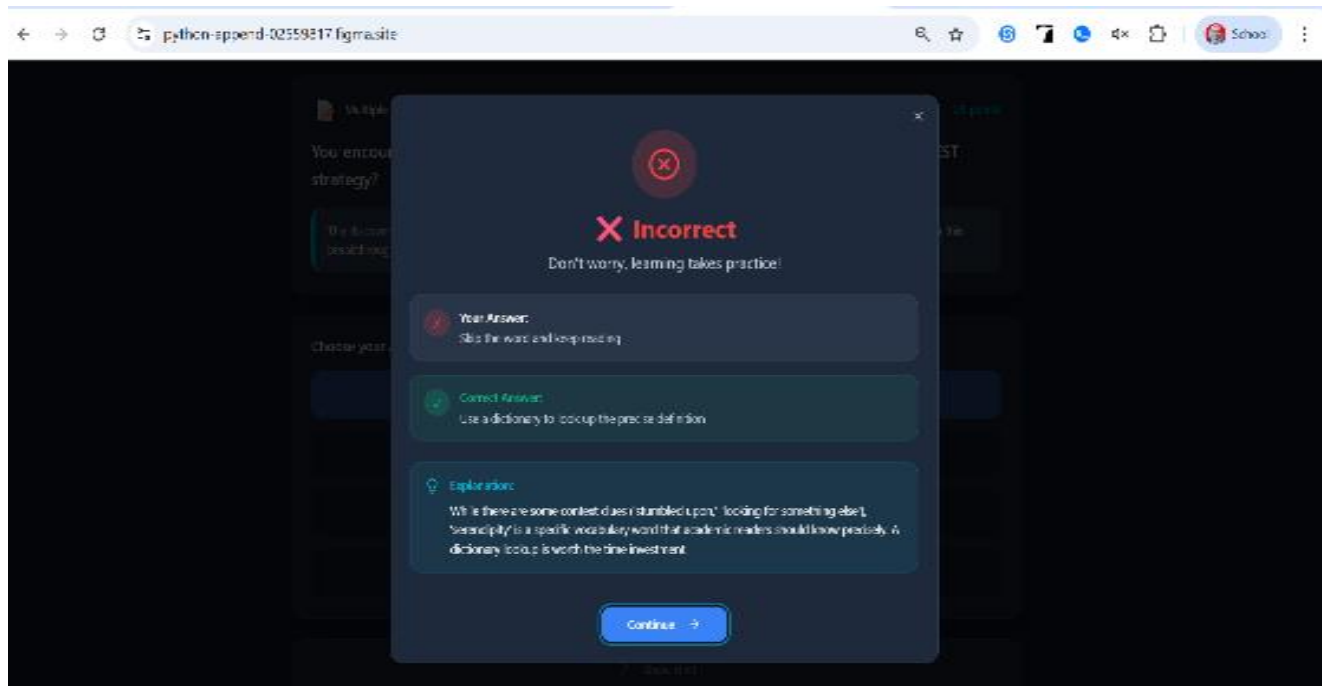


## Demands embedded in the game

Finally, reflective feedback provides learners a chance to look back at their strategic decisions after each task.

They can evaluate how effective those decisions were and think about how to adjust these strategies for future reading situations. This reflection process encourages deeper learning and long-term retention of strategic skills.

**Figure 1** Reflective feedback provided in the game



### Potential Findings and Commercialisation

The commercialisation potential of The Reading Strategist: Quest for Academic Comprehension is substantial, given its adaptability and alignment with current trends in higher education and educational technology. One of its most immediate applications is integration as a Learning Management System (LMS) plugin, particularly in institutional platforms such as UiTM’s uFuture. Embedding the game as allows for seamless adoption in existing digital ecosystems, where educators can assign missions as part of online coursework, monitor learner progress, and scaffold academic reading instruction within formal programmes. Such integration aligns with the global shift toward digital learning ecosystems that prioritise personalised and data-driven instruction (Aljohani, 2017; Bond et al., 2021).

