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Fostering Entrepreneurial Skills through Community-Industry Collaboration in Vocational Education: A Case Study of the Business Pitching Competition

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Abstract

The Business Pitching Competition, jointly organized by Batu Lanchang Vocational College and Junior Chamber International Bayan, and sponsored by Inpat (Malaysia) Sdn. Bhd. and KCA Global (M) Sdn. Bhd., was designed to cultivate entrepreneurial skills among vocational students. By bringing together local businesses, NGOs, and educational institutions, this initiative aimed to bridge the gap between vocational education and industry expectations. Vocational students often face challenges in gaining practical entrepreneurial experience and industry exposure, hindering their readiness for real-world business endeavors. The competition sought to enhance entrepreneurial competencies, foster community engagement, and encourage innovation among vocational students. With participation from 296 students representing 25 vocational colleges across 13 Malaysian states, participants developed and presented business ideas to a panel of industry leaders and business experts who provided mentorship and constructive feedback. The competition significantly improved students' business planning, communication, and critical thinking skills, with some business ideas demonstrating potential for real-world application. This initiative reinforced the importance of industry-academia collaboration, creating a supportive ecosystem for youth entrepreneurship. It also underscored the value of community engagement in vocational education. The findings suggest that similar competitions can serve as effective models for integrating practical entrepreneurial education into vocational training, benefiting both students and the wider community.

Keywords: Business Pitching Competition, Entrepreneurial Skills, Vocational Education, Community-Industry Collaboration, Innovation And Engagement

Introduction

Entrepreneurial education has gained increasing recognition as a catalyst for innovation, job creation, and economic sustainability. Traditional vocational education models, primarily centered on technical and industry-specific competencies, often lack practical entrepreneurial components essential for self-employment and business creation (He & Puttawong, 2024; Mundhada et al., 2024). As economies transition toward knowledge-based and technology-driven landscapes, vocational institutions must integrate entrepreneurial learning frameworks to equip students with the adaptability and creativity required to thrive (Mundhada et al., 2024; Chu & Astillero, 2022; Gibb, 2002).

With the emergence of Industrial Revolution 5.0, which combines technological advancements with human skills, fostering creativity and innovation has become paramount. Entrepreneurship-based education serves a critical role in preparing students for these shifts by nurturing problem-solving abilities, leadership, teamwork, and adaptability. Recent studies have highlighted that the institutional environment, government policies, and industry collaborations significantly influence students' entrepreneurial capabilities (Lei et al., 2021). Moreover, research by Samsudin et al. (2019) revealed that students favor hands-on, real-world learning experiences such as industry visits and business ideation over passive learning methods. These findings emphasize the need for more interactive, industry-integrated entrepreneurial education, particularly in vocational and technical institutions.

In response to this gap, the 2024 Business Pitching Competition was developed as a strategic initiative to provide vocational students with experiential learning opportunities in business development and professional networking. This competition aimed to refine students' business acumen, problem-solving skills, and communication abilities while deepening their understanding of market dynamics and industry expectations. By collaborating with businesses, industry experts, and community leaders, the competition established a sustainable model for entrepreneurship education within vocational institutions.

Problem Statement

Despite the increasing emphasis on entrepreneurship as a driver of economic development, vocational students face several challenges in developing entrepreneurial competencies and launching their own businesses (Sindakis & Showkat, 2024). One of the primary issues is the lack of real-world entrepreneurial exposure, as vocational programs traditionally prioritize technical skills over business acumen. Without practical experience in business planning, financial literacy, and market analysis, students struggle to transition from vocational training to entrepreneurship (Chu & Astillero, 2022).

Limited industry engagement in vocational education further compounds the problem. Research by Ali et al. (2024) highlights that entrepreneurial education alone does not guarantee startup success unless complemented by strong personal attributes such as self-efficacy, resilience, and adaptability. Additionally, Lei et al. (2021) argue that traditional

entrepreneurship education models fail to produce industry-ready entrepreneurs unless they incorporate real-world exposure and institutional support.

