Assessing the Impact of a Game-Based Islamic Finance Service-Learning (SULAM) Programme on Islamic Financial Literacy among Secondary School Students.

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ABSTRACT

Financial literacy among high school students is essential for cultivating economically responsible societies. This study evaluates the efficacy of the "Money with Purpose: Islamic Finance for the Next Generation" project, implemented under the Service-Learning Malaysia - University for Society (SULAM) framework. Driven by university students from Universiti Teknologi MARA (UiTM) Kampus Puncak Alam, the community outreach aimed to transfer foundational Islamic finance principles to 142 secondary school students at SMK Seri Desa, Tanjung Karang. Employing an interactive, game-based educational methodology, five targeted knowledge modules were executed. Pre-survey and post-survey metrics were compiled to assess shifting baseline perceptions and comprehension levels. The results reveal substantial statistical improvement in students' comprehension of core tenets, including the prohibition of *riba* (usury), *gharar* (uncertainty), and *maysir* (gambling), as well as enhanced confidence in differentiating Islamic and conventional financial systems. This paper underlines the strategic potential of uniting corporate social collaboration, university service-learning models, and gamified instructional paradigms to bolster real-world financial literacy.

INTRODUCTION

Financial literacy has become an essential competency for navigating increasingly complex financial environments and making informed economic decisions. Rapid developments in financial markets, digital financial services, and diverse financial products have heightened the need for individuals to acquire sound financial knowledge and decision-making skills from an early age (OECD, 2023). In Muslim-majority countries such as Malaysia, financial literacy extends beyond conventional financial knowledge to encompass an understanding of Islamic financial principles, which govern financial transactions based on the prohibition of *riba* (interest), *gharar* (excessive uncertainty), and *maysir* (gambling), while promoting fairness, transparency, and ethical wealth creation (Bank Negara Malaysia, 2022; IFSB, 2023). Developing Islamic financial literacy among younger generations is therefore critical to preparing financially responsible citizens capable of making informed choices aligned with both economic and Shariah principles.

Despite the growing prominence of the Islamic finance industry, studies have consistently reported that awareness and understanding of Islamic financial concepts among young people remain relatively limited. Secondary school curriculum generally emphasize conventional economics and personal financial management, with comparatively little exposure to Islamic financial products, contracts, and ethical financial practices. This educational gap may hinder students' ability to distinguish between Islamic and conventional financial systems and reduce their preparedness to participate effectively in Malaysia's dual financial system (Lusardi & Mitchell, 2014; OECD, 2023). Consequently, innovative educational approaches are needed to improve Islamic financial literacy while fostering meaningful learning experiences among school students.

One pedagogical approach that has gained increasing recognition in Malaysian higher education is the Service-Learning Malaysia–University for Society (SULAM) initiative. Introduced by the Ministry of Higher Education, SULAM integrates academic learning with meaningful community engagement, enabling university students to apply disciplinary knowledge to address real societal needs while simultaneously enhancing civic responsibility, critical thinking, communication, and problem-solving skills (Ministry of Higher Education Malaysia, 2019). Grounded in experiential learning theory (Kolb, 1984), SULAM promotes reciprocal learning in which both university students and community participants benefit from collaborative knowledge exchange.

In addition, game-based learning has emerged as an effective instructional strategy for enhancing learner motivation, engagement, and knowledge retention. By incorporating interactive activities, challenges, and immediate feedback, game-based learning creates an active learning environment that encourages deeper understanding of complex concepts compared with traditional lecture-based approaches (Plass et al., 2015; Deterding et al., 2011). Within the context of Islamic finance education, integrating game-based learning into SULAM activities offers considerable potential to simplify abstract financial concepts and make learning more accessible and engaging for younger audiences.

This study evaluates the educational impact of the "Money with Purpose: Islamic Finance for the Next Generation" program, a game-based Service-Learning Malaysia–University for Society (SULAM) initiative developed under the Islamic Finance (FIN546) course for Bachelor of Business Management in Finance at Universiti Teknologi MARA (UiTM) Puncak Alam.

The program was designed and delivered by undergraduate students in semester two to enhance Islamic financial literacy among form three and form four secondary school students through five interactive learning modules. Using a pre-test and post-test on programme evaluation, this study assesses whether participation in the program significantly improves students' understanding of fundamental Islamic finance concepts and their ability to differentiate Islamic and conventional financial systems. The findings contribute to the growing body of literature on service-learning, game-based pedagogy, and Islamic financial literacy by demonstrating how university–community partnerships can effectively promote meaningful educational outcomes.

