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Enhancing The Threshold Concepts: The Intervention of an Innovative Infographic Module-Based Padlet (IMP) In Franchise Business Management

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ABSTRACT

Distance learning has become an increasingly prominent mode of education in higher education institutions (HEIs) worldwide, offering flexible alternatives to traditional on-campus programs. Despite its widespread adoption, distance learners often struggle with grasping complex subject matter, particularly threshold concepts such as those found in franchise business education. This study explores the effectiveness of an instructional intervention using the Infographic Module-Based Padlet (IMP) to enhance conceptual understanding among students enrolled in the Franchise Business Management Course (FBMC) at Universiti Utara Malaysia (UUM). Adopting an action research methodology and a mixed methods design to ensure methodological triangulation, the study found that the IMP tool significantly improved learner engagement and comprehension. Participants reported that the visual and interactive nature of the module facilitated a clearer understanding of franchise business concepts, helping them overcome initial learning barriers. The findings suggest that such digital interventions can play a critical role in addressing low threshold issues among distance learners. From a policy standpoint, the results underscore the need for government and educational policymakers to revisit existing pedagogical frameworks to better support remote learning environments. Practically, HEIs and educators are encouraged to adopt more proactive and student-centered teaching strategies that leverage digital tools to foster deeper learning. The study contributes to ongoing efforts to enhance the quality and inclusivity of distance education, particularly in fields requiring conceptual mastery and applied understanding.

Keywords: Distance Learning, Threshold Concept, Franchise Business Concept, Infographic Module-Based Padlet (IMP), Scholarly Teaching and Learning (SoTL), Higher Education Institutions (HEIs).

INTRODUCTION

Distance learning, as defined within the educational context, refers to a pedagogical approach wherein instructors and learners are geographically separated and rely on digital communication technologies—such as internet platforms, email, video conferencing, and audio conferencing—to facilitate interaction and instruction (Fabian et al., 2022; Traxler, 2018). The modality has gained considerable prominence in recent years, particularly in response to the global disruptions caused by the COVID-19 pandemic, which accelerated its integration into mainstream educational systems (Fabian et al., 2022). This shift has underscored the critical role of digital infrastructure in sustaining academic continuity and expanding educational access.

As digital learning technologies continue to evolve, the demand for flexible and inclusive educational models has intensified, positioning distance learning as a transformative force in the future of education. Nevertheless, this modality presents pedagogical challenges, particularly in ensuring that students achieve meaningful learning outcomes (Chung & Choi, 2021; Sidek et al., 2024). In response, educators have increasingly adopted innovative instructional strategies and digital tools to enhance virtual engagement. Notably, the integration of infographics and interactive platforms such as Padlet has demonstrated efficacy in improving student comprehension and participation in online learning environments (Subramaniam & Fadzil, 2021).

Compared to conventional face-to-face instruction, distance learning offers unparalleled accessibility, enabling learners to pursue education from virtually any location with internet connectivity (El Refae, Kaba & Eletter, 2021). This flexibility holds promise for narrowing educational disparities between developed and developing regions by democratizing access to academic resources. Moreover, distance learning supports lifelong learning trajectories, allowing individuals to balance educational pursuits with professional responsibilities and caregiving roles.

From an economic standpoint, distance learning presents a cost-effective alternative to traditional education by minimizing the need for physical infrastructure and reducing associated travel expenses (Masood et al., 2024; Murad et al., 2025). These advantages not only contribute to institutional efficiency but also enhance the affordability of education for students. As such, the continued refinement of distance learning practices and technologies is essential to realizing its full potential in fostering equitable, sustainable, and learner-centered educational ecosystems.

Problem Statement

Globally, learners enrolled in distance education programs often encounter challenges in comprehending subject matter, particularly in mastering threshold concepts essential to disciplinary understanding (Brown et al., 2022; Burns, 2020; Zainuddin et al., 2023). Within the context of the Franchise Business Management course (BPME3023), the course instructor has expressed concern regarding the limited cognitive engagement and conceptual grasp among distance learners. Many of these students are primarily motivated by career advancement, which may inadvertently narrow their focus and impede deeper learning. This instrumental motivation, coupled with external constraints such as limited internet access, infrequent synchronous sessions, and restricted instructional hours—only four hours per month—further exacerbates their difficulty in distinguishing franchising from other foundational business models.

The dual burden of full-time employment and academic responsibilities presents additional barriers to effective learning for these adult learners. Their limited time for revision and reflection restricts their ability to assimilate course content, resulting in fragmented understanding and reduced academic performance (Burns, 2020; Zainuddin et al., 2023). To address this issue, the study introduces the Infographic Module-Based Padlet (IMP) as a pedagogical intervention aimed at enhancing conceptual clarity and engagement. By leveraging visual and interactive learning strategies, the IMP seeks to support learners in overcoming threshold concept challenges and achieving more efficient comprehension within constrained timeframes.