In addition, the innovation can also be used flexibly in different academic settings. It can function as a standalone tool in academic reading courses, as supplementary content for academic reading workshops, or as a support system in blended learning programmes. This flexibility allows institutions to incorporate it into existing curricula without major restructuring. Modular educational tools are valued because they can be easily scaled and adapted to different fields (Laurillard, 2013).

Beyond higher education institutions, The Reading Strategist holds potential for partnerships and licensing opportunities. Its narrative-based strategy modules could be used and licensed by academic publishers, digital reading platforms, or professional training providers. This would expand its market reach. The demand for gamified, strategy-focused learning tools is growing in both formal and informal education. Publishers and platforms are looking to improve learner engagement and set their products apart. (Sailer & Homner, 2020; Dichev & Dicheva, 2023). By positioning itself as a research-driven, scalable, and adaptable innovation, The Reading Strategist is well-placed for long-term sustainability and broad adoption.

### NOVELTY AND RECOMMENDATIONS

The Reading Strategist: Quest for Academic Comprehension introduces several distinctive elements that set it apart from existing digital reading platforms. Unlike conventional comprehension tools that primarily assess outcomes, this innovation gamifies the explicit teaching of reading strategies, enabling learners to practise and

internalise Global, Problem-Solving, and Support strategies through interactive missions. This focus on strategy training instead of comprehension testing addresses the gap noted in reading research. Weaker learners greatly benefit from modeling and guided practice of metacognitive strategies (Mokhtari, Dimitrov, & Reichard, 2018; Jincheng & Rahmat, 2022).

The innovation also uses recent findings in gamified instruction. It shows how features like avatars, progress dashboards, and immersive stories can boost motivation, engagement, and reading persistence (Dichev & Dicheva, 2023; Lam & Hew, 2022). By incorporating strategy practice in a game-based framework, The Reading Strategist promotes autonomy, feedback, support, and story immersion. These are all important aspects of good gamification that lead to deeper involvement and lasting skill retention (Deci & Ryan, 2000; Hamari, Koivisto, & Sarsa, 2014).

In short, this product's uniqueness comes from linking strategy instruction and gamification. It creates an educational tool that motivates learners and improves their academic reading skills in digital environments.

Given its originality and potential for commercialization, several suggestions can help strengthen the impact and scalability of The Reading Strategist: Quest for Academic Comprehension. First, future development should focus on validating its effectiveness through classroom trials in higher education. Thorough testing across various subjects and different learner profiles would confirm its ability to enhance reading strategy awareness and comprehension. This could contribute to the growing research on gamified teaching methods (Sailer & Homner, 2020; Habók, Magyar, & Molnár, 2024).

Second, the platform should adopt a flexible design that allows customization of missions and texts based on institutional or disciplinary needs. This adaptability can improve its teaching relevance and make it more appealing for partnerships with universities, publishers, and ed-tech providers (Laurillard, 2013; Dichev & Dicheva, 2023).

Finally, the long-term vision should aim to expand beyond ESL contexts to reach wider academic and professional audiences. By adding multilingual support and adapting strategies for professional literacy practices, The Reading Strategist could have a broader impact on international markets and lifelong learning.

In conclusion, The Reading Strategist: Quest for Academic Comprehension represents a promising innovation that blends gamification, metacognitive strategy instruction, and narrative immersion to support ESL undergraduates in navigating the challenges of online academic reading. While pilot testing and classroom-based evaluations are planned for future research, the current conceptualisation offers a strong foundation for transforming reading instruction into an engaging, strategy-driven experience. Moving forward, the innovation should prioritise empirical validation through student and instructor feedback, as well as explore practical considerations such as teacher training, accessibility, and integration within institutional platforms. Establishing strategic partnerships with learning management system developers and publishers will further enhance its scalability and long-term sustainability. By pursuing this dual pathway of ongoing refinement and practical implementation, The Reading Strategist has the potential to make a meaningful impact on digital reading pedagogy, ensuring it remains educationally grounded, adaptable, and commercially viable in diverse learning contexts.

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