

# Entrepreneurship Education in Technical and Vocational Training (TVET) in Malaysia: Students' Experiences and Perspectives

Wan Nurul Hasinah Wan Kamarudin

Department of Civil Engineering, Politeknik Sultan Ahmad Shah (POLISAS) Kuantan,  
Semambu, 25350, Kuantan, Pahang, Malaysia

E-mail: [hasinah@polisas.edu.my](mailto:hasinah@polisas.edu.my)

Wan Nor Bayah Wan Kamarudin (Corresponding author)

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (UiTM) Terengganu  
Branch, Dungun Campus, Sura Hujung, 23000, Dungun, Terengganu, Malaysia

E-mail: [wnbayah@uitm.edu.my](mailto:wnbayah@uitm.edu.my)

Norhaya Hanum Mohamad

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (UiTM)  
Terengganu Branch, Dungun Campus, Sura Hujung, 23000, Dungun, Terengganu, Malaysia

E-mail: [norhayahanum@uitm.edu.my](mailto:norhayahanum@uitm.edu.my)

Azlina Samsudin

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (UiTM) Terengganu  
Branch, Dungun Campus, Sura Hujung, 23000, Dungun, Terengganu, Malaysia

E-mail: [azlin6458@uitm.edu.my](mailto:azlin6458@uitm.edu.my)

Nik Mohamad Zulfadli Nik Mohd Fahmi

Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (UiTM) Terengganu  
Branch, Dungun Campus, Sura Hujung, 23000, Dungun, Terengganu, Malaysia

E-mail: [nikmohamad@uitm.edu.my](mailto:nikmohamad@uitm.edu.my)

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## Abstract

Nowadays, entrepreneurship education is crucial not only in business management programs but also in technical and vocational education and training (TVET), to foster a well-rounded and sustainable educational landscape. This study explores the perceptions of diploma in architecture students at a Malaysian polytechnic on the role of entrepreneurship education within their TVET curriculum. Utilizing a qualitative approach, a semi-structured online interview was conducted among second-year students who actively engaged in entrepreneurship courses and events, allowing for a deep exploration of their insights. Using NVivo 14 for thematic analysis, focusing on the identification of recurring themes and insights linked to students' experiences and perspectives on entrepreneurship education. The findings indicate a positive reception among architecture students towards institutional entrepreneurship education, highlighting their aspirations to enter the business world and emphasizing the value of an entrepreneurial mindset within technical fields. This research contributes to the understanding of how entrepreneurship education aligns with institutional goals and aiming to reveal insights into how the study objective contributes to students' sustainable educational development within a technical and vocational context. Nonetheless, the insights obtained serve as a critical foundation for future research and highlight key variables worth investigating for their role in shaping entrepreneurship education, particularly in developing nations like Malaysia.

**Keywords:** Entrepreneurship Education, TVET, Vocational Training, Students Perspective

## 1. Introduction

### *1.1 Entrepreneurship Education in Malaysia*

Entrepreneurship education in higher institution plays a pivotal role in equipping students with necessary skills and relevant knowledge to adapt with the evolving job market. Within the Technical and Vocational Training (TVET) system, integrating entrepreneurship education is particularly significant, as it fosters self-reliance and prepares students for both employment and self-employment. While extensive research has examined entrepreneurship education in business management disciplines, limited studies have explored its relevance and effectiveness within technical and vocational fields such as architecture. This gap is critical, as architecture students require a unique blend of technical expertise and entrepreneurial acumen to succeed in the industry that increasingly values innovation, business management and self-driven career pathways. This study aims to address this gap by investigating how diploma level architecture students in one of pioneer Malaysian polytechnics perceive entrepreneurship education and eventually inspire their career aspirations.

Entrepreneurship education primarily introduces students to the fundamentals of business creation, guiding them through the process of developing viable business ideas while fostering an entrepreneurial mindset. Scholars have highlighted that this form of education is designed to nurture creativity and innovation as well as encourage students to pursue their independent business ventures (Yu et al., 2022; Yumei et al., 2021). By integrating entrepreneurial skills into the curriculum, higher learning institutions aim to produce graduates who are not only job seekers but also potential job creators which can contribute to economic growth and industry advancements.