Despite extensive research on the academic engagement of full-time university students (Idris et al., 2021; Kamarudin et al., 2023; Liu et al., 2019), there remains a notable gap in understanding the unique learning needs of distance learners, particularly working adults. Their interaction with complex concepts in virtual environments has received limited scholarly attention. Consequently, this study contributes to addressing that gap by examining how the IMP intervention facilitates meaningful engagement with threshold concepts, thereby offering insights into more inclusive and effective instructional design for distance education (Brown et al., 2022; Meyer & Land, 2005).

Research Question (RQ) and Research Objective (RO)

As such, we have developed both research question and research objective for the study as stated below:

RQ: How does the intervention of Infographic Module-Based Padlet (IMP) help to enhance the BPME3023 distance learners' understanding of Franchise Business concept?

RO: To evaluate the effectiveness of the intervention using Infographic Module-Based Padlet (IMP) in enhancing students' understanding.

LITERATURE REVIEW

Franchise Business Concept

The franchise business model is characterized by a formal agreement in which a franchisor grants a franchisee the right to operate a business under its established brand, utilizing proprietary products, services, and operational systems (Abdul Ghani et al., 2022). This model has gained considerable traction among entrepreneurs worldwide

due to its strategic advantages, including reduced business risk, enhanced brand visibility, and structured access to training and operational support (Abaidah et al., 2024; Ahmad et al., 2025; Kamarudin et al., 2021b). However, despite its widespread appeal, the franchise model encompasses multifaceted legal, financial, and operational complexities that present significant learning challenges, particularly for distance learners pursuing entrepreneurship education (Masood et al., 2024; Sherman, 2011).

This study investigates the franchise business model through three interrelated thematic dimensions: the foundational principles of franchise business management, the identification and development of franchisable business models, and a comparative evaluation of franchising's benefits and limitations for various stakeholders. A critical distinction is drawn between franchising and independent business ownership to facilitate deeper conceptual understanding. Within the context of entrepreneurship education, franchising is recognized as a threshold concept—one that demands a transformative shift in learners' cognitive frameworks to grasp its strategic and structural intricacies (Murad et al., 2024b, 2025; Shane & Hoy, 2021). Accordingly, educators are tasked with developing pedagogical strategies that effectively engage diverse learner profiles and support the acquisition of complex business knowledge.

To address these pedagogical challenges, the adoption of digital technologies and innovative instructional methods has become increasingly essential, particularly in virtual learning environments. Tools such as interactive infographics and collaborative platforms have demonstrated potential in enhancing learner engagement, promoting conceptual clarity, and fostering independent learning in complex subject areas (Ismailova & Ergashev, 2019). These approaches not only support the comprehension of franchising as a threshold concept but also contribute to more inclusive and effective entrepreneurship education for distance learners.

The Infographic Module-Based Padlet (IMP)

Infographics, defined as visual representations of data, information, or knowledge, serve as powerful tools for conveying complex and voluminous content in a clear and accessible manner. Their application spans various domains, including archival documentation, cartography, instructional materials, and news dissemination. The theoretical foundation for visual argumentation was notably advanced by Stephen Toulmin in 1958 through his graphical model, which has since influenced pedagogical practices. In educational contexts, instructors frequently employ infographics to simplify intricate subject matter, leveraging their capacity to generate innovative and comprehensible learning materials.

The pedagogical value of infographics lies in their ability to transform abstract or dense content into visually engaging formats that facilitate learner comprehension. As highlighted by Hernández-Fernández and Morera-Vidal (2022) and Subramaniam and Fadzil (2021), infographics enhance the teaching and learning process by supporting cognitive retention and conceptual clarity. This is particularly relevant in distance education, where learners often engage with course materials independently. Empirical evidence suggests that infographics outperform text-only resources in promoting understanding and memory retention, thereby contributing to more effective learning outcomes.

Beyond their cognitive benefits, infographics also contribute to increased learner engagement and motivation. Their visually stimulating nature captures attention and sustains focus, as supported by Pashler et al. (2007). Moreover, the digital accessibility of infographics enhances their utility in remote learning environments. Learners can conveniently access these resources across various devices, including smartphones and tablets, thereby enabling flexible and inclusive learning experiences. The widespread availability of online infographics ensures that diverse content—ranging from statistical data to conceptual frameworks—is readily accessible to learners.

Furthermore, infographics offer adaptability to accommodate varied learning preferences, rendering them a versatile instructional medium. Educators can tailor infographic content to align with specific pedagogical goals and learner needs. As noted by Basco (2020) and Murad et al. (2024a), this customization enhances instructional effectiveness. Additionally, infographics contribute to instructional efficiency; Lin and Yu (2017) report that their use can reduce teaching time for complex topics by up to 50 percent. Collectively, these attributes underscore the strategic importance of infographics in distance education, where visual clarity, learner engagement, accessibility, and instructional efficiency are paramount.

