

ENHANCING VOCATIONAL TRAINING THROUGH ENTREPRENEURSHIP EDUCATION: A CASE STUDY OF MALTA'S APPROACH TO FOSTERING AN ENTREPRENEURIAL MIND-SET

Joseph Cilia^a, Glen Farrugia^b

^a Malta College of Arts, Science and Technology, Triagon Academy, Malta, Joseph.J.Cilia@mcast.edu.mt

^b Malta College of Arts, Science and Technology, Triagon Academy, Malta

Abstract

This article explores the integration of entrepreneurship education within vocational training programs, focusing on Malta's strategic initiatives aimed at fostering an entrepreneurial mindset among learners. As the global economy increasingly emphasizes innovation and adaptability, traditional vocational training models are being challenged to incorporate entrepreneurial principles that prepare students for dynamic career landscapes. This study employed a qualitative research design, utilizing semi-structured interviews to gather in-depth insights from both students and lecturers involved in vocational training programs that integrate entrepreneurship education. Through a comprehensive case study of Malta's approach, this research highlights effective pedagogical strategies, program frameworks, and partnerships that cultivate entrepreneurial skills among vocational trainees. The findings indicate that embedding entrepreneurship education within vocational curricula not only enhances employability but also empowers students to navigate the complexities of modern employment environments. By analysing stakeholder perspectives, curriculum design, and practical outcomes, this article argues for the essential role of entrepreneurship education in shaping a resilient workforce capable of driving economic growth. Ultimately, the study contributes to the broader discourse on educational reform by illustrating how Malta's experience can inform best practices for similar initiatives worldwide.

Keywords: Entrepreneurship Education, Vocational Training, Entrepreneurial Mindset, Educational Reform, Economic Growth

JEL Classification: I25, J24, L26

1. INTRODUCTION

Malta's efforts to integrate entrepreneurship into vocational training align with global trends but also face unique challenges. While initiatives such as the Youth Entrepreneurship Program and curriculum reforms are commendable, they must be evaluated against international benchmarks and theoretical insights. Embedding entrepreneurship education within a robust theoretical and empirical framework can enhance its effectiveness and ensure that it contributes meaningfully to both individual empowerment and national economic development.

The landscape of work is rapidly transforming, driven by globalization, technological advancements, and evolving consumer needs. In this context, the demand for skilled workers who not only possess technical expertise but also exhibit entrepreneurial competencies has become increasingly critical. Traditional vocational training programs, which have long focused on imparting specific skills for various occupations, must now adapt to a more holistic approach that integrates entrepreneurship education into their curricula. This integration is essential for cultivating an entrepreneurial mindset among learners, which is vital for fostering innovation, adaptability, and resilience in the workforce (Jones & Iredale, 2010; Pittaway & Cope, 2007).

Despite growing interest in entrepreneurship education, there remains a lack of empirical research that critically examines how such education is implemented within vocational training contexts. This study addresses this gap

by investigating the integration of entrepreneurship education in Malta's vocational training system. The research is guided by the following goals:

- To explore how entrepreneurship education is embedded in vocational curricula;
- To assess the perceived effectiveness of these programs from both student and lecturer perspectives; and
- To identify challenges and opportunities for enhancing entrepreneurship education in vocational settings.
- By comparing the views of students and lecturers, the study aims to provide a comprehensive understanding of the pedagogical and institutional dynamics that shape entrepreneurship education outcomes.

2. LITERATURE REVIEW

2.1. The Maltese Context in Perspective

Despite its growing popularity, entrepreneurship education is not without critique. Scholars such as Fayolle and Gailly (2008) argue that the field lacks consensus on pedagogical models and assessment methods. There is also debate over whether entrepreneurship can truly be taught or whether it is an innate disposition. Moreover, some critics caution against overemphasizing entrepreneurship in contexts where structural barriers—such as limited access to capital or weak entrepreneurial ecosystems—may hinder actual business creation (Neck & Greene, 2011). These critiques highlight the importance

of contextualizing entrepreneurship education within local economic and cultural realities.

2.2. Critical Reflections and Debates

Internationally, vocational education and training (VET) systems have increasingly embraced entrepreneurship as a means to enhance employability and adaptability. In Finland, for example, entrepreneurship is embedded across all VET curricula, supported by national strategies and teacher training programs (Tuunainen, 2014). Germany's dual system integrates apprenticeships with entrepreneurial modules, while the UK promotes enterprise education in further education colleges through initiatives like the Enterprise Adviser Network. These examples demonstrate that entrepreneurship education in vocational settings is not only feasible but also beneficial when aligned with national policy and labour market needs.

2.3. Global Perspectives on Vocational Entrepreneurship Education

The concept of an entrepreneurial mindset refers to a set of attitudes, skills, and behaviours that enable individuals to identify opportunities, take initiative, and innovate in uncertain environments (Gibb, 2002). This mindset includes traits such as resilience, creativity, and risk tolerance. Entrepreneurial intention, on the other hand, is the conscious state of mind that precedes action toward starting a business (Krueger & Carsrud, 1993). Entrepreneurial competencies encompass a broader range of skills, including opportunity recognition, strategic thinking, and resource mobilization (Man, Lau & Chan, 2002). These constructs are essential for understanding the goals and outcomes of entrepreneurship education, particularly in vocational contexts where learners are often preparing for immediate entry into the workforce.