Beyond understanding the students' perspectives, it is also essential to examine the role of personality traits in shaping their engagement from the experience and exposure with entrepreneurship education. The Big Five Personality Traits Theory (Costa & McCrae, 1992) bids a useful framework for analyzing the individual differences that may affect students' entrepreneurial learning experiences. Psychological perspective on this, highlighting how traits such as openness to experience and conscientiousness have been linked to a greater inclination towards entrepreneurship, while extraversion has been associated with confidence in business interaction. By incorporating this theoretical aspect, this study offers deeper insights into how personality traits influence students' willingness to embrace entrepreneurship as part of their career prospects. In their study, Wan Kamarudin et al., (2023) have empirically clarified that positive attitudes, such as viewing entrepreneurship as a career choice and having self-confidence, strongly influence Malaysian hospitality students' entrepreneurial intentions. For example, optimism further strengthens this link, underscoring the significance of entrepreneurship education. To highlight its role in shaping students' entrepreneurial mindset, a related study by Yan et al. (2023) examined how entrepreneurship education influences students, particularly in relation to their behavioral approach to entrepreneurship. The findings indicate that exposure to entrepreneurial learning fosters a stronger entrepreneurial spirit, with students developing an entrepreneurial mindset through

engagement in such educational programs (Liao et al., 2022). Prior research acknowledge that education plays a crucial role in motivating students to consider entrepreneurial paths upon graduation which reducing their reliance on traditional employment. Entrepreneurship education also aids in the development of an entrepreneurial mindset, motivates students to initiate businesses, and encourages them to view entrepreneurship as a viable career option (Colombelli et al., 2022; Lu et al., 2021; Saptono et al., 2021; Soomro & Shah, 2022). Consequently, by exposing students to entrepreneurship, which has been shown to increase their desire to establish their own businesses, they acquire valuable innovative skills that enable them to effectively seize business opportunities and achieve success in their ventures (Hisrich et al., 2017; Yan et al., 2023).

Malaysian Higher Education Institutions (HEIs) emphasize the need for graduates to have both job-ready skills and entrepreneurial abilities. To support this, they encourage students to think entrepreneurially, seek new opportunities, and create value across different academic programs. The government has long promoted entrepreneurship among graduates, aiming to develop well-rounded individuals with the skills to pursue various career paths (BERNAMA, 2021, para. 3). In 2020, the Malaysia Ministry of Higher Education (MOHE) played a pivotal role in supporting the establishment of nearly 50,000 student entrepreneurs, with over 7,000 graduates choosing to embark on entrepreneurial careers after completing their studies (BERNAMA, 2021, para.1). Moreover, in line with the Malaysia Education Blueprint (MEB) 2015-2025 (Higher Education) in referring to Figure 1, (Ministry of Higher Education Malaysia, 2015) introduces 10 key Shifts aimed at driving sustained excellence in the higher education sector. These Shifts address critical performance challenges within the system, particularly in terms of quality, efficiency, and adapting to global trends that are reshaping the higher education landscape. The first four Shifts prioritize outcomes for essential stakeholders, including students in academic and TVET pathways, members of the academic community, and Malaysians engaged in lifelong learning. The remaining six Shifts are designed to strengthen the higher education ecosystem by focusing on enablers such as governance, funding, innovation, internationalization, online education, and efficient delivery mechanisms.

## The 10 Shifts



Figure 1. Diagram from the Malaysia Education Development Plan 2015–2025 (Ministry of Higher Education Malaysia, 2015)

Meanwhile, under the Economic Transformation Programme (ETP), Malaysia aims to increase TVET enrolment by 2.5 times by 2025. However, the current workforce supply remains insufficient in 10 of the 12 National Key Economic Area (NKEA) sectors. Moreover, TVET is often viewed as less attractive compared to university education, resulting in fewer applicants, particularly among high-performing students. To address this challenge, Malaysia needs to have transition from an education system focused primarily on university pathways to one that equally values and promotes both academic and TVET tracks.

The Ministry of Higher Education (MOHE) has taken steps to address graduate unemployment. The 2023 Graduate Tracer Study reported that 13.5% of graduates were still seeking job placement (Ministry of Higher Education Malaysia, 2023), a notable improvement from the 60% unemployment rate recorded in 2018 (D’Silva, 2020). This progress reflects efforts such as curriculum alignment with industry needs, stronger employer collaborations, and enhanced entrepreneurship education.