METHOD

Research Design: Action Research

To address the two research questions underpinning this study, an action research design was employed, aligning with established frameworks in educational inquiry. Action research, often referred to as classroom action research, is widely recognized as a methodological tool for professional academic development aimed at enhancing teaching quality and instructional practices (Sakir & Kim, 2020; Creswell, 2012). Sakir and Kim (2020) emphasize

its focus on practical outcomes and the instructor's reflective engagement in improving pedagogical strategies. As noted by Creswell (2012), action research involves a systematic process through which educators and other stakeholders collect both quantitative and qualitative data to inform and refine their teaching approaches and learning environments.

Central to the action research paradigm is the concept of reflective practice, particularly the Reflection-in-Action process introduced by Schon (1984). This approach encourages practitioners to critically examine their experiences in real time, thereby fostering deeper insights and more responsive decision-making. In the context of this study, one of the lecturers initiated direct engagement with students to evaluate the impact of the instructional intervention on their comprehension. Such reflective engagement not only informed the ongoing implementation of the intervention but also contributed to the iterative refinement of teaching strategies based on student feedback and observed learning outcomes.

The action research methodology adopted in this study followed a cyclical and iterative structure comprising planning, acting, observing, reflecting, and modifying actions. Conducted over a two-month period, the research design adhered to the principles articulated by Kemmis and McTaggart (1988), who advocate for a dynamic and responsive process of educational change. Each cycle of the research was designed to build upon the insights gained from the previous phase, thereby fostering continuous improvement in instructional delivery and learner engagement.

Subriadi and Najwa (2020) provide further clarity on the operational stages of action research. The planning phase involves a comprehensive review of the research context, including the selection of appropriate methodologies, subjects, and instruments. The action phase entails the implementation of the planned intervention, while the observation phase serves as a critical checkpoint for data collection and monitoring. Finally, the reflection phase involves the analysis of findings, which informs subsequent cycles and concludes each iteration of the research process.

In this study, the planning phase focused on identifying the threshold concept challenges faced by BPME3023 distance learners in understanding franchise business principles. The action phase involved the deployment of a targeted instructional intervention designed to address these conceptual gaps. Observation was conducted through triangulated data collection methods to ensure robust monitoring of student progress. Reflective practice was then employed to interpret the outcomes, enabling the research team to assess the effectiveness of the intervention and propose refinements for future instructional strategies.

Data Collection Method

This study employed a mixed-methods approach to data collection, integrating both quantitative and qualitative techniques to ensure comprehensive analysis. Quantitative data were derived from students' performance scores in case-based activities conducted via Padlet, while qualitative data were obtained through focus group interviews, open-ended feedback responses, and reflective observations by the instructor and participating researchers following each intervention cycle. All performance metrics and feedback were systematically gathered using Google Forms across four distinct intervention phases. A detailed account of the methodological procedures is provided in the subsequent section.

Methodological Triangulation

As far as the credibility and trustworthiness of the research findings are concerned, a triangulation method was employed, which served to comprehensively address the research questions. This methodological approach incorporated five key components: (i) instructor's reflection, (ii) researchers' reflection, (iii) document analysis of students' written essays, (iv) students' reflection, and (v) student interviews. The integration of these diverse data sources enabled a multifaceted understanding of the instructional intervention and its impact on student learning, thereby strengthening the validity of the study's outcomes.

Semi-structured interview sessions were conducted with selected respondents to gain deeper insights into their learning experiences and evaluate the effectiveness of the Infographic Module-Based Padlet (IMP) intervention (Kamarudin et al., 2024). Each interview lasted approximately 45 minutes to one hour and was transcribed verbatim to preserve the authenticity of participants' responses. This transcription process facilitated a detailed examination of the nuances in student discourse, allowing researchers to identify recurring themes and patterns related to engagement, comprehension, and perceived value of the intervention (Kamarudin et al., 2023; Bowen, 2009).

Document analysis was employed to review students' written submissions, providing an additional layer of evidence regarding their conceptual understanding and application of course content. As outlined by Baxter (2021), document analysis involves the systematic evaluation of formal records in both print and digital formats. In educational research, this technique is guided by four core criteria—authenticity, credibility, representativeness, and meaning—which ensure the integrity and relevance of the data analysed (Baysal et al., 2022; Morgan, 2022).

Student reflections were collected throughout the intervention cycles using Gibb's (1988) Reflective Cycle framework, which encouraged learners to articulate their experiences and identify areas for improvement. These reflections served as a critical feedback mechanism, informing iterative modifications to the instructional approach. By incorporating student input and engaging in continuous pedagogical evaluation, the instructor-researcher was able to refine teaching strategies and enhance conceptual clarity among learners. This reflective and adaptive process contributed to the overall effectiveness of the IMP intervention in supporting student comprehension and engagement.