2.4. Defining Key Constructs

Entrepreneurship education is underpinned by several theoretical frameworks that explain how individuals acquire entrepreneurial competencies and develop entrepreneurial intentions. One widely used model is Experiential Learning Theory (Kolb, 1984), which emphasizes learning through reflection on doing—an approach particularly relevant in vocational education where hands-on experience is central. Similarly, Ajzen's Theory of Planned Behaviour (1991) provides a psychological lens to understand how attitudes, subjective norms, and perceived behavioural control influence entrepreneurial intention. These frameworks offer valuable insights into how entrepreneurship education can be structured to foster not only knowledge but also motivation and confidence to act entrepreneurially.

2.5. Theoretical Foundations of Entrepreneurship Education

The landscape of work is rapidly transforming, driven by globalization, technological advancements, and evolving consumer needs. In this context, the demand for skilled

workers who not only possess technical expertise but also exhibit entrepreneurial competencies has become increasingly critical. Traditional vocational training programs, which have long focused on imparting specific skills for various occupations, must now adapt to a more holistic approach that integrates entrepreneurship education into their curricula. This integration is essential for cultivating an entrepreneurial mindset among learners, which is vital for fostering innovation, adaptability, and resilience in the workforce (Jones & Iredale, 2010; Pittaway & Cope, 2007).

Malta provides a compelling case study for enhancing vocational training through the incorporation of entrepreneurship education. Recognizing the need to align educational outcomes with labour market demands, various stakeholders in Malta—including educational institutions, government bodies, and industry partners—have collaborated to promote entrepreneurship as a key driver of economic growth and social development. The Maltese government's strategic initiatives aim to equip students with the entrepreneurial skills necessary to navigate the complexities and uncertainties of the modern economy, addressing both current labour market demands and future employment trends (Kim et al., 2019).

Research consistently demonstrates that entrepreneurship education enhances employability and fosters critical thinking, creativity, and problem-solving abilities among students (Hynes & Richardson, 2007; Taatila, 2010). These competencies are increasingly important in a labour market characterized by rapid technological advancements and shifting consumer preferences. By integrating entrepreneurial principles into vocational training programs, educational systems can empower students to thrive in competitive environments, adapt to changing circumstances, and seize opportunities for innovation and self-employment. Such a multifaceted skill set is essential in today's work landscape, where job security is often uncertain, and the ability to create value through entrepreneurship can distinguish individuals in their careers (Komninos et al., 2024).

Malta's innovative strategies in vocational training illustrate the potential benefits of incorporating entrepreneurship education into educational frameworks. Various initiatives have been launched, such as collaborations between educational institutions and industry stakeholders to create programs that cultivate entrepreneurial competencies. For instance, initiatives like the Youth Entrepreneurship Program aim to engage young learners in hands-on projects that foster creativity, business acumen, and practical skills necessary for entrepreneurship (Kim et al., 2019). Additionally, the introduction of courses that focus on innovation, business planning, and the principles of entrepreneurship within vocational curricula represents a significant shift toward a more integrated approach to education.

Evidence suggests that effective entrepreneurship education can lead to improved learning outcomes,

including increased motivation and engagement among students (Fayolle & Gailly, 2015). Programs that actively involve students in experiential learning opportunities—such as internships, mentorships, and collaborative projects—are particularly effective in fostering entrepreneurial mindsets. These experiences not only allow students to apply theoretical knowledge in real-world contexts but also encourage them to develop a proactive approach to problem-solving and innovation. By examining Malta's approach to entrepreneurship education within vocational training, this article aims to analyse the effectiveness of these programs and their broader implications for educational policy and practice.

Through this exploration, the article will contribute to the ongoing discourse on educational reform by highlighting the importance of preparing future generations for the challenges and opportunities of an increasingly entrepreneurial economy. As nations grapple with the demands of globalization and technological change, the insights derived from Malta's experience can inform best practices for similar initiatives worldwide, ultimately leading to a more dynamic and adaptable workforce.

3. RESEARCH DESIGN

The inclusion of both students and lecturers was intentional, as comparing their perspectives allows for a more holistic understanding of the program's effectiveness. Students provide insights into the learning experience and perceived outcomes, while lecturers offer critical reflections on pedagogical strategies and institutional implementation.

3.1. Methods

This study employed a qualitative approach to investigate the integration of entrepreneurship education within Malta's vocational training framework. This method was particularly effective for exploring complex phenomena, such as education and entrepreneurship, where understanding the perspectives and experiences of participants was crucial (Creswell, 2013). The qualitative methodology allowed for an in-depth exploration of participants' views, experiences, and the contextual factors influencing the implementation of entrepreneurship education.