The introduction should provide an overview of entrepreneurship education, highlighting the importance of entrepreneurial skills and mindset in today’s landscape. It should also discuss the implementation of entrepreneurship education in vocational and technical institutions. The following section explores how incorporating entrepreneurship education at the selected polytechnic may shape students’ perspectives on entrepreneurship. This study focuses on

understanding diploma architecture thoughts on the impact of entrepreneurship education in TVET and how it shapes their experiences in the entrepreneurial realm.

### *1.2 The Entrepreneurship Education in TVET Programs in Malaysia*

The Entrepreneurship Development Plan for Higher Education Institutions (EDP-HEIs) in 2010 was later followed by the Entrepreneurship Strategic Plan for Higher Education Institutions 2013–2015 (ESP-HEIs), which introduced six core pillars and 15 strategies to strengthen entrepreneurship in higher education. One key objective was the establishment of entrepreneurship development centers at all public HEIs, providing training and mentoring. Today, these centers operate in 20 public universities, 36 polytechnics, and 104 community colleges. Additionally, the National Entrepreneurship Council for Higher Education Institutions (NECHEI), established in 2011, promotes collaboration between the government, entrepreneurs, and students to cultivate an entrepreneurial mindset on campus (Entrepreneurship Action Plan for Higher Education Institutions (EAP-HEIs) 2021–2025, 2020). In this regard, Ranjan (2019) recognized the entrepreneurs, with their ability to identify, analyze, and capitalize on opportunities, play a key role in driving economic growth by transforming ideas into viable businesses. This underscores the growing importance of entrepreneurship education, which goes beyond business training to develop skilled human capital capable of innovation, problem-solving, and adapting to new technologies. As a lifelong learning process, it enhances knowledge and practical skills from early education to adulthood.

TVET programs are becoming increasingly popular among Malaysian youths, as seen in the rising enrolment numbers this year. These programs are often more affordable and shorter duration than traditional university degrees, making them a practical choice for students seeking cost-effective education and faster entry into the workforce. Additionally, ongoing government initiatives to position TVET as a strong career pathway have contributed to its growing appeal (Tan et al., 2024). In 2024, several Malaysian polytechnics reported significant enrolment growth, reflecting a heightened interest in TVET education. Sultan Azlan Shah Polytechnic (PSAS) in Behrang, Perak, recorded its highest intake yet, with 1,052 students, up from 661 in 2023 and 560 in 2022. Merlimau Polytechnic also saw an increase of enrollment of 1,345 students in 2024, compared to 1,163 in 2023 and 883 in 2022. Sultan Idris Shah Polytechnic in Selangor registered 800 students in the first session of 2024/2025, rising from 625 in the previous session. Sultan Salahuddin Abdul Aziz Shah Polytechnic (PSA) in Shah Alam, Selangor, experienced a 30% increase, with 1,033 students enrolled this year, with projections reaching 1,288. Similarly, Tasek Gelugor Metro Polytechnic recorded its highest intake since pre-pandemic levels, enrolling 120 students per session.

This growing interest in TVET is driven by various factors, including greater public awareness of polytechnic programs, the influence of the National TVET Policy 2030, and strong graduate employability rates. Popular diploma programs across various institutions include Electrical Engineering, Accounting, Culinary Arts, and Tourism Management. Notably, Merlimau Polytechnic reported a 99.4% employability rate for its graduates, with an

average starting salary of RM2,200, while Sultan Idris Shah Polytechnic highlighted graduate employability rates ranging from 94.3% to 98% over the past three years, with starting salaries ranging from RM1,800 to RM2,100. These factors collectively contribute to the growing appeal of polytechnic education in Malaysia, particularly among students seeking accessible, industry-relevant qualifications.

In line with these goals, research by Abdullah (2020) and Ibrahim et al. (2015) highlights that both entrepreneurship education and TVET play a key role in addressing unemployment and reducing poverty. They emphasize that embedding entrepreneurship into TVET curriculum equips students with the necessary skills to start their own businesses and gain a competitive advantage. To support MOHE's goal of producing skilled graduates, TVET institutions have implemented various initiatives that blend entrepreneurship education with student entrepreneurship programs. Studies show that exposure to entrepreneurship education increases students' interest in entrepreneurial careers (Ibrahim et al., 2015). However, Abdullah (2020) points out challenges in the delivery of such education, including outdated teaching methods and a lack of entrepreneurship training among lecturers. These issues raise concerns about whether polytechnics can effectively instill entrepreneurial thinking in students. Entrepreneurship education has received increased attention and investment from MOHE, universities, and TVET institutions. While improvements have been made, there is still a need to assess its impact on technical and vocational students. By addressing these gaps, this study does not only contribute to the growing body of literature on entrepreneurship education in non-business TVET fields but also provides practical recommendations for improving curriculum design to better support students with diverse personality profiles and learning needs.