Franchise Business Management (BPME3023) Course Learning Outcomes

The Franchise Business Management course (BPME 3023) offered by Universiti Utara Malaysia is designed with specific learning outcomes intended to guide student development. Upon successful completion of the course, students are expected to demonstrate the following competencies:

- Discuss the concept of franchise and the differentiation between the other marketing approaches (A2, C2).
- Identify the development of franchise business in Malaysia - the involvement of franchise agencies, their roles and the execution of franchise activities (C4, A4).
- Evaluate the forms of preparation as a franchisor and the aspect of management as well as steps must be taken prior a potential franchisee involves in franchise business (C5).

This action research initiative is strategically developed to support the attainment of Course Learning Outcome 1 (CLO1), which focuses on enabling students to comprehend and effectively articulate the concept of franchising, while also distinguishing it from alternative marketing approaches. The following section provides a detailed exposition of the intervention phases, outlining the specific learning activities implemented to reinforce conceptual understanding and pedagogical impact.

Data Analysis – Thematic Analysis

This study employed thematic coding as a qualitative analytical technique to address the research questions, following established procedures outlined by Kamarudin et al. (2023) and Maguire and Delahunt (2017). The qualitative dataset comprised student interviews, open-ended feedback, and reflective observations recorded by the researcher throughout each intervention cycle, in accordance with Gibb's (1988) Reflective Cycle. Data were collected systematically across multiple stages of the study and subsequently synthesized to identify recurring themes that illuminated the effectiveness of the Infographic Module-Based Padlet (IMP) intervention.

Thematic analysis was conducted through a structured six-phase process: (i) familiarization with the data, (ii) generation of initial codes, (iii) identification of emerging themes, (iv) review of thematic coherence, (v) definition and naming of themes, and (vi) production of the final analytical narrative (Maguire & Delahunt, 2017). This rigorous approach enabled the researchers to extract meaningful insights from the qualitative data, capturing the nuanced perspectives and experiences of the participants.

To enhance the robustness of the findings, the qualitative results were triangulated with quantitative data derived from student performance scores. This integration formed part of a mixed-methods strategy within the Scholarship of Teaching and Learning (SoTL) framework, incorporating statistical analysis—specifically a T-test—as outlined by Kamarudin et al. (2021a). The combination of thematic and statistical analyses provided a comprehensive understanding of the pedagogical impact of the IMP intervention, reinforcing the validity and applicability of the study's conclusions.

Intervention Strategies and Procedures

This action research was structured around four iterative intervention cycles, beginning with the principal researcher's reflective practice on teaching the Franchise Business Management course (BPME3023) in a distance learning context over the preceding two semesters. This initial phase served as the problem identification stage, wherein the instructor critically examined pedagogical challenges and student learning difficulties, particularly concerning threshold concepts. The insights gained from this reflection were systematically analysed and shared with the observer researchers, enabling the formulation of targeted intervention strategies aimed at improving students' conceptual understanding and overall learning experience. The full cyclical framework of the Infographic Module-Based Padlet (IMP) intervention is illustrated in Figure 1.

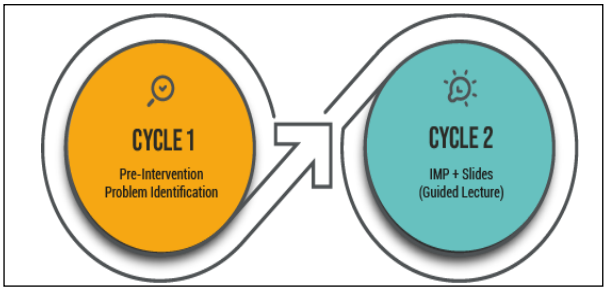

Figure 1. The Intervention Cycles

In the second phase, the intervention was implemented by integrating the IMP into the existing instructional approach, which previously relied on conventional lecture methods. Each cycle involved collecting student responses at both pre-intervention and post-intervention stages. Initially, students engaged with a case study designed to assess their grasp of foundational theoretical concepts. Following this, they completed a second Google Forms activity focused on the franchising theories presented through the IMP. Students were then required to respond to content embedded within the infographic materials, allowing researchers to evaluate shifts in comprehension and engagement resulting from the intervention.

The first intervention cycle introduced students to an interactive IMP and guided lecture slides covering Chapters 1, 2, and 3—core sections that address fundamental aspects of franchise business management, including definitions, examples, and distinctive operational features. These chapters were deliberately selected to establish a strong conceptual foundation. In the final phase of the study, a comprehensive assessment was conducted to evaluate the effectiveness of the intervention cycles. This assessment focused on measuring improvements in students' understanding of franchising concepts and identifying areas for further pedagogical refinement.