The disconnect between vocational education and business ecosystems leads to graduates being ill-prepared for competitive markets. Many struggle to secure funding, attract customers, or sustain long-term business operations (Dehez & Mêgnigbêto, 2024). Consequently, vocational graduates often face higher unemployment rates due to their limited entrepreneurial competencies (Gibb, 2002). Furthermore, the absence of structured mentorship and networking opportunities restricts their access to essential resources such as investment capital and industry insights (Macpherson et al., 2022).

To address these challenges, innovative educational interventions are necessary. The 2024 Business Pitching Competition was conceived as an industry-driven initiative to bridge this gap, equipping vocational students with entrepreneurial competencies, industry connections, and real-world business experience. By integrating mentorship, experiential learning, and competitive business pitching, the competition aimed to foster self-sufficiency and market-readiness among vocational students (Harahap, 2023; Usman et al., 2024).

Literature Review: Project-Based Learning in Entrepreneurial Education

Effectiveness of Project-Based Learning in Entrepreneurship Education in Malaysia

In Malaysia, project-based learning (PBL) has emerged as a vital pedagogical approach in entrepreneurship education, particularly within vocational and technical institutions. Recognizing the significance of experiential learning, the Malaysian Ministry of Education has prioritized its integration into the curriculum to ensure that students acquire both practical business acumen and technical skills (Tahir & Abdullah, 2024; Teoh et al., 2024). Research by Haron et al. (2022) highlights that students' entrepreneurial intentions are strongly influenced by their level of interest and the support structures provided by universities. Their findings indicate that students who participate in university-led entrepreneurship initiatives—such as startup incubators, business competitions, and mentorship programs—are more inclined to pursue business ventures compared to those engaged solely in classroom-based learning. These insights underscore the necessity for entrepreneurship education programs to extend beyond theoretical instruction by incorporating real-world business challenges and hands-on learning approaches.

This initiative aligns with the Malaysia Education Blueprint (2013-2025), which advocates for the development of holistic, entrepreneurial, and well-balanced graduates. The incorporation of PBL in vocational education has enabled students to engage in real-world business problem-solving, thereby enhancing their critical thinking and innovation capacities. A study by Ren et al. (2024) found that vocational students exposed to PBL demonstrated superior business creativity and risk management skills compared to those in traditional learning environments. Additionally, Rosli et al. (2023) emphasized that business incubation programs play a pivotal role in fostering digital entrepreneurship skills among TVET students. Their study concluded that successful incubation programs require robust institutional support, structured mentorship, and adequate funding. However, many Malaysian polytechnics face financial constraints and lack structured policies to support digital entrepreneurship incubation. The study proposed a theoretical framework that integrates Institutional Isomorphism Theory and the Student Entrepreneurship Encouragement Model

(SEEM) to facilitate the effective implementation of digital entrepreneurship programs. These findings suggest that business incubation in vocational education should be reinforced with structured policies, industry partnerships, and experiential digital business training.

Similarly, Rosli et al. (2023) explored the impact of digital entrepreneurship education (DEE) within business incubation programs in Malaysian polytechnics, emphasizing its role in preparing students for the Fourth Industrial Revolution (4IR). Their research revealed that polytechnics integrating digital entrepreneurship models recorded higher student engagement and business startup success rates. The study analyzed two polytechnic business incubators—Eduvalley Polytechnic and Skillrise Eastside Polytech—which effectively incorporated digital marketing, AI-driven business modeling, and IoT-based startup strategies. The findings suggest that students exposed to digital business incubation programs develop stronger entrepreneurial competencies and are more likely to sustain their ventures compared to those in traditional entrepreneurship education models. These insights reinforce the necessity for PBL models that integrate digital entrepreneurship frameworks to enhance vocational education outcomes.