## **2. Method**

### *2.1 Research Design*

This study employs a qualitative research design to highlight the critical role of entrepreneurship education in TVET, particularly for diploma architecture students in one Malaysia Premier Polytechnics under the Department of Polytechnic and Community College Education, Ministry of Higher Education. Gaining insight into their views will help to assess the effectiveness of current programs and identify areas for improvement, ultimately contributing to the enhancement of entrepreneurship education initiatives.

### *2.2 Participant's Profile*

The study involves ten architecture students from a Malaysian polytechnic, selected based on their participation in entrepreneurship courses. This small targeted sample aligns with the qualitative research approach, which prioritizes in-depth insights over broad generalization (Creswell & Poth, 2018). In qualitative studies, carefully selected participants with direct experience in the subject matter can provide rich, meaningful data (Patton, 2015). Thus, given the exploratory nature of this research, the focus on a smaller sample allows for a more detailed examination of students' perspectives and experiences, serving as an initial step in understanding how entrepreneurship education influences technical program students. This

proposed approach offers a foundational understanding that can inform future studies with broader participant pools, enabling further validation and generalization of findings.

Participants were chosen based on specific criteria: they were final-year students enrolled in an entrepreneurship syllabus who were actively involved in related entrepreneurship courses and events. These inclusion criteria ensured that they could offer relevant perspectives on entrepreneurship education. To achieve this, the study employed purposive sampling, a method used to select individuals with firsthand experience in the topic under investigation (Palinkas et al., 2015). By concentrating on a specific group, this study provides a focused synopsis of the entrepreneurship education landscape in technical institutions, which can serve as a basis for future large-scale investigations.

### *2.3 Data Collection*

Prior to the interview sessions, arrangements were made with all identified participants including the purpose of study and consent to participate in the interviews were clearly communicated to ensure ethical standards were followed throughout the study. Participants were informed about the study's purpose, methods, and how their data would be used. They were assured that their participation was voluntary and that their responses would remain confidential. All participants gave informed consent before taking part in the study. A semi-structured online interview was conducted asynchronously via Microsoft Teams and Google Forms, allowing participants to respond at their convenience and reflect on their responses.

The moderator/interviewer closely guided the participants through each interview question, ensuring that they received adequate support and appropriate prompts throughout the sessions. Besides, to ensure effective communication, all interviews were conducted in a casual setting, facilitating the smooth exchange of ideas between the participants and the researchers with each interview session lasted between 20 to 45 minutes.

Then, the written responses were collected and analyzed for key themes related to the study (DiCicco-Bloom & Crabtree, 2006). Each participant's responses were collected in a written document, and the responses were analyzed for themes related to the study's objectives. Then, the data were analyzed using thematic analysis to identify patterns in the responses (Elo & Kyngäs, 2008). NVivo 14 software was used to help organize and analyze the data. The process followed these steps; 1) Coding, 2) Theme Development, 3) Validation and 4) Interpretation where the final themes were examined to capture the students' perspectives and experiences regarding entrepreneurship education. As the study involves a small sample, the results are not intended to be generalized to a larger population. However, the qualitative design adopted may provide valuable insights into the students' views on entrepreneurship education within this specific context.



### 3. Results and Discussion

#### 3.1 Recruitment

Table 1. Participants' profile

ID	Gender	Age (Years)	Entrepreneurship involvement	Family/relatives Own a Business ventures business	
P1	Female	20	Yes	Yes	Grocery shop
P2	Female	20	Yes	Yes	Organic Chicken
P3	Female	20	Yes	Yes	Food and beverage Stall
P4	Male	20	Yes	No	-
P5	Female	20	Yes	No	-
P6	Male	20	Yes	Yes	Farming
P7	Female	20	Yes	No	-
P8	Male	20	Yes	Yes	Frozen Food vendor
P9	Male	20	Yes	Yes	Home-based fruit selling
P10	Female	20	Yes	No	-

Table 1 presents profiles of the study participants, detailing identification codes, genders, ages, levels of entrepreneurship involvement, and any connections to family-owned businesses. The participants are second-year architecture students enrolled at one Malaysian polytechnic, where exposure to entrepreneurship education is anticipated to influence their entrepreneurial perspectives and ambitions. This study explores these students' experiences and views on the role of entrepreneurship education within their technical and vocational training. By examining their engagement in entrepreneurship-related learning, this research seeks to understand how such educational experiences shape their entrepreneurial outlooks.

