

THE RELATIONSHIP BETWEEN PEDAGOGICAL APPROACHES AND LEARNING ENGAGEMENT IN ENTREPRENEURSHIP AND INNOVATION COURSE AT NORTHERN REGION UNIVERSITIES OF MALAYSIA: A SCOPING REVIEW

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ABSTRACT

The integration of diverse pedagogical approaches in higher education has emerged as a critical factor in enhancing student engagement and fostering entrepreneurial mindsets. In Malaysia, the focus on entrepreneurship and innovation within university curricula is part of broader efforts to cultivate entrepreneurial abilities and contribute to national economic growth. This scoping review explores the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at Northern Region universities in Malaysia. The goal is to identify effective teaching strategies that enhance student engagement, as well as to highlight research gaps in this area. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines, a thorough search was conducted across databases such as ERIC, ProQuest, and Jstor. Seventeen studies met the inclusion criteria and were analyzed to uncover key themes, pedagogical practices and gaps in the existing literature. The findings emphasize the importance of pedagogical approach on learning engagement.

Keywords: Pedagogical Approaches; Student Engagement; Entrepreneurship Education; Innovation; Malaysia

1. INTRODUCTION

Pedagogical approaches significantly impact student engagement and learning, particularly in fields like entrepreneurship and innovation. Universities, originally focused on knowledge dissemination, have evolved into key drivers of economic development and technological advancement, with academic entrepreneurship playing a central role. As Clark, B. R. (1998) stated, universities are no longer merely producers of human capital and industry-ready workers; they now play an active role in fostering entrepreneurial mindsets, facilitating, nurturing, and supporting entrepreneurial activities. This shift is particularly notable in Malaysia, where the government has prioritized entrepreneurship and innovation courses as part of its Vision 2020 initiative to foster a knowledge-based economy.

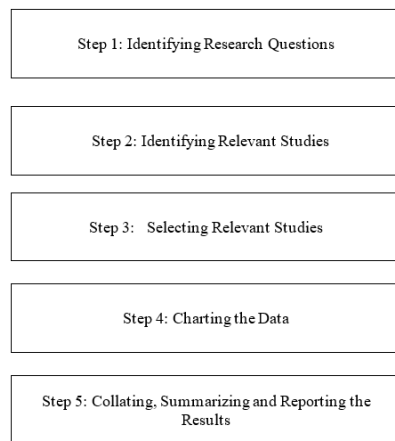
Learning engagement is influenced by various pedagogical approaches, such as experiential, traditional, and project-based learning, which promote creativity and problem-solving. These methods are crucial in entrepreneurship education, helping to develop entrepreneurial mindsets and preparing students for real-world challenges. Despite the increasing focus on entrepreneurship education, there is a gap in understanding how different pedagogical approaches influence learning engagement in these courses. This scoping review aims to investigate the pedagogical strategies used in entrepreneurship and innovation courses at universities in Northern Malaysia and their impact on learning engagement. It will

also draw on global trends and best practices from regions where academic entrepreneurship has been transformative. The findings will help identify research gaps and provide insights into the current body of knowledge, offering directions for future research.

2. MATERIALS AND METHODS

This scoping review follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA) guidelines (Ne'matullah et al., 2022; Zaid et al., 2022). The present scoping review was carried out based on Arksey and O'Malley (2005) methodological framework:

Figure 1: Methodological framework (Arksey & O'Malley, 2005)



2.1 Identifying the Research Questions / Objectives

The below fundamental 'scoping review' research questions were created based on the research objectives of the Population-Concept-Context (PCC) framework.

Table 1: Research Questions / Objectives Based on PCC

	Research Questions	Specific Objectives
1.	How are past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia distributed?	To identify the distribution of past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia.
2.	What research designs were used by past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia?	To highlight the research designs employed in studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia.

3.	What are the research aims of past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia?	To determine the research aims of prior studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia.
4.	What elements of the study were examined in past research on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia?	To examine the key elements investigated in past research on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia.
5.	What are the findings of past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia?	To evaluate the findings of past studies on or related to the relationship between pedagogical approaches and learning engagement in entrepreneurship and innovation courses at northern region universities of Malaysia.

2.2 Identifying Relevant Studies

The search strategy was designed to comprehensively cover all relevant studies. This involved using relevant keywords related to the topic.

Table 2: Search Strategy

	Search Database	Search String/Keyword
1.	ERIC	(pedagogical approaches OR teaching methods OR instructional strategies) AND (learning engagement OR student engagement OR active learning) AND (entrepreneurship OR innovation education) AND (higher education OR universities) AND (Malaysia OR Northern Region Universities of Malaysia)
2.	Proquest	
3.	Jstor	

2.3 Selecting Relevant Studies

Table 3: Inclusion and Exclusion Criterion

	Inclusion Criteria	Exclusion Criteria
1.	Articles published from 2019 - 2025	Articles before 2019
2.	Related to higher education student	Not related to higher education student
3.	Text in English language	Other languages
4.	Full text	Without full text

2.4 Charting the Data

The researcher collectively determined which attributes of the articles to extract for summary and analysis after piloting the data charting table with a representative sample of the studies to be reviewed. The completed data charting structure was designed to retrieve the following study elements: Author Name, Title, Research Design, Aims, Theories and Findings. For a detailed summary of the data extracted, please refer to this link: [[Link](#)].

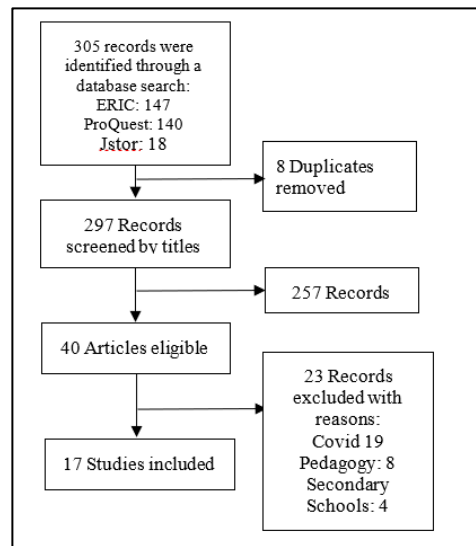
2.5 Collating, Summarizing and Reporting the Results

The researcher summarized and reported findings from the charting process and then organized the findings by applying codes and keywords to minimize and narrow down all the data into related content. Next, the codes and keywords were revised to ensure the data collected were relevant to the study and collated into predefined categories.

3. RESULTS AND DISCUSSION

The search identified 305 records through a database search of Education Resources Information Center (ERIC), Proquest and Jstor. Figure 1 shows that 147 titles were extracted from the ERIC database, 140 titles were identified from the Proquest database and 18 titles were obtained from the Jstor database. After removing 8 duplicate titles, 297 records were screened by title and abstract. From this, 257 records were excluded during the title and abstract screening stage. Consequently, 40 titles were assessed for eligibility by data extraction. Out of these, 23 titles were excluded for various reasons: 8 titles were focused on Covid 19 pedagogy only, 4 titles on secondary schools education only, 7 titles on E-learning only and lastly 4 titles were categorized under other topics. Therefore, only 17 titles were included in the final review.

Figure 2: Flow Diagram of The Scoping Review



4. CONCLUSION

In conclusion, this scoping review highlights the critical role of pedagogical approaches, particularly innovative and experiential learning methods, in enhancing student engagement and fostering entrepreneurial mindsets in entrepreneurship and innovation courses at Northern Malaysia universities. While these methods show promise in improving engagement and entrepreneurial outcomes, challenges such as limited institutional support, student motivation, and resource constraints continue to hinder their full potential. The findings emphasize the need for pedagogical strategies that align with students' learning styles and highlight the importance of institutional and government support in overcoming these barriers. Future research should address the geographical and methodological gaps in the literature, particularly by focusing on the Malaysian context, employing mixed-methods approaches, and exploring the integration of active learning strategies such as problem-based learning. By further investigating these areas, future studies can offer deeper insights into how pedagogical approaches can better prepare students for real-world entrepreneurial challenges, ultimately contributing to a more robust and sustainable entrepreneurial ecosystem in Malaysia.

5. REFERENCES

- Benlahcene, A., Awang-Hashim, R., & Kaur, A. (2020). Personal best goals: Do they mediate the relationship between teacher autonomy support and student engagement? *Malaysian Journal of Learning & Instruction*, 17(1), 25-49
- Constructivist Pedagogical Approaches in Higher Education: A Qualitative Case Study of Students and their Learning Experiences in a Collaborative Learning Space - ProQuest. (n.d.). <https://www.proquest.com/docview/2597796486/9170BEC188DB46D7PQ/1?%20Theses&sourcetype=Dissertations%20>
- Clark, B. R. (n.d.). Creating Entrepreneurial Universities: Organizational pathways of transformation. *Issues in Higher Education*. <https://eric.ed.gov/?id=ED421938>

- Looi, K. H., & Maritz, A. (2021). Government Institutions, Entrepreneurship Education and Entrepreneurship Education Programmes in Malaysia. *Education & Training*, 63(2), 271–291. <https://eric.ed.gov/?id=EJ1282978>
- Manimala, M. and J. Mitra (2008), "Higher Education's Role in Entrepreneurship and Economic Development", in Potter, J. (ed.), *Entrepreneurship and Higher Education*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264044104-4-en>.