3.2. Sample Size and Structure

A total of 24 participants were involved in the study, comprising 16 students and 8 lecturers from vocational institutions across Malta. The student participants were enrolled in programs that included entrepreneurship modules, while the lecturers had direct experience in delivering entrepreneurship education. Participants varied in age, gender, and program specialization, ensuring a diverse representation of perspectives.

3.3. Sampling Procedure

Purposive sampling was employed to select participants who were most likely to provide relevant insights into the integration of entrepreneurship education. Criteria for

selection included active involvement in vocational training programs with entrepreneurship components and willingness to participate in the study. Recruitment was facilitated through institutional contacts and email invitations.

3.4. Data Collection Instruments

Data were collected using semi-structured interviews guided by a protocol developed from existing literature on entrepreneurship education. The interview guide included open-ended questions covering themes such as perceived relevance, implementation challenges, and impact on entrepreneurial mindset. Pilot testing of the interview guide was conducted with two participants to refine question clarity and flow.

3.5. Reliability Measures

To ensure reliability and validity of the findings, multiple strategies were employed. Interviews were audio-recorded and transcribed verbatim. Thematic analysis was conducted using Braun and Clarke's (2006) framework. Triangulation was achieved by comparing responses across student and lecturer groups. Member checking was performed by sharing preliminary findings with selected participants for feedback. Additionally, inter-coder reliability was ensured by having two researchers independently code a subset of transcripts and resolve discrepancies through discussion.

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3.6. Data Collection

Data collection was conducted through semi-structured interviews, which allowed for a comprehensive exploration of participants' views while providing the flexibility to probe deeper into specific topics as they arose (DiCicco-Bloom & Crabtree, 2006). The semi-structured format facilitated an open dialogue, encouraging participants to share their thoughts and insights in a way that structured interviews might not have permitted. This was especially important in education research, where personal experiences significantly impacted perceptions of educational effectiveness (Kvale & Brinkmann, 2009).

Participants were selected using purposive sampling to ensure a diverse representation of perspectives. The target population included students who were currently enrolled in vocational training courses that integrated entrepreneurship components, as well as lecturers responsible for delivering these educational programs.

Including both students and lecturers facilitated a comprehensive understanding of the effectiveness and challenges associated with entrepreneurship education from multiple vantage points. This dual focus was essential, as it recognized that both groups played critical roles in the learning process and provided valuable insights into the operational and pedagogical aspects of entrepreneurship education.

3.7. Interview Process

The semi-structured interviews were designed to explore key themes, including participants' perceptions of the relevance and impact of entrepreneurship education, the challenges encountered in implementing such programs, and the overall effectiveness in fostering an entrepreneurial mindset among students. Open-ended questions were utilized to encourage participants to express their thoughts and experiences freely, while follow-up questions were employed to delve deeper into specific issues (Creswell & Poth, 2018). This approach allowed for the emergence of rich qualitative data that captured the complexities of the participants' experiences.

Each interview was recorded, transcribed, and subjected to thematic analysis to identify patterns and themes related to the integration of entrepreneurship education. Thematic analysis facilitated the identification of key insights into how entrepreneurship education was perceived and experienced within the Maltese vocational training context, enabling the researcher to synthesise findings that could inform future policy and practice.

3.8. Ethical Considerations

Ethical considerations were paramount throughout the research process. Prior to conducting interviews, participants received detailed information about the study's purpose, the voluntary nature of their participation, and their right to withdraw at any time without consequence. Informed consent was obtained from all participants, ensuring that they fully understood their involvement and agreed to the recording and analysis of their interviews (Creswell, 2013).

Confidentiality was strictly maintained, with all data anonymised to protect participants' identities. Pseudonyms were used in the reporting of findings to further ensure privacy. Additionally, the research adhered to institutional ethical guidelines and relevant legal frameworks, including data protection regulations. By prioritising ethical considerations, the study aimed to foster a respectful and safe environment for participants to share their experiences and insights.

4. RESULTS

The results from the semi-structured interviews with 15 students and six lecturers provide a comprehensive understanding of the integration of entrepreneurship education within Malta's vocational training framework. The findings are organized thematically and directly linked to the research questions.

Theme 1: Relevance of Entrepreneurship Education
(Linked to Research Question 1: How is entrepreneurship education embedded within Malta's vocational training curricula?)

12 out of 15 students stated that entrepreneurship education improved their problem-solving skills and creativity:

"It made me think differently about how to approach challenges at work." — Student

Lecturers confirmed this, with one noting:

"We see students becoming more proactive and confident in their ideas." — Lecturer

Theme 2: Challenges in Implementation
(Linked to Research Question 3: What challenges and opportunities exist in implementing entrepreneurship education?)

Eight students expressed frustration with the lack of real-world applications:

"We need more hands-on projects, not just theory." — Student

Lecturers cited resource limitations and the need for professional development:

"We're doing our best, but we need more training and support." — Lecturer

Theme 3: Effectiveness in Fostering an Entrepreneurial Mindset
(Linked to Research Question 2: What are the perceptions of students and lecturers regarding the effectiveness of these programs?)