Ren et al. (2024) explored Malaysia's strategic approaches to entrepreneurship education (EE), emphasizing that policy frameworks and institutional strategies significantly influence entrepreneurial learning in higher education institutions (HEIs). Their study analyzed key policies, including the Higher Education Entrepreneurship Development Policy (2010), the Strategic Plan on Entrepreneurship Development (2013-2015), and the National Entrepreneurship Policy 2030 (NEP 2030). Although Malaysia has made considerable progress in embedding EE into university curricula, gaps in practical implementation, standardization, and resource allocation persist. These findings highlight the need for structured entrepreneurship education models that incorporate business incubation programs, startup accelerators, and hands-on entrepreneurial projects to effectively bridge the gap between policy and practice.

One of the most significant advantages of PBL in Malaysia's entrepreneurial education landscape is its ability to foster industry-academic collaboration, particularly through initiatives such as the 2024 Business Pitching Competition. Studies indicate that PBL models incorporating mentorship from industry professionals and hands-on business projects significantly enhance students' market readiness (Harun et al., 2023). Rosli et al. (2023) further emphasized that digital entrepreneurship education strengthens industry collaboration and provides students with real-world business exposure. Their study found that polytechnic incubators with structured digital integration—such as AI-powered startup simulations, crowdfunding workshops, and digital business strategy coaching—helped students establish and sustain ventures with greater scalability potential. However, challenges remain, including the absence of standardized policies, unequal access to digital tools, and limited faculty expertise in digital entrepreneurship. These findings suggest that vocational education should adopt a more structured approach to integrating digital incubation programs to ensure equitable access to digital resources and industry partnerships.

On top of that, Lei et al. (2021) demonstrated that institutional support, industry partnerships, and infrastructure investment are critical in fostering entrepreneurial

innovation among students. Their research, grounded in the Triple Helix Model of Innovation, underscores the necessity for collaboration between government, universities, and industry to create an environment conducive to real-world entrepreneurship training. This finding reinforces the importance of integrating project-based learning (PBL) with external industry mentorship and hands-on business experiences in vocational education settings.

Meanwhile, Samsudin et al. (2019) found that students favor entrepreneurship teaching methods that involve direct industry exposure and interactive engagement, such as industry visits and business ideation activities. Their study indicates that students' entrepreneurial intentions are influenced by the teaching methodologies employed, with experiential and action-based learning methods having a more profound impact than traditional lecture-based approaches. These findings align with the effectiveness of PBL models, reaffirming the need for hands-on business exposure in vocational entrepreneurship education. Through close collaboration with industry mentors, students gain firsthand insights into business model development, financial planning, and competitive market strategies. Furthermore, institutions such as Polytechnic Malaysia and Malaysian Vocational Colleges have implemented PBL-driven entrepreneurship programs, demonstrating a positive correlation between project engagement and business startup success rates among graduates (Harahap, 2023; Usman et al., 2024).

Xu et al. (2023) stressed the importance of systematically evaluating entrepreneurship education in application-oriented institutes. Their research developed a structured evaluation index that considers factors such as organizational structure, teaching staff quality, curriculum design, industry collaboration, student learning performance, and financial support. The study found that while many universities implement entrepreneurship education, the absence of a standardized evaluation model has led to inconsistencies in program effectiveness. These findings highlight that successful entrepreneurship education requires not only hands-on learning but also clear institutional frameworks, sustainable funding, and robust industry partnerships. Without these essential components, vocational institutions may struggle to prepare students for real-world entrepreneurial challenges, reinforcing the need for structured evaluation and continuous curriculum enhancements.

The academic performance of students participating in PBL-driven entrepreneurial programs in Malaysia has shown marked improvement. Research by Tahir and Abdullah (2024) suggests that students enrolled in PBL-oriented business courses exhibit superior problem-solving abilities, improved teamwork, and heightened entrepreneurial intentions compared to their peers in traditional lecture-based settings. Additionally, case studies from Malaysian vocational institutions indicate that students who participate in business pitching competitions and startup incubator projects excel in business strategy formulation, financial literacy, and customer engagement. These findings reinforce the effectiveness of project-based learning in equipping vocational students with practical entrepreneurial competencies, ultimately leading to higher employability and self-employment rates in Malaysia (Lavado-Anguera et al., 2024).