#### 3.2 Student Entrepreneurship Perspectives

The initial phase of the interview was designed to capture the perspectives and insights of participants regarding entrepreneurship. Preceding this, an evaluation of their comprehension of the significance of entrepreneurship revealed an intermediate level of understanding among architecture students. Notably, participants view entrepreneurship significantly as the management of businesses to generate profits (European Commission, 2012; Ibrahim et al., 2015), the enhancement of a community's or an individual's economy through job creation (Barcelona et al., 2023; Uddin et al., 2022), and the promotion of innovation and the exploitation of business opportunities (Hassan et al., 2022).

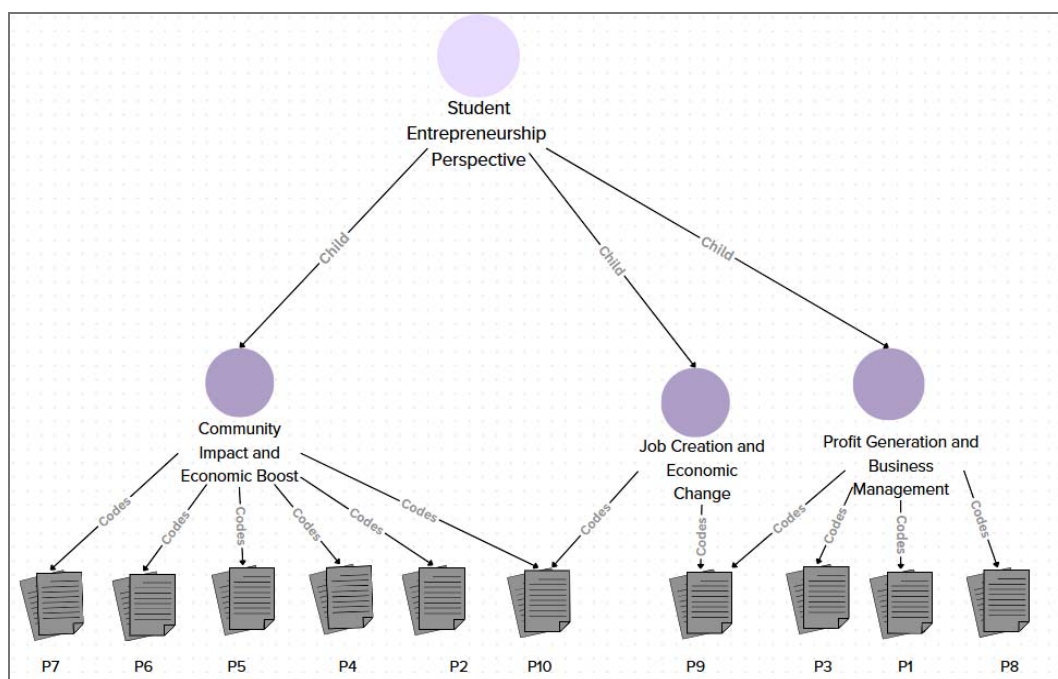


Figure 2. Thematic Analysis of Student Perspectives on Entrepreneurship Education

Figure 2 presents the thematic analysis of interviews on “Students’ Perspectives on Entrepreneurship Education,” highlighting three key themes: Community Impact and Economic Boost, Job Creation and Economic Change, and Profit Generation and Business Management.

### 3.2.1 Profit Generation and Business Management

Profit generation and business management play a key role in entrepreneurship education, especially in the TVET context. Participants emphasized profit-driven outcomes, aligning with TVET’s focus on preparing students for self-employment and economic contribution. Entrepreneurship education equips students with essential business skills such as planning, marketing, and financial management, helping them build and sustain businesses.

From the interviews, participants highlighted profit as a key motivation. One participant [P1] described entrepreneurship as “a business that generates profit,” while another [P3] viewed it as “starting or managing a business to ensure growth and profitability.” Similarly, [P9] defined it as “building a business to earn profits.” These responses reflect students’ practical understanding of entrepreneurship as a mean of financial sustainability.