10 students reported increased confidence in starting a business:

"Before this course, I never thought I could be an entrepreneur." — Student

Lecturers observed increased engagement:

"Students are more enthusiastic and ask deeper questions." — Lecturer

Theme 4: Support and Resources Needed
(Linked to Research Question 3)

Nine students emphasized the need for mentorship and networking:

"Meeting real entrepreneurs would help us understand the risks and rewards." — Student

Lecturers recommended partnerships with industry professionals:

"We need to bring the real world into the classroom." — Lecturer

Theme 5: Cultural Attitudes Towards Entrepreneurship

(Linked to Research Question 3)

Six students mentioned cultural barriers to entrepreneurship:

“People here are afraid of failure.” — Student

Lecturers agreed:

“We need to change the narrative around risk-taking.” — Lecturer

Theme 6: Digital Skills and Career Aspirations

(Linked to Research Question 2)

11 students highlighted the importance of digital skills:

“Everything is online now—our training should reflect that.” — Student

Lecturers supported this view:

“Digital literacy is essential for modern entrepreneurs.” — Lecturer

The results from the semi-structured interviews conducted with students and lecturers regarding the integration of entrepreneurship education within Malta’s vocational training framework provide a rich understanding of various aspects of the program. The findings are organized into several key themes, each highlighting distinct insights and perceptions from both groups. Here’s a detailed explanation of the results:

4.1. Relevance of Entrepreneurship Education

Student Insights: Students believed that entrepreneurship education significantly improved their problem-solving skills and creativity. They felt these attributes were crucial for adapting to the dynamic job market. Many students recognized that understanding entrepreneurship could

enhance their career prospects, allowing them to navigate various professional paths effectively.

Lecturer Insights: Lecturers echoed these sentiments, emphasizing that entrepreneurship education equips students with practical skills relevant across multiple industries. They noted that fostering a proactive mindset among students prepares them to face challenges in their future careers, which is essential in today’s rapidly changing economy.

4.2. Challenges in Implementation

Student Insights: Some students expressed frustration regarding the curriculum’s lack of real-world applications, feeling that theoretical knowledge was not sufficient without practical experiences. This gap created a desire for more hands-on learning opportunities that could enhance their understanding of entrepreneurship.

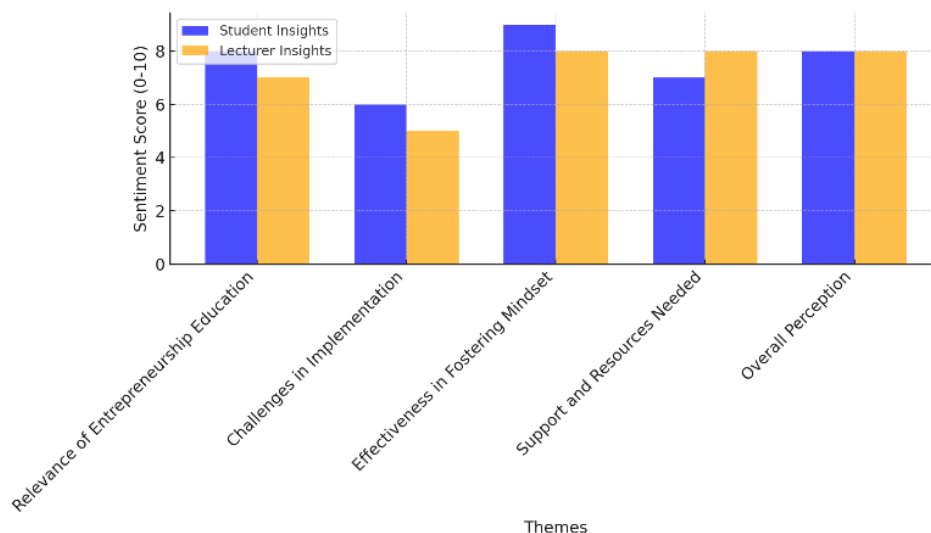
Lecturer Insights: Lecturers identified resource limitations as a significant barrier to effective implementation. They mentioned the need for ongoing professional development to ensure that educators could deliver current and relevant entrepreneurship concepts, thereby enhancing the quality of education provided to students.

4.3. Effectiveness in Fostering an Entrepreneurial Mindset

Student Insights: Many students reported feeling more confident in their ability to start their own businesses after completing the courses. They attributed this newfound confidence to the inspiration and motivation provided by the entrepreneurship education program, which encouraged them to consider entrepreneurial endeavours.

Lecturer Insights: Lecturers observed a notable shift in student attitudes over time, with increased engagement and enthusiasm for entrepreneurial initiatives. This shift highlighted the effectiveness of the program in nurturing an entrepreneurial mindset, which is vital for success in any business venture.

Figure 1. | Comparison of student and lecturer insights on Entrepreneurship Education



4.4. Support and Resources Needed

Student Insights: Students voiced the need for more mentorship opportunities and networking events to connect with local entrepreneurs and industry experts. They believed that such interactions would provide invaluable insights and guidance, helping them to navigate their entrepreneurial journeys more effectively.