Methodology

This study employs a qualitative case study approach, focusing on the 2024 Business Pitching Competition as a model for project-based learning in entrepreneurial education. The research

methodology consists of three primary components: document analysis, participant observation, and post-event surveys. This multi-method approach ensures a comprehensive understanding of the competition's structure, execution, and impact on vocational students' entrepreneurial development. By integrating insights from various sources, the study aims to provide an in-depth evaluation of the initiative's effectiveness in bridging the gap between vocational training and industry expectations (Creswell, 2013).

Document Analysis

The first stage of data collection involved analyzing official documents and reports related to the 2024 Business Pitching Competition. These documents included the event proposal, judging criteria, participant project submissions, feedback from industry judges, and competition reports from JCI Bayan and Batu Lanchang Vocational College. Document analysis provided valuable insights into the event's objectives, structure, evaluation process, and participant experiences. By examining these materials, researchers were able to identify key themes, such as skill development, industry collaboration, and innovation adoption among students (Bowen, 2009).

Participant Observation

The second phase involved participant observation, where researchers closely monitored the pitching sessions, mentorship interactions, and feedback exchanges during the event. Observations were recorded using field notes and video documentation, allowing for a deeper understanding of student engagement, presentation effectiveness, and mentor feedback dynamics. By assessing real-time interactions between students and industry professionals, this method helped capture how project-based learning influences entrepreneurial mindset development. Participant observation also enabled researchers to evaluate students' confidence levels, creativity in pitching, and adaptability to mentor feedback (Merriam & Tisdell, 2015).

Post-Event Surveys and Interviews

The final phase consisted of post-event surveys and structured interviews with students, mentors, judges, and organizers. Surveys were designed to assess students' learning experiences, their confidence in applying entrepreneurial skills, and the perceived value of mentorship. Interviews with mentors and judges provided additional perspectives on students' progress, common weaknesses, and areas for further improvement. Data from these sources were analyzed using thematic coding techniques, ensuring that key insights from multiple stakeholders were incorporated into the findings (Braun & Clarke, 2006). This triangulation of data collection methods strengthened the validity and reliability of the research findings, providing a well-rounded analysis of the impact of project-based learning in entrepreneurship education.

Findings

Findings from Document Analysis

An analysis of the event proposal, judging criteria, participant project submissions, and feedback reports revealed that the 2024 Business Pitching Competition provided a structured and practical approach to entrepreneurial education. The competition emphasized critical business components, including business model development, market research, financial planning, and presentation skills. Judges' feedback highlighted those students demonstrated

strong ideation skills but required further refinement in financial projections and risk assessment. Additionally, the documents showed that collaborations with industry mentors were highly valued, as they provided real-world insights and constructive feedback on students' business proposals (Tahir & Abdullah, 2024).

The document analysis also indicated that several student business ideas had commercialization potential, with five projects receiving direct interest from industry sponsors for further development. Moreover, the integration of digital tools in presentations and business planning was noted as a key strength among participants, showcasing their adaptability to technology-driven entrepreneurship.

Findings from Participant Observation

Observations during the pitching sessions, mentorship interactions, and panel discussions revealed key insights into students' confidence, problem-solving capabilities, and ability to respond to critical questioning. Throughout the competition, students demonstrated progressive improvements in their business articulation and presentation skills, particularly after receiving feedback from mentors and industry judges. It was observed that teams with direct mentor guidance performed significantly better than those without, as they were able to address gaps in their business models more effectively.