LITERATURE REVIEW

Financial literacy has been widely recognised as a critical life skill that enables individuals to make informed financial decisions, improve financial well-being, and contribute to sustainable economic development (Lusardi & Mitchell, 2014; OECD, 2023). As financial markets become increasingly sophisticated, there is a growing need to equip young people with the knowledge and competencies required to manage financial resources responsibly.

Within Malaysia's dual financial system, financial literacy should extend beyond conventional financial knowledge to include an understanding of Islamic finance principles, which are founded on ethical values, risk sharing, and Shariah compliance (Bank Negara Malaysia, 2022; IFSB, 2023).

Recent studies have highlighted that many young people possess only a moderate level of financial literacy, particularly regarding Islamic financial products and services. Although Malaysia is recognised as one of the global leaders in Islamic finance, awareness and understanding of concepts such as *riba*, *gharar*, *maysir*, Islamic banking, and takaful remain limited among school students and young adults (Abdullah & Anderson, 2015; Sabri et al., 2022). This knowledge gap may impede informed financial decision-making and reduce participation in the Islamic financial ecosystem.

To address these challenges, educators have increasingly adopted experiential learning approaches that actively engage learners in authentic educational experiences. Service-learning has emerged as an effective pedagogical strategy because it integrates academic learning with meaningful community engagement, allowing students to apply theoretical knowledge while simultaneously developing communication, teamwork, leadership, and civic responsibility (Kolb, 1984; Eyler & Giles, 1999).

In Malaysia, the Ministry of Higher Education institutionalised this approach through the Service-Learning Malaysia–University for Society (SULAM) initiative, which encourages reciprocal learning between universities and local communities (Ministry of Higher Education Malaysia, 2019).

In parallel, game-based learning has received considerable attention for its ability to increase learner engagement, motivation, participation, and knowledge retention. Interactive educational games encourage active learning by enabling learners to solve problems, receive immediate feedback, and participate in collaborative activities that enhance conceptual understanding (Deterding et al., 2011; Plass et al., 2015). Previous studies have reported positive effects of game-based learning across various educational disciplines; however, empirical evidence on its application in Islamic finance education, particularly within community-based service-learning programmes, remains limited.

Despite the growing body of literature on financial literacy, service-learning, and game-based learning, several research gaps remain. First, existing studies primarily focus on conventional financial literacy or evaluate the educational outcomes of university students participating in service-learning activities, with comparatively little attention given to the learning outcomes of community beneficiaries, particularly secondary school students.

Second, while game-based learning has been widely adopted across various educational settings, limited empirical research has examined its effectiveness in improving Islamic financial literacy through structured SULAM initiatives. Third, few studies have integrated service-learning and gamification within Islamic finance education and quantitatively evaluated their impact using pre-test and post-test assessments. Consequently, there is insufficient empirical evidence demonstrating whether game-based SULAM programmes can effectively enhance Islamic financial literacy among secondary school students.

To address these gaps, this study evaluates the educational impact of the "Money with Purpose: Islamic Finance for the Next Generation" programme, a game-based SULAM initiative implemented by undergraduate students from Universiti Teknologi MARA (UiTM).

Specifically, the study examines whether participation in the programme significantly improves secondary school students' understanding of fundamental Islamic finance concepts and their ability to differentiate Islamic and conventional financial systems. By integrating service-learning, experiential learning, and game-based pedagogy within the context of Islamic finance education, this study contributes to the emerging literature on innovative approaches for promoting Islamic financial literacy among younger generations.

This study makes three important contributions to the existing literature. First, it extends research on Islamic financial literacy by providing empirical evidence on the effectiveness of a game-based educational intervention for secondary school students. Second, it enriches the service-learning literature by evaluating the educational outcomes experienced by community participants rather than focusing solely on university students.

Third, it demonstrates how integrating gamification with the SULAM framework can enhance community engagement and knowledge transfer, offering a practical model for higher education institutions seeking to strengthen university–community partnerships while promoting financial literacy aligned with national educational and sustainable development agenda.

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Program Methodology & Conceptual Framework

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                 Game-Based SULAM Programme
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              |             |              |
      Interactive      Experiential     Collaborative
        Learning         Learning          Learning
        (Games)           (SULAM)       (Facilitators)

                            |
                            ▼
            Student Engagement & Motivation

                            |
                            ▼
              Learning Outcomes

     ┌─────────────────────────────────────┐
     | • Understanding Islamic Finance     |
     | • Knowledge of Riba                 |
     | • Knowledge of Gharar               |
     | • Knowledge of Maysir               |
     | • Islamic Banking Products          |
     | • Confidence in differentiating     |
     |   Islamic & Conventional Finance    |
     └─────────────────────────────────────┘

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                            ▼
          Improved Islamic Financial Literacy
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This study adopted a questionnaire for one-group based on pre-test and post-test quasi-experimental design to evaluate the educational effectiveness of a game-based Islamic Finance Service-Learning Malaysia–University for Society (SULAM) programme. The programme was conducted during a face-to-face community engagement programme held on May 2026 at Sekolah Menengah Kebangsaan (SMK) Seri Desa, Tanjung Karang, Selangor. The research design enabled the comparison of participants' knowledge and perceptions before and after the programme to determine whether statistically significant improvements occurred following programme participation. The programme involved two participant groups.