FINDINGS

The findings of this study are systematically presented according to each intervention cycle conducted within the framework of this Scholarship of Teaching and Learning (SoTL) research. As outlined, the data were derived through a triangulation strategy encompassing three key sources: students' reflective feedback, document analysis of their tasks and assignments, and reflective observations by the researchers. This multi-source approach ensured a comprehensive and credible evaluation of the intervention's impact on student learning.

Cycle 1: Pre-İntervention or Problem Identififcation

The first cycle of this action research represents the pre-intervention phase, during which key challenges related to students' attainment of the threshold concept of franchising (CLO1) were identified. This diagnostic stage focused on two primary dimensions: the course delivery mode and the learners' contextual learning conditions. The absence of weekly meetings and the presence of extended intervals between online sessions were found to contribute to diminished student motivation and concentration. Simultaneously, the nature of distance learners—many of whom are working adults—posed additional constraints, particularly in terms of time availability and the cognitive load required to engage with extensive course materials. These issues were further substantiated through student interviews and a pre-test assessing their initial understanding of franchising concepts.

Findings from Instructor's Reflection

Insights from the instructor's reflective practice during this cycle revealed several noteworthy observations. One prominent finding was the heterogeneity of the student cohort, encompassing a wide range of demographic characteristics, including age, professional and academic backgrounds, and varying degrees of exposure to franchising in real-world contexts. This diversity suggested that some students possessed prior knowledge or experience that could be leveraged to support peer learning. Consequently, the establishment of an online collaborative platform was proposed to facilitate knowledge exchange, promote student-centred learning, and enable learners to monitor their progress throughout the intervention period.

Another critical observation pertained to the generally low levels of student motivation and engagement with the BPME3023 course. This issue appeared to be influenced by several factors, including the elective nature of the course, the asynchronous online delivery format, and the competing demands of students' professional responsibilities. The lack of regular interaction and structured learning sessions further compounded the challenge of maintaining sustained attention and interest. Therefore, any instructional intervention must be designed to address these contextual realities by offering a learning experience that is accessible, engaging, and responsive to the needs of adult learners.

Failure to consider these pedagogical and logistical factors may undermine the effectiveness of the intervention and hinder students' ability to remain actively involved throughout the semester. As such, the proposed instructional strategy must prioritize simplicity, interactivity, and relevance to ensure that learners are not only able to grasp the threshold concepts but also remain motivated to participate meaningfully in the learning process. This foundational cycle thus sets the stage for subsequent interventions aimed at enhancing conceptual understanding and learner engagement.

Findings from Document Analysis (Students' Assessment)

The instructor's preliminary assessment focused on diagnosing student learning challenges and aligning them with the threshold concept of franchising, as outlined in Course Learning Outcome 1 (CLO1). To initiate this process, a set of three general questions related to franchise business was disseminated via Padlet during the first and second intervention cycles. All eleven students were required to respond to these questions, providing the instructor with an opportunity to observe and evaluate their initial conceptual grasp. This activity served as a diagnostic tool to gauge the learners' baseline understanding prior to the formal implementation of the instructional intervention.

Analysis of the Padlet responses revealed a consistently low level of comprehension regarding the threshold concept of franchising. The students' submissions were largely superficial, lacking depth and critical engagement with the core principles of franchise business management. This outcome highlighted a significant gap in their foundational knowledge and underscored the need for a more structured and engaging pedagogical approach. In response to these findings, the instructor proposed the integration of the Infographic Module-Based Padlet (IMP) as a targeted teaching aid for the subsequent intervention cycle. The IMP was envisioned as a visually rich and interactive tool designed to enhance conceptual clarity, promote learner engagement, and support the development of deeper understanding among distance learners.

Findings from Interview with Past Semester's Students

An additional approach employed for problem identification during this cycle involved conducting structured interviews with selected learners, which yielded further insights into the preliminary phase. The instructor's primary aim in collecting this qualitative data was to validate concerns regarding the low levels of motivation and concentration observed among adult learners engaged in distance education.

To this end, two participants were interviewed, providing valuable and targeted responses that aligned with the instructor's investigative objectives. The interviews focused on eliciting information about the learners' personal backgrounds, employment trajectories, motivations for pursuing further education, and prior academic experiences. These responses offered deeper perspectives into the learners' attitudes and challenges associated with studying in a distance learning environment.

Instructor: What motivates you to continue your study?

> "It's my interest to study. I think that I am in a place where everyone else has already finished their studies, and the environment encourages further education. So, I am taking this opportunity to continue my studies." (L1)

> "...my parents wanted me to join the public sector because of its bright future. I found some colleagues pursuing their studies and this working environment gives an opportunity to enhance my career for future job promotion. It's my soul to pursue higher education." (L2)

Instructor: How about the approach used by the lecturers for online and face-to-face classes?