Recent studies highlight the role of entrepreneurship education in developing business acumen and financial sustainability among students. Leong and Idris (2023) emphasize that TVET entrepreneurship programs bridge the gap between theory and real-world business applications, while Ibrahim et al. (2022) stress the importance of fostering a profit-oriented mindset alongside resilience to navigate market challenges.

Profit generation as a key outcome aligns with Malaysia's national economic policies. The Malaysian Education Blueprint positions entrepreneurship in TVET as a strategy to develop job creators rather than job seekers. By adopting a profit-driven approach, students gain financial independence while contributing to youth employment and economic growth. However, findings suggest that entrepreneurship education should go beyond profit generation. Business management training should integrate sustainability and ethical practices, ensuring a balance between financial success, community impact, and environmental responsibility (Yusoff & Ibrahim, 2023).

### 3.2.2 Community Impact and Economic Boost

The participants in this study view entrepreneurship as a mean of economic empowerment and community development, aligning with TVET's goal of integrating technical skills with entrepreneurial knowledge. Many emphasized its role in supporting both individual and community economies.

In particular, [P4] described entrepreneurship as "starting a business that helps boost a community or an individual economy," while [P6] stated, "entrepreneurship is a way to generate income." Participants [P5] and [P7] associated it with innovation, job creation, and economic growth. Similarly, [P10] recognized its broader societal benefits, including improved living standards and economic stability, while [P2] highlighted its importance in navigating economic uncertainty.

Entrepreneurship drives economic growth by creating jobs, addressing local needs, and fostering innovation. Studies support this, with Musa and Kassim (2023) emphasizing the role of TVET entrepreneurship education in equipping students to tackle socio-economic challenges through business ventures. Similarly, Rahman et al. (2022) highlight how entrepreneurship strengthens community resilience, helping individuals adapt to economic uncertainties. Participants [P6] and [P2] also stressed the importance of identifying business opportunities and generating income, reinforcing how entrepreneurship education prepares students for an unpredictable economy. In Malaysia, SMEs play a key role in the national economy meanwhile TVET programs focused on entrepreneurship are essential in shaping job creators rather than job seekers.

In a similar vein, participant [P10] highlighted how entrepreneurship improves living standards, while [P7] emphasized its role in addressing social challenges. However, Yusoff and Ibrahim (2023), who advocate integrating social entrepreneurship into TVET to align business activities with community needs and sustainability suggest TVET programs need a more structured approach to balance profit-making with social responsibility. Incorporating ethical business practices and sustainability into entrepreneurship education can help students create ventures that benefit both the economy and society.

In conclusion, the theme Community Impact and Economic Boost reinforces the role of entrepreneurship education in driving economic growth, supporting communities, and building resilience. By embedding these elements into TVET curricula, Malaysian architecture students can be better equipped to contribute meaningfully to society and adapt

to economic challenges.

### 3.2.3 Job Creation and Economic Change

Entrepreneurship is a key driver of economic growth and a means to address unemployment, especially in developing economies like Malaysia. In the TVET context, entrepreneurship education equips students with skills to create jobs for themselves and others, contributing to broader economic development.

During interviews, participants emphasized job creation and economic change as key outcomes of entrepreneurship. For instance, [P9] stated that entrepreneurship “can improve the standard of living for society, provide job opportunities, and more,” while [P10] and [P8], described it as “an action that can create jobs” and “a catalyst for economic change and development.” These perspectives emphasize entrepreneurship’s role in reducing unemployment and fostering economic stability.

In their study, Ahmad and Jamaludin (2023) noted that entrepreneurship in Malaysia is a crucial strategy for reducing youth unemployment, particularly among TVET graduates. The study mentioned that small and medium-sized enterprises (SMEs), which form the backbone of Malaysia’s economy, contribute significantly to employment and GDP. Additionally, Rahim et al. (2022) highlighted that entrepreneurial ventures drive market transformation and stimulate economic activity, aligning with participants’ views on entrepreneurship as a force for economic change. Entrepreneurship education in TVET also promotes adaptability and resilience, preparing students to navigate economic uncertainties. By equipping students with practical business skills, TVET programs enable them to contribute to job creation and long-term economic development.