Lecturer Insights: Lecturers recommended establishing partnerships with industry professionals to enhance the curriculum. They believed that incorporating real-world insights from experienced entrepreneurs would significantly benefit students, enriching their educational experience and preparing them for real-life challenges.

4.5. Overall Perception of the Program

Student Insights: Overall, students viewed entrepreneurship education as a vital component of their vocational training, which significantly enhanced their employability. They recognized that skills gained through the program were transferable and applicable to various career paths.

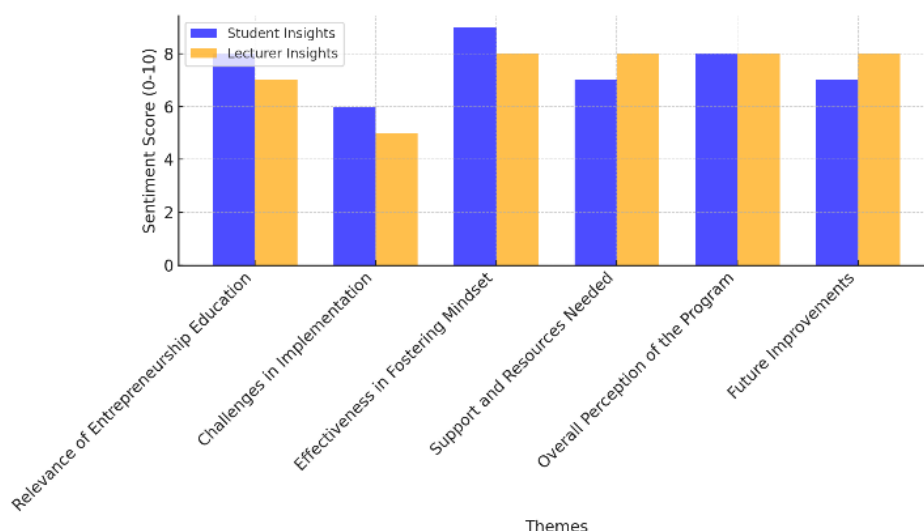
Lecturer Insights: Lecturers agreed on the importance of integrating entrepreneurship into vocational education. They emphasized that such integration is crucial for preparing students to meet the challenges of the modern workforce, underscoring the need for educational reform that aligns with industry demands.

4.6. Future Improvements

Student Insights: Students suggested that the curriculum should incorporate more practical projects and case studies related to entrepreneurship. They believed these additions would help bridge the gap between theory and practice, making the learning experience more applicable and relevant to their future careers.

Lecturer Insights: Lecturers emphasized the importance of continuous curriculum evaluation and adaptation to keep pace with the evolving demands of the job market. They argued that regular updates to the curriculum would ensure that students receive the most relevant and current education.

Figure 2. | Comparison of student and lecturer insights on Entrepreneurship Education (Updated)



4.7. Impact on Career Aspirations

Student Insights: A majority of students reported that the courses had a positive influence on their career aspirations, leading them to consider entrepreneurship as a viable career path. This shift in perspective indicated the program's effectiveness in inspiring students to pursue entrepreneurial endeavours.

Lecturer Insights: Lecturers noted that many students pursued entrepreneurial activities post-graduation, reflecting the program's impact on their aspirations and readiness to enter the business world.

failure influenced their willingness to engage in entrepreneurial activities. This insight highlighted the importance of addressing cultural attitudes to foster a more supportive environment for aspiring entrepreneurs.

Lecturer Insights: Lecturers pointed out that societal attitudes towards entrepreneurship need to evolve to create a more favourable environment for students. They suggested that changing perceptions could significantly enhance students' willingness to engage in entrepreneurial pursuits.

4.8. Cultural Attitudes Towards Entrepreneurship

Student Insights: Some students mentioned that prevailing cultural perceptions about risk-taking and

4.9. Collaboration with Local Businesses

Student Insights: Students expressed a strong desire for more collaborations with local businesses, believing that such partnerships would provide practical insights and valuable real-world experiences. They recognized the

importance of understanding the local business landscape to inform their entrepreneurial endeavours.

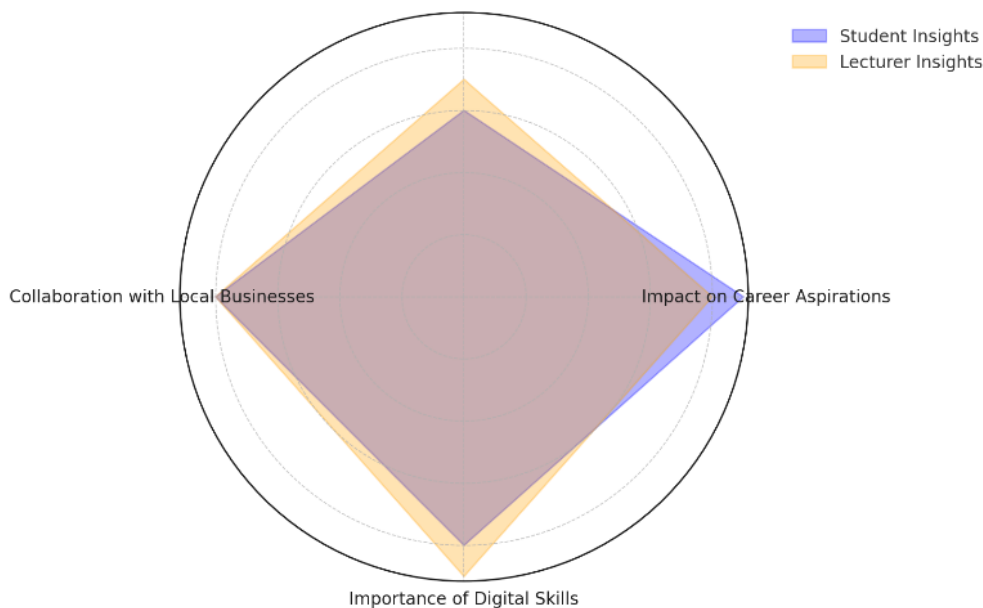
Lecturer Insights: Lecturers indicated that stronger ties with the local business community could enhance