> "As a distance learner, it can be challenging to communicate effectively with the lecturer and to receive timely feedback. Lecturers should understand the challenges faced by distance learners, such as limited access to face-to-face interactions, limited access to resources, and the need for flexibility in learning. Lecturers should not be too rigid and instead adopt a more supportive approach to help distance learners overcome these challenges." (L1)

> "This time around for the learning process, especially in Dr's class - the use of the Padlet is new to me… previously the other lecturers just used PowerPoint, Quizzes and lecture... so (it was) quite challenging and it takes time for me to adapt to the new teaching aid." (L2)

Instructor: How are you finding the understanding of business courses, particularly the franchise business concept itself, considering that you are a Bachelor of Communication student?

"This programme is more for management communication…which includes courses like businesses, management, how to deal with lower-level staff. For me, it is quite relatable to me as I'm involved in business together with my husband...so I can apply it in daily life." (L1)

"It's quite ok because we already have the basics of business courses from the previous semester. It boosted my interests but because of the lecturer itself, if the lecturer is equipped with the knowledge and information about the course it will increase our understanding and increase our interest to learn." (L2)

Instructor: What was your first impression when I introduced the Padlet?

"I have never heard of Padlet before because no lecturer had ever used it. For me, I have never used it since my earlier days of learning…It feels more difficult to answer that question compared to before…but after being explained it's easy to use and I don't need to turn on my laptop." (L1)

"This is new to me…first time I heard and used this Padlet…quite blurry and didn't know how to use it. I was the one who posted the answer last because I was trying to find out how Padlet worked…I need more time to answer the activity as I need to refresh the topic and learn Padlet." (L2)

Responses from Learner 1 (L1) and Learner 2 (L2) to the probing interview questions revealed encouraging insights regarding their intrinsic motivation to pursue further education and their preference for online learning modalities. However, both learners expressed ambivalence when engaging with Padlet, citing unfamiliarity with the platform and initial discomfort in navigating its features. Overall, the instructor's findings from the interview sessions centered on three key dimensions: learners' motivation to study, their preferred learning approaches, and their emotional responses to the introduction of Padlet as a digital learning tool.

Summary of Cycle 1

During the problem identification phase, all researchers reached a consensus on the implementation of the Infographic Module-Based Padlet (IMP) intervention, prompted by the observation that learners demonstrated only a superficial understanding of franchise business management concepts. Despite exhibiting strong enthusiasm and commitment toward their academic pursuits, the learners required additional time and support to adapt to Padlet as a new instructional medium. This highlighted the necessity for a structured pedagogical strategy in the subsequent cycle, aimed at enhancing conceptual clarity and learner engagement through the use of IMP.

Cycle 2: IMP and Slides (with Guided Lecture)

The second cycle marked the formal commencement of the instructional intervention. Building upon the challenges identified in the initial cycle, the Infographic Module-Based Padlet (IMP), accompanied by supporting slide materials, was introduced during the first online session. The infographic content focused on three core dimensions of Chapter One (Introduction to Franchise Business) namely, theoretical foundations, future prospects, and motivations for engaging in franchising.

Padlet was employed as an integrative digital platform, enabling learners to engage with classroom activities, respond to targeted questions, and interact collaboratively. Consistent with the structure of the first cycle, the instructional activities were anchored around three guiding questions, as outlined below:

- What is a franchise business? Provide three (3) examples in your answers.
- What are the unique operational and management features of franchising?
- What is agency theory, and how can the theory be applied in business franchise?

In addition to the structured lecture on the chapter content, the four-hour online session was strategically designed to familiarize learners with the operational aspects of Padlet. This orientation aimed to build their confidence and technical competence, enabling them to independently post responses in future activities. Upon completion of the intervention, a Google Forms survey was administered to collect learner feedback and assess their engagement with the instructional tools.

Findings from Student's Reflections

Initial feedback collected from the learners indicated that approximately 80% agreed the use of IMP combined with slide presentations significantly enhanced their comprehension of Chapter 1. Furthermore, nearly 90% expressed enjoyment of this instructional approach, noting that it effectively simplified the chapter content and facilitated clearer understanding. The majority of learners commended the instructor's initiative and offered constructive suggestions for further improvement in subsequent sessions. Selected learner feedback included the following:

"…infographics were simple and clear."

"…use of IMP intriguing and accessible."

"…absolutely helpful."

"…to add more explanation."

"…to include relevant examples."

Findings from Document Analysis (Rubric on Submitted Padlet-Casses Essay)

The assessment findings for Cycle 2 were derived from rubric-based evaluations, which served as a structured mechanism to gauge learners' comprehension levels. The use of a knowledge rubric was essential for tracking incremental improvements across cycles, particularly in response to weekly case-based activities delivered via Padlet. These cases were specifically designed to assess learners' application of conceptual knowledge through guided questions.

During Cycle 1, a pre-test was administered and evaluated through instructor observation prior to the formal lecture. Following the implementation of the IMP + Slides intervention, a noticeable progression in the depth and maturity of learners' responses was observed in Padlet activities. This qualitative improvement was further substantiated by quantitative analysis, with T-test results indicating a statistically significant enhancement in learner performance from Cycle 1 to Cycle 2 (refer to Table 3 for detailed scores).

Findings from Researcher's Reflection (Observer-Participants and Instructor's Reflections)

The overwhelmingly positive feedback from learners affirms the effectiveness of the IMP + Slides intervention. While the infographics presented information in a simplified format—contrasting with the more detailed slide content—the delivery remained clear, concise, and pedagogically sufficient. A notable example includes the use of acronyms and distinctive visual elements in illustrating the Theory of Franchise (refer to Figure 2), which demonstrably enhanced learners' memory retention and conceptual understanding.

Moreover, the integration of Padlet proved highly beneficial, functioning as a centralized platform for peer interaction, content access, activity participation, and direct communication with the instructor. This holistic learning environment fostered a sense of shared achievement, as reflected in the encouraging feedback from both students and the research team.

Figure 2. The Theory of Franchise

A key point of reflection from the learner feedback is the general consensus that the IMP and slide-based approach was effective in supporting their understanding, with only minor refinements suggested for future implementation. This affirms the continued relevance and applicability of IMP and slides as the central instructional tools within the action research framework.

Nonetheless, several learners emphasized the need for more detailed explanations to complement the simplified content presented in the infographics. To uphold the pedagogical integrity of the intervention and ensure equitable access to deeper learning opportunities, these suggestions should be carefully considered in subsequent cycles. This will help balance clarity with depth, ensuring that the streamlined format does not inadvertently limit learners' ability to engage with more comprehensive conceptual insights when needed.

Summary of Cycle 2

In this cycle, the instructor's delivery of a guided lecture, complemented by the integration of IMP and slide-based materials during the online session, represented a strong initial effort to support learners' comprehension of franchise business concepts. The research team unanimously agreed that this approach was particularly beneficial for distance and working-adult learners, aiding their retention and understanding through the use of targeted infographics and weekly Padlet activities designed to reinforce Chapter 1 content.

Feedback collected at the conclusion of each weekly activity provided valuable insights, enabling the instructor to continuously refine both the pedagogical approach and the instructional materials. Despite these efforts, the results revealed a persistently low level of threshold concept mastery among the learners. All eleven participants submitted responses that were largely general and lacked depth. In response to this finding, the instructor recommended the continued use of IMP as a core teaching aid in the subsequent cycle, with adjustments aimed at deepening conceptual engagement and enhancing learner outcomes.

Quantitative Method (T-Test Analysis)

To evaluate the effectiveness of the IMP intervention, an independent t-test was employed to determine whether there were statistically significant differences in learners' performance scores across the intervention cycles. The principal researcher (instructor) systematically assessed learners' responses in each cycle and documented the scoring data. These scores, with a maximum attainable mark of 100 per cycle, were then compared between Cycle 1 and Cycle 2 to measure changes in comprehension and overall performance.

The results of the t-test analysis are presented in Table 1, illustrating the impact of the intervention on learners' understanding of the franchise business concept.

Table 1. t-Test Analysis

Cycle	N	Mean	Std. Deviation	Std. Error Mean	t-value	df	p-value (2-tailed)
1 vs 2	11	22.00	7.642	2.304	-26.727	17.903	<0.001

The findings from the independent t-test analysis indicate a statistically significant difference in mean scores between the two groups assessed across Cycle 1 and Cycle 2 ($t(20) = -9.503$, $p < .001$). The negative t-values suggest that the mean score in Cycle 2 was notably higher than that of Cycle 1, reflecting improved learner performance following the intervention (Field, 2013). Given that the p-values fall below the conventional alpha threshold of 0.05, the null hypothesis can be rejected in favor of the alternative hypothesis, confirming a meaningful difference in group means (Rosner, 2015).

Collectively, these results demonstrate a substantial improvement in learner comprehension and performance between the two cycles, thereby affirming the positive impact of the IMP + Slides intervention.

DISCUSSIONS

Classroom teaching and learning activities encompass a range of pedagogical elements, among which visual aids play a pivotal role. Their integration into both physical and virtual learning environments has been widely recognized as an effective instructional strategy (Zain, 2021; Akhmetshin et al., 2019). In the context of distance education where learners are geographically separated from institutional settings the use of visual aids serves as a critical medium for interaction, enhancing the potential for meaningful learning experiences (Fabian et al., 2022; Traxler, 2018).

In the post-pandemic era, characterized by rapid technological advancement, the relevance of visual aids in education has become even more pronounced (Subramaniam & Fadzil, 2021; Zain, 2021). Zain (2021) emphasizes that technological visual aids contribute to more engaging and interactive sessions, while Subramaniam and Fadzil (2021) underscore the importance of innovative teaching methods in supporting virtual learning. These tools have been shown to significantly enhance student engagement and comprehension in online settings (Ismailova & Ergashev, 2019).

This study introduced the Infographic Module Padlet (IMP) as a visual aid central to the intervention strategy. The findings demonstrate that IMP effectively supports learner engagement, stimulates interest, and facilitates the attainment of the threshold concept in the BPME3023 Franchise Business Management course. These outcomes align with prior research highlighting the pedagogical value of technological tools in promoting active learning and conceptual understanding (Tang et al., 2021; Lin & Yu, 2017; Pashler et al., 2007).

The intervention also contributed directly to achieving Course Learning Outcome 1 (CLO1), which focuses on students' ability to understand and articulate the concept of franchising and distinguish it from other business

models. Learners showed progressive mastery across three key chapters: introduction to franchise business, franchisable business concepts, and the advantages and disadvantages of franchising for stakeholders. These improvements were evident through successive intervention cycles and reflect the successful integration of visual aids into the learning process (Brown et al., 2022).

One of the most notable outcomes of the IMP intervention was its capacity to foster deep learning. Ramsden (2003) defines deep learning as the ability to internalize and apply knowledge meaningfully, as opposed to surface-level memorization. The structured use of IMP enabled learners to engage with theoretical content more effectively, translating abstract concepts into practical understanding and application.

Equally important is the instructor's role in understanding learner needs. Chaudhuri (2020) and O'Mahony et al. (2016) argue that meaningful engagement with students is essential for enhancing learning outcomes. In this study, such efforts translated into improved comprehension, motivation, and participation among learners. The intervention also cultivated a more inclusive and responsive learning environment, particularly beneficial for adult and distance learners (Subramaniam & Fadzil, 2021).

During the problem identification phase (Cycle 1), the research team conducted reflective analysis to uncover factors contributing to learners' limited grasp of the threshold concept. These included the learners' status as working adults whom many from uniformed services their enrollment in a communication-based program, the elective nature of the BPME3023 course, and their primary motivation for career advancement. These contextual factors shaped their engagement levels and necessitated a tailored instructional approach.

Given these constraints, the introduction of IMP was a strategic response to enhance learner motivation and support CLO1 achievement. Feedback from students gathered through reflections and interviews—revealed strong appreciation for the intervention. Learners expressed enthusiasm for the new tool, noting its role in increasing their interest and motivation to explore course content more deeply. These findings are consistent with literature on effective teaching tools that promote engagement and learner satisfaction (Ismailova & Ergashev, 2019; Tang et al., 2021).

The implementation of IMP in Cycle 2 began with a hands-on orientation, where students were guided through the use of Padlet. This preparatory phase ensured familiarity with the platform, laying the groundwork for subsequent Scholarly Teaching and Learning (SoTL) activities. The intervention evolved through continuous refinement, informed by Gibbs' (1988) Reflective Learning Theory. While feedback confirmed improved understanding of the threshold concept, it also highlighted the need for more detailed explanations to complement the simplified infographic content. These insights will inform the design of future cycles to ensure equitable access to comprehensive learning.

SUGGESTION FOR FUTURE RESEARCH

Drawing from the implementation of the Scholarship of Teaching and Learning (SoTL) approach, it is evident that additional reinforcement is necessary to support distance learners in fully grasping the subject matter and achieving the required threshold concept. The feedback provided by students strongly suggests the need for at least one additional cycle within the current IMP intervention framework to further consolidate their understanding.

This proposed cycle would allow instructors and researchers to expand upon the concepts presented in the infographics, offering more detailed explanations that could enhance conceptual clarity and accuracy. Moreover, incorporating real-world examples of franchise businesses through case studies, multimedia resources, or experiential learning activities such as field visits would enrich the learning experience. Such contextual applications would enable researchers to observe and evaluate how learners internalize and apply the threshold concept of franchise business management in more authentic and practical settings.

CONCLUSION

In summary, the use of instructional tools and visual aids presents a valuable strategy for enhancing classroom teaching and learning practices. Within this scholarly teaching initiative, the development and implementation of the Infographic Module-based Padlet (IMP) proved to be a significant intervention in addressing both pedagogical challenges and the core research questions. Notably, the tailored design of the IMP effectively supported the acquisition of the threshold concept in franchise business management, particularly among distance and working-adult learners.

This approach enabled students to engage with complex course content more effectively, despite the constraints of their professional and personal commitments. Furthermore, the IMP served as a practical and accessible reference tool, facilitating exam preparation and promoting deeper conceptual understanding. Learners

benefited from structured content revision through the IMP, accompanying slides, and supplementary notes, while also drawing insights from peer contributions thereby fostering a collaborative and reflective learning environment.

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