The programme was facilitated by 33 undergraduate students enrolled in the Islamic Finance (FIN546) course at the Faculty of Business and Management, Universiti Teknologi MARA (UiTM) Puncak Alam. These students designed and delivered the educational activities as part of their SULAM community engagement project. The target beneficiaries comprised 142 secondary school students from Forms 3 to 4, aged between 15 and 16 years, from SMK Seri Desa, Tanjung Karang, Selangor.

The programme adopted a Game-Based Learning (GBL) approach integrated within the SULAM framework. Participants rotated through five interactive learning stations, spending approximately 15 minutes at each checkpoint. Each station represented one instructional module. The instructional activities incorporated crossword puzzles, quizzes, matching exercises, scenario-based questions, and facilitator-led discussions to reinforce learning outcomes. Table below shows 5 modules aligned with learning objective to strengthen the Islamic financial literacy among secondary student.

Module	Learning Objective
Module 1	Fundamentals Concepts of Islamic Finance
Module 2	Importance of Islamic Finance
Module 3	Islamic vs Conventional Finance
Module 4	Riba versus Profit
Module 5	Islamic Banking Products

Data were collected using a structured questionnaire administered immediately before and after programme participation. The questionnaire employed a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The instrument measured aligned with the five modules for example understanding of Islamic finance, understanding of riba, understanding of *gharar*, understanding of *maysir*, knowledge of Islamic banking and engagement with the programme.

RESULTS AND DISCUSSION

Evaluation of Learning Outcomes through Pre- and Post-Intervention Assessment

The effectiveness of the Game-Based Islamic Finance Service-Learning Malaysia–University for Society (SULAM) programme was evaluated through a comparative analysis of participants' responses before and after the programme. A structured questionnaire using a five-point Likert scale was administered to assess changes in students' perceptions, understanding, and confidence regarding fundamental Islamic finance concepts.

The comparison between pre- and post-activity responses indicates positive improvements in students' conceptual understanding following participation in the programme. The findings suggest that exposure to interactive learning activities enabled students to develop a clearer understanding of key Islamic finance principles, including the prohibition of *riba* (interest), *gharar* (excessive uncertainty), and *maysir* (gambling), as well as the differences between Islamic and conventional financial systems.

The improvement in learning outcomes can be attributed to the programme's experiential learning approach, where students were not merely exposed to theoretical explanations but were actively involved in problem-solving activities, discussions, and practical scenarios. Through these activities, abstract financial concepts were transformed into relatable examples connected to students' daily financial experiences, such as saving money, purchasing goods, and understanding ethical financial decisions.

These findings support the argument of experiential learning theory (Kolb, 1984), which suggests that meaningful learning occurs when individuals actively engage with knowledge through experience, reflection, conceptualisation, and application. In this context, the SULAM programme provided students with opportunities to construct their understanding of Islamic finance through direct participation rather than passive information reception.

Pedagogical Evaluation: Interactive Gamification

Beyond measuring knowledge improvement, this study also examined whether the game-based learning approach enhanced students' engagement and accessibility to Islamic finance concepts. The findings demonstrate that gamification played an important role in transforming complex financial principles into a more understandable and enjoyable learning experience.

Before participating in the programme, 78 students indicated that they expected the programme to be interactive and engaging. This initial expectation reflects students' preference for alternative learning approaches that differ from conventional classroom-based teaching methods. Traditional lecture methods may present challenges when introducing technical financial concepts, particularly among secondary school students who have limited prior exposure to Islamic finance terminology.

Following participation, 109 students strongly agreed or agreed that the game elements successfully enhanced their learning experience and made complex Islamic finance concepts easier to understand. This substantial increase indicates that the interactive components, including crossword activities, checkpoint challenges, and collaborative problem-solving tasks, effectively supported knowledge acquisition.

The findings suggest that gamification served three important educational functions:

Increasing Student Engagement

The game-based activities encouraged active participation rather than passive listening. Students were required to discuss answers, solve challenges, and collaborate with peers. This interactive environment increased motivation and sustained students' attention throughout the learning process.

For example, the fundamental concepts such as *riba*, *gharar*, and *maysir*, which may initially appear abstract, were introduced through practical scenarios and game activities. This allowed students to relate theoretical Islamic finance principles to real-life financial situations.

Simplifying Complex Islamic Finance Concepts

Islamic finance involves technical terminology and Shariah-based principles that may be difficult for secondary school students to comprehend. The use of games helped break down complicated concepts into smaller and more manageable learning components.

The checkpoint rotation approach allowed students to focus on one concept at a time and before start the game facilitators will brief some of the instructions and the term related with the theoretical Islamic finance terminology such as:

- identifying halal and haram financial activities;
- understanding why *riba* is prohibited;
- distinguishing profit from interest;
- recognising Islamic financial products and contracts such as Takaful, Murabahah, Mudharabah contract etc.

This modular approach reduced cognitive difficulty and enabled students to gradually develop their understanding of Islamic finance.

Enhancing Knowledge Retention through Active Learning

The positive post-programme responses demonstrate that students were able to retain and apply knowledge after engaging with interactive activities. Unlike traditional lecture-based learning, where students may memorise information temporarily, game-based learning encourages deeper cognitive processing through participation, decision-making, and feedback.

These findings are consistent with previous studies highlighting that game-based learning improves learner motivation, engagement, and knowledge retention by creating meaningful learning experiences. Game-based learning broadly refers to an educational system that implements game or game-elements as a motivational driver for students (Prensky, 2003; Van Eck, 2006)

Item	Pre-Programme	Post-Programme	Interpretation
Expected/experienced programme as interactive and engaging	78 students	109 students	Increased positive perception after participation

Game activities improve understanding of Islamic finance concepts	-	109 students agreed/strongly agreed	Indicates effectiveness of gamification
Interactive checkpoint activities make complex concepts easier to understand	-	Positive response	Supports accessibility of Islamic finance education

DISCUSSION & INNOVATION INSIGHTS

The empirical outcomes from the "Money with Purpose: Islamic Finance for the Next Generation" programme demonstrate the potential of Game-Based Learning (GBL) as an effective pedagogical approach within a service-learning framework. Islamic finance concepts, including complex instruments such as Islamic contracts and Shariah principles related to *gharar* (excessive uncertainty), may appear abstract and challenging for adolescent learners when delivered through conventional teacher-centred approaches. By incorporating game-based activities such as puzzle-solving, matching exercises, interactive challenges, and real-life budgeting simulations, the programme transformed complex financial concepts into more accessible and meaningful learning experiences. This approach reduced cognitive barriers and enabled students to develop a clearer understanding of Islamic financial principles through active participation, collaboration, and experiential engagement.

Beyond its educational impact, the programme also highlights the scalability and sustainability of university–community collaboration through the Service-Learning Malaysia–University for Society (SULAM) framework. Supported by institutional resources, including a student activity allocation from the *Tabung Pengurusan Aktiviti Pelajar* the initiative demonstrates how academic programmes can establish effective partnerships with schools and financial institutions to promote Islamic financial literacy at the community level.

The programme also generated reciprocal benefits for both university students and community participants. This programme also benefits to undergraduate facilitators, the implementation of the SULAM project provided opportunities to develop essential soft-skill to graduate competencies, including leadership, communication, stakeholder management, teamwork, and project risk management skills. Meanwhile, participating secondary school students gained early exposure to ethical financial decision-making and personal financial planning based on Islamic principles. Therefore, the findings suggest that integrating Game-Based Learning with service-learning initiatives can serve as an effective model for promoting Islamic financial literacy while simultaneously strengthening university–community engagement.

CONCLUSION

The "Money with Purpose: Islamic Finance for the Next Generation" SULAM intervention demonstrates the transformative potential of integrating Game-Based Learning with university–community engagement to enhance Islamic financial literacy among secondary school students. By shifting from conventional knowledge transmission towards an interactive, experiential, and student-centred learning environment, the programme enabled participants to develop a deeper understanding of fundamental Islamic finance principles and make meaningful connections between financial concepts and real-life decision-making.

The findings highlight that contextualised knowledge transfer, supported by gamified activities and peer-led facilitation, can effectively reduce the complexity of Islamic financial concepts and improve students' confidence in distinguishing between ethical, Shariah-compliant financial practices and conventional interest-based mechanisms. Beyond improving financial knowledge among school students, the initiative also created valuable experiential learning opportunities for university students by strengthening their leadership, communication, project management, and community engagement competencies.

Moving forward, the sustainability and broader impact of similar initiatives can be enhanced through the integration of digital gamification platforms, continuous university–school mentorship programmes, and stronger collaboration with financial industry stakeholders. Such efforts can establish a scalable model for financial education that not only promotes Islamic financial literacy but also nurtures a generation of financially responsible, ethically conscious, and informed consumers capable of making sound financial decisions in an increasingly complex economic environment.

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