For Malaysian architecture students in TVET programs, entrepreneurship opens pathways to careers in design consultancy, construction, and real estate. Beyond the job creation, this supports the growth of Malaysia’s construction and real estate sectors. However, the impact of entrepreneurship education depends on how well TVET curricula integrates practical training. The programs should include real-world business scenarios, mentorship, and financial management to better prepare students for entrepreneurial challenges. Yusoff and Hassan (2023) emphasize the value of experiential learning such as internships and business simulations that may bridge the gap between theory and practice, ensuring students gain hands-on experience. These findings also suggest that entrepreneurship education significantly contributes to shaping students’ intentions to become entrepreneurs. In their study, Mohamad Fadzil et al. (2022) observed the positive relationship between entrepreneurship programs and entrepreneurial aspirations reinforces the role of cognitive factors in influencing student’s career choices. Moreover, Wan Kamarudin et al. (2023) further reinforce this connection by highlighting how psychological factors, such as optimism, play a significant role in fostering an entrepreneurial mindset through education.

The theme “Job Creation and Economic Change” highlights the importance of entrepreneurship education in TVET for boosting employment and economic growth. By equipping Malaysian architecture students with entrepreneurial skills, TVET institutions can

help reduce unemployment and support national economic goals. Future improvements should emphasize hands-on learning and industry collaboration. These findings reinforced evidence of Wan Kamarudin et al. (2023) which indicate that entrepreneurial intention should be nurtured as early as possible, as it influences the future number of entrepreneurs in a country. The study mentioned that universities can enhance this by moving from traditional teaching to project-based learning, including internships, industry visits, networking, and entrepreneurship seminars, to improve students' marketability.

#### **4. Conclusion and Recommendations**

This study highlights the importance role of entrepreneurship education in TVET, particularly for diploma in architecture students of one Malaysian polytechnic. While previous research has extensively explored entrepreneurship education in business management disciplines, limited studies have examined the impact on students in technical and vocational fields such as architecture. This study addresses that gap by providing insight into how students in technical fields perceive and engage with entrepreneurial learning, thereby broadening the discourse on entrepreneurship education beyond conventional business programs. This study reveals a positive perception of entrepreneurship education, emphasizing its role in fostering an entrepreneurial mindset among students pursuing technical fields. It also identifies three key themes that define students' perspectives: profit generation and business management, community impact and economic boost, and job creation and economic change. In tandem with this, participation in entrepreneurship programs, particularly those involving industry collaborations, enhances students' business acumen, problem-solving abilities, and engagement with the community. Furthermore, students recognize the importance of entrepreneurial skills in enhancing their employability, either as future business owners or within the technical industry. Given these findings, integrating foundational business courses into TVET programs is vital. Topics such as business planning, market analysis, and operations management should be embedded into the curriculum to prepare students for both self-employment and leadership roles in technical industries. By aligning entrepreneurship education with institutional goals, this research provides valuable insights for policymakers, the Ministry of Higher Education (MOHE), institutions, educators, and academics to refine TVET strategies. Strengthening entrepreneurship components in technical education can better equip students to navigate industry challenges and contribute to sustainable economic development.

This study also highlights the importance of nurturing an entrepreneurial mindset and adapting educational programs accordingly. A crucial theoretical implication of this study is the alignment with the Big Five Personality Traits Theory by Costa and McCrae (1992). The findings suggest that students who exhibit openness to experience and conscientiousness are more inclined to engage with entrepreneurship education and perceive its value in their future careers. In the similar vein, extraversion appears to correlate with students' willingness to participate in entrepreneurial activities, reinforcing prior studied that links personality traits with entrepreneurial intentions. Thus, integrating psychological perspectives such as the Big Five Personality Traits allows for a deeper understanding of the factors influencing students' engagement with entrepreneurship education, providing a more nuanced approach to

curriculum development.

On the other hand, from a methodological context, this study employs a small sample size of ten architecture students using qualitative interviews. While some may argue that the sample size limits generalizability, qualitative research prioritize depth over breadth, enabling researchers to capture rich, detailed insights (Creswell & Poth, 2018; Patton, 2015). Purposive sampling was used to ensure participants had direct experience with entrepreneurship education, making their perspectives particularly valuable. This approach aligns with existing qualitative research methodologies, which emphasize participant expertise over large-scale statistical representation.

While this study offers meaningful contributions, future research should explore the long-term impact of entrepreneurship education on graduates, extend the scope to other technical disciplines, and assess the effectiveness of various pedagogical approaches in entrepreneurship education. These directions would further support TVET's role in developing a dynamic, entrepreneurial workforce, particularly in emerging economies like Malaysia.

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