A recurring theme from the observations was that students struggled with financial feasibility and long-term sustainability planning. Many business ideas were creatively strong but lacked realistic implementation strategies. Furthermore, students who had previous exposure to entrepreneurship-related activities or had undergone project-based learning modules prior to the competition exhibited higher levels of preparedness and strategic thinking. These findings suggest that early exposure to project-based entrepreneurial education can significantly enhance vocational students' capabilities in business planning and decision-making.

Findings from Post-Event Surveys and Interviews

Post-event surveys and structured interviews with students, mentors, industry judges, and event organizers provided further insights into the competition's impact. A total of 85% of student respondents reported that participating in the competition increased their confidence in developing and pitching business ideas. Many students expressed that the event helped them understand real-world business challenges, particularly in areas of financial literacy, customer validation, and scalability (Harahap, 2023; Usman et al., 2024).

From the mentors' and judges' perspectives, 90% of respondents agreed that the competition provided a valuable platform for industry-academia engagement. They noted that the students' enthusiasm and willingness to learn were strong but highlighted a lack of strategic business forecasting skills as a common weakness. This suggests that further training in financial projections, investment strategies, and market adaptability would be beneficial in future iterations of the competition.

Additionally, survey responses from vocational college lecturers indicated that integrating business pitching components into the formal curriculum could lead to better student preparedness for industry expectations. Lecturers noted that students who

participated in the competition demonstrated greater initiative, leadership, and teamwork compared to their non-participating peers. These findings reinforce the importance of experiential learning in entrepreneurial education, highlighting its positive impact on both technical and soft skills development.

Discussion

The findings from the 2024 Business Pitching Competition align with previous research on project-based learning (PBL) in entrepreneurship education, reinforcing the effectiveness of experiential learning in vocational training (Harahap, 2023; Usman et al., 2024). Prior studies, such as those by Tahir and Abdullah (2024), highlighted those students engaged in PBL demonstrated improved problem-solving skills, communication abilities, and entrepreneurial intentions compared to those in traditional lecture-based learning. The post-event surveys and observations from this competition confirm these findings, as students who participated in the event reported enhanced confidence, business knowledge, and strategic thinking (Harahap, 2023; Usman et al., 2024). However, this study also identifies several unique contributions. Unlike previous research that primarily focused on entrepreneurial mindset development, this competition emphasized industry-academia collaboration, allowing students to gain direct exposure to real-world business expectations (Tahir & Abdullah, 2024). The presence of industry mentors and investors played a crucial role in shaping students entrepreneurial capabilities, a factor that is less emphasized in conventional PBL models (Rosli et al., 2023). The strong mentorship component in this event led to higher levels of business feasibility and commercialization potential among student projects, which was a key differentiator from prior studies (Harahap, 2023; Usman et al., 2024).

From a theoretical perspective, this study contributes to the growing body of knowledge on experiential and project-based learning in vocational education (Rosli et al., 2023). Unlike traditional PBL models, the involvement of industry mentors, judges, and investors in this competition provided students with real-time feedback, professional networking opportunities, and business acumen (Harun et al., 2023). This suggests that structured industry engagement should be a core component of PBL models in entrepreneurship education. One key limitation identified in this study is the lack of financial forecasting and risk assessment skills among vocational students. This echoes prior research indicating that vocational education often lacks robust financial training, which is crucial for successful entrepreneurship (Harahap, 2023; Usman et al., 2024). Future iterations of similar competitions should incorporate structured financial literacy modules to bridge this gap (Tahir & Abdullah, 2024).

The competition findings show that students who participated in hands-on business pitching activities developed greater problem-solving abilities and creative thinking (Kolmos et al., 2012). This confirms earlier studies suggesting that real-world project exposure fosters entrepreneurial creativity and resilience, leading to higher rates of business success among vocational graduates (Harahap, 2023; Usman et al., 2024). The success of this competition demonstrates that entrepreneurship competitions can serve as long-term educational initiatives, fostering continuous student engagement and industry participation (Rosli et al., 2023). This contribution is essential for policymakers and educators seeking to expand entrepreneurship education models within Malaysias vocational training framework (Harahap, 2023; Usman et al., 2024). The findings of this study suggest that entrepreneurship

education in vocational colleges should be institutionalized through continuous engagement with industry partners (Tahir & Abdullah, 2024). Policymakers should consider implementing mandatory entrepreneurship competitions as part of the vocational curriculum, ensuring that students receive practical exposure to business pitching and industry validation. Additionally, educators should explore hybrid learning models that incorporate both theoretical instruction and project-based entrepreneurial activities to maximize student learning outcomes (Harun et al., 2023).

Moreover, this study highlights the need for increased financial and government support for such competitions, as industry-sponsored events like the 2024 Business Pitching Competition provide substantial benefits to student development (Rosli et al., 2023). Collaborative funding initiatives between government agencies, private sector investors, and vocational institutions can help sustain these programs, ensuring their long-term impact on Malaysia's entrepreneurial ecosystem (Harahap, 2023; Usman et al., 2024).

Conclusion

The 2024 Business Pitching Competition has successfully demonstrated that project-based learning, combined with industry mentorship and structured entrepreneurial challenges, is an effective model for bridging the gap between vocational training and entrepreneurship. The findings from this study indicate that students not only developed strong business acumen, problem-solving abilities, and confidence in pitching their ideas, but also gained valuable exposure to industry expectations and market realities, making them better equipped for self-employment and entrepreneurship. Through direct engagement with mentors and industry leaders, students have acquired essential entrepreneurial competencies, further reinforcing the competition's role in empowering them to become self-sufficient and market-ready entrepreneurs.

Beyond individual student benefits, this competition also highlighted the importance of industry-academia collaboration in shaping future entrepreneurial talent. The active participation of mentors, investors, and judges from various industries provided students with practical insights and constructive feedback, which are often missing in traditional classroom settings. This study supports the call for institutionalizing entrepreneurship competitions within the vocational education framework, as they create a sustainable platform for continuous learning, industry partnerships, and business innovation. The evidence from this study suggests that structured entrepreneurship programs such as this competition can serve as a stepping stone for students to launch their own businesses, further fostering an entrepreneurial mindset among vocational graduates.

Looking forward, it is imperative to address the challenges identified in this study, such as students' lack of financial forecasting skills and long-term business sustainability strategies. Future iterations of the Business Pitching Competition should incorporate financial literacy modules, extended mentorship periods, and structured incubation programs to support students in further developing their business ideas beyond the competition. Additionally, expanding the competition's reach by including more vocational institutions, international collaborations, and additional funding opportunities could enhance its impact, ensuring that a larger pool of students benefits from entrepreneurial education. With sustained industry involvement and academic support, competitions like these can play a vital role in fostering a

new generation of entrepreneurs, contributing to Malaysia' s economic growth and innovation ecosystem.

Theoretical and Contextual

This study contributes to the existing body of knowledge on project-based entrepreneurial education, particularly within the vocational education landscape. By integrating industry-academia collaboration, mentorship, and structured entrepreneurial challenges, this research extends theoretical frameworks on experiential learning and entrepreneurship education. Unlike traditional pedagogical models that rely heavily on classroom instruction, this study demonstrates that structured competitions can serve as a viable approach to fostering entrepreneurial skills and self-efficacy among vocational students. The findings provide empirical evidence supporting the relevance of the Triple Helix Model, which emphasizes the interaction between universities, industry, and government in fostering innovation and entrepreneurship. Furthermore, this research offers a contextual contribution by showcasing the potential of community-driven entrepreneurship initiatives in Malaysia's vocational education system. It highlights the importance of bridging policy and practice through structured industry engagement, aligning with Malaysia's National Entrepreneurship Policy 2030 and TVET empowerment initiatives. The insights derived from this study provide a scalable model for vocational institutions globally, advocating for policy enhancements that institutionalize entrepreneurship competitions as a core element of vocational training programs.

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