learning outcomes. They believed that collaboration with businesses would not only enrich the curriculum but also provide students with networking opportunities critical for their future success.

Table 1 | Ancillary aspects of Entrepreneurship Education

Theme	Student Insights	Lecturer Insights
Impact on Career Aspirations	A majority of students reported that the courses positively influenced their career aspirations, leading them to consider entrepreneurship as a viable path.	Lecturers noted that many students pursued entrepreneurial endeavors post-graduation, reflecting the effectiveness of the program in inspiring action.
Cultural Attitudes Towards Entrepreneurship	Some students mentioned that cultural perceptions about risk-taking and failure affected their willingness to engage in entrepreneurial activities.	Lecturers pointed out that societal attitudes towards entrepreneurship need to evolve to create a more supportive environment for aspiring entrepreneurs.
Collaboration with Local Businesses	Students expressed a desire for more collaborations with local businesses to gain practical insights and real-world experiences.	Lecturers indicated that stronger ties with the local business community could enhance learning outcomes and provide students with networking opportunities.
Importance of Digital Skills	Many students recognized the necessity of digital skills for entrepreneurship, emphasizing the need for training in this area.	Lecturers agreed that incorporating digital skills into the curriculum is crucial, given the increasing reliance on technology in business.

Figure 3. | Cultural Attitudes towards Entrepreneurship



4.10. Importance of Digital Skills

Student Insights: Many students recognized the necessity of digital skills in entrepreneurship, emphasizing the need for training in this area. They understood that proficiency in digital tools and platforms was increasingly important for business success.

Lecturer Insights: Lecturers agreed that incorporating digital skills into the curriculum is crucial. They highlighted the growing reliance on technology in business and the

need for students to be equipped with the relevant skills to thrive in a digital economy.

The findings from the interviews provide a comprehensive overview of the strengths and weaknesses of the entrepreneurship education program in Malta's vocational training framework. They reveal that while students and lecturers recognize the value of entrepreneurship education, challenges such as resource limitations and the need for practical application persist.

Addressing these challenges, alongside fostering a supportive cultural attitude towards entrepreneurship, will be essential for enhancing the effectiveness of the program and preparing students for successful careers in an increasingly entrepreneurial landscape.

5. DISCUSSION

The findings from the semi-structured interviews with students and lecturers regarding the integration of entrepreneurship education within Malta's vocational training framework illuminate the complex interplay between educational objectives and real-world applications. This discussion delves into the implications of these findings, highlighting their significance in shaping an effective entrepreneurship education program.

5.1. Relevance and Effectiveness of Entrepreneurship Education

The results indicate that both students and lecturers recognize the crucial role of entrepreneurship education in developing skills such as creativity, problem-solving, and adaptability. These competencies are essential for navigating today's dynamic job market, where the ability to think outside the box and tackle challenges head-on is highly valued. The students' confidence in their entrepreneurial abilities, as noted in the findings, underscores the program's success in fostering an entrepreneurial mindset. This is particularly important as the contemporary workforce increasingly values innovation and agility, traits that are indispensable in a rapidly changing economic landscape. Moreover, the program's emphasis on real-world applications and experiential learning helps students to not only understand theoretical concepts but also to apply them in practical scenarios. This hands-on approach ensures that students are well-prepared to face the complexities of the business world, making them more competitive and resilient.

As noted by Gibb (2002), entrepreneurship education can act as a catalyst for economic development by equipping individuals with the necessary skills to drive innovation. This, in turn, can lead to the creation of new businesses, job opportunities, and overall economic growth, highlighting the far-reaching impact of effective entrepreneurship education. Additionally, fostering an entrepreneurial mindset can inspire students to become proactive problem-solvers and leaders in their communities, further contributing to societal advancement. The integration of entrepreneurship education into the curriculum also promotes a culture of continuous learning and adaptability, which is crucial in an era marked by rapid technological advancements and globalization. By instilling these values, educational institutions can help shape a generation of forward-thinking individuals who are capable of making significant contributions to both the economy and society at large.

5.2. Challenges in Implementation

However, despite the apparent benefits, significant challenges persist in the implementation of entrepreneurship education. Students' frustrations regarding the lack of real-world applications in the curriculum highlight a critical gap that must be addressed. The lecturers' insights regarding resource limitations further complicate this issue, as effective entrepreneurship education often requires substantial investment in training, materials, and real-world experiences (Hannon, 2006). This gap suggests a need for educational institutions to re-evaluate their curricula, ensuring that theoretical knowledge is complemented by practical experiences that resonate with students' aspirations. Moreover, there is a pressing need for collaboration between educational institutions and industry partners to bridge this gap. By fostering partnerships with businesses and entrepreneurs, schools can provide students with internships, mentorship programs, and hands-on projects that offer invaluable real-world insights.

Moreover, addressing these challenges requires a systemic approach that includes policy support and funding from government and private sectors. Investment in entrepreneurship education should be seen as an investment in the future workforce, capable of driving innovation and economic growth. Institutions must also focus on continuous professional development for lecturers, equipping them with the latest pedagogical strategies and industry knowledge to effectively guide students. In addition, incorporating technology and digital tools into the curriculum can enhance learning experience and provide students with the skills needed to thrive in a digital economy. By taking these steps, educational institutions can create a more robust and dynamic entrepreneurship education program that not only meets the needs of students but also contributes to the broader economic and social development.

It is also crucial to address the diverse needs of students from various backgrounds. Tailoring entrepreneurship education to be inclusive and accessible can help in nurturing a wide range of talents and perspectives, which are essential for fostering innovation. This includes providing support for underrepresented groups and ensuring that all students have equal opportunities to benefit from entrepreneurship education. By creating an environment that encourages diversity and inclusion, educational institutions can cultivate a richer and more innovative entrepreneurial ecosystem.

The integration of entrepreneurship education should not be limited to business schools alone. Embedding entrepreneurial thinking across different disciplines can encourage students from various fields to apply entrepreneurial principles in their respective areas of study. This interdisciplinary approach can lead to the development of innovative solutions to complex problems, driving progress in multiple sectors. By promoting a culture of entrepreneurship throughout the

entire educational system, institutions can prepare students to be proactive, adaptable, and resilient in the face of future challenges.

5.3. The Role of Cultural Attitudes

The findings regarding cultural attitudes towards entrepreneurship also warrant attention. Students' hesitance to engage in entrepreneurial activities due to fear of failure reflects a broader societal perception that often discourages risk-taking. Lecturers' observations about the need for a cultural shift emphasize that entrepreneurship education cannot operate in a vacuum; it must be supported by a societal framework that values and encourages entrepreneurial endeavors. The research by Fayolle and Gailly (2008) supports this notion, asserting that cultural perceptions can significantly influence the entrepreneurial intentions of individuals. Thus, efforts to promote entrepreneurship must extend beyond the classroom and into the community, fostering an environment that celebrates innovation and risk-taking.

5.4. Importance of Collaboration and Networking

Another key insight from the findings is the importance of collaboration with local businesses. Students expressed a strong desire for more mentorship opportunities and networking events, recognizing that real-world connections can significantly enhance their educational experience. Lecturers similarly emphasized the benefits of partnerships with industry professionals. This alignment between student desires and lecturer observations points to the potential for creating a more robust entrepreneurship education ecosystem. Engaging local businesses can provide students with invaluable insights into the practicalities of running a business, bridging the gap between theory and practice (Rae, 2006). Moreover, this collaboration could foster a sense of community, where students can learn from local entrepreneurs' successes and challenges, further enriching their educational journey.

The integration of local business partnerships into the curriculum can offer students hands-on experience that is crucial for their development. By working closely with industry professionals, students can gain a deeper understanding of market dynamics, customer needs, and the operational aspects of running a business. This practical exposure not only enhances their learning but also prepares them for the realities of the business world. Furthermore, these partnerships can lead to potential job opportunities and internships, providing students with a pathway to employment and career growth.

It is also important to recognize the mutual benefits of such collaborations. Local businesses can benefit from the fresh perspectives and innovative ideas that students bring. This symbiotic relationship can lead to the development of new products, services, and business strategies, driving local economic growth. By fostering a culture of collaboration and mutual support, educational institutions and local businesses can create a thriving

entrepreneurial ecosystem that benefits both students and the wider community.

5.5. Digital Skills in the Modern Economy

The recognition of digital skills as crucial for entrepreneurial success is another significant finding. In an increasingly digital economy, proficiency in technology is paramount for aspiring entrepreneurs. The lecturers' agreement on the necessity of incorporating digital skills into the curriculum reflects a growing awareness of the need to adapt educational practices to meet the demands of the modern workforce. The World Economic Forum (2020) emphasizes the importance of digital literacy in driving economic growth and innovation, suggesting that entrepreneurship education must evolve to include training in digital tools and platforms. This evolution is essential not only for keeping pace with technological advancements but also for ensuring that students are equipped with the skills needed to leverage these tools effectively.

Furthermore, integrating digital skills into entrepreneurship education can open up new avenues for innovation and business development. Students who are proficient in digital technologies can explore opportunities in emerging fields such as e-commerce, digital marketing, and fintech. This can lead to the creation of innovative business models and solutions that address contemporary challenges. Additionally, digital literacy can enhance students' ability to analyze data, automate processes, and improve operational efficiency, making their ventures more competitive in the global market.

It is also important to recognize that digital skills are not limited to technical proficiency. They encompass a range of competencies, including digital communication, online collaboration, and cybersecurity awareness. By incorporating these skills into the curriculum, educational institutions can prepare students to navigate the complexities of the digital landscape confidently and responsibly. Fostering a culture of continuous learning and adaptability is crucial, as the digital economy is characterized by rapid change and constant innovation. By instilling these values, entrepreneurship education can help students remain agile and resilient in the face of technological disruptions.

The integration of digital skills into entrepreneurship education is vital for preparing the next generation of entrepreneurs. It ensures that they are not only capable of using technology but also of harnessing its potential to drive innovation and economic growth. As the digital economy continues to evolve, so must the educational practices that support it, ensuring that students are well-equipped to thrive in a technology-driven world.

5.6. Recent Developments in Digital Entrepreneurship Education

Recent research has increasingly emphasized the importance of integrating digital competencies into

entrepreneurship education, particularly in vocational contexts. Wibowo et al. (2023) found that digital entrepreneurship education significantly enhances students' entrepreneurial intentions, especially when paired with digital literacy and entrepreneurial alertness. Similarly, Mustaffa et al. (2024) highlighted the need for vocational institutions to embed digital entrepreneurship into their curricula, noting that collaboration with industry is essential for relevance and impact. Bulto et al. (2025), through a bibliometric analysis, demonstrated a growing scholarly focus on digital transformation in entrepreneurship education, suggesting that digital tools are becoming foundational to entrepreneurial pedagogy. Furthermore, SpringerOpen (2025) explored how personality traits influence digital entrepreneurial attitudes, advocating for more personalized and adaptive learning environments. These studies collectively underscore the need for vocational education systems to evolve in response to the digital economy, ensuring that learners are equipped with both entrepreneurial and digital competencies.

5.7. Future Directions

Looking ahead, the findings advocate for several critical changes to enhance the effectiveness of entrepreneurship education in Malta. First, educational institutions must prioritize the integration of practical experiences within the curriculum. This could involve incorporating case studies, live projects, and internships that allow students to apply their learning in real-world contexts. These experiential learning opportunities can bridge the gap between theoretical knowledge and practical application, thereby making the educational process more engaging and relevant. By providing students with opportunities to work on real-world problems, they can develop critical thinking and problem-solving skills that are essential for entrepreneurial success.

Second, fostering a supportive cultural environment that values entrepreneurship is imperative. This could be achieved through community initiatives that promote successful entrepreneurial stories and celebrate innovation. By highlighting local success stories and organizing events such as entrepreneurship fairs and innovation contests, the community can create a positive perception of entrepreneurship and inspire more individuals to pursue entrepreneurial ventures. Additionally, educational institutions can collaborate with local media to showcase entrepreneurial achievements, further reinforcing the importance of entrepreneurship within the community.

Educational institutions can play a pivotal role in cultivating an entrepreneurial mindset by integrating entrepreneurship education across various disciplines. This interdisciplinary approach can encourage students from different fields to think creatively and apply entrepreneurial principles in their respective areas of study. For instance, students in engineering, arts, and sciences can benefit from learning how to commercialize their innovations and ideas. Third, strengthening

collaborations with local businesses will be vital in providing students with mentorship and networking opportunities that can significantly impact their career trajectories. Establishing partnerships with industry professionals can offer students valuable insights into the practicalities of running a business, as well as access to potential job opportunities and internships. These collaborations can also facilitate knowledge exchange and foster a sense of community between students and local entrepreneurs.

It is crucial to continuously update the curriculum to reflect the evolving demands of the modern workforce. Incorporating emerging trends and technologies into the coursework can ensure that students are well-prepared to navigate the dynamic business landscape. Providing resources and support for the continuous professional development of lecturers is also essential, as it enables them to stay abreast of the latest industry developments and effectively guide students. By implementing these changes, educational institutions in Malta can create a more robust and dynamic entrepreneurship education ecosystem that not only meets the needs of students but also contributes to the broader economic and social development of the region.

Furthermore, it is essential to recognize the role of policy support and funding in driving these changes. Government and private sector investment in entrepreneurship education can provide the necessary resources to implement these initiatives effectively. This includes funding for training programs, technological infrastructure, and partnerships with local businesses. By securing adequate financial support, educational institutions can ensure the sustainability and scalability of their entrepreneurship education programs.

Lastly, fostering a culture of continuous improvement and innovation within educational institutions is vital. Encouraging feedback from students, lecturers, and industry partners can help identify areas for enhancement and ensure that the curriculum remains relevant and impactful. By adopting a proactive approach to curriculum development and staying attuned to the needs of the modern workforce, educational institutions can better prepare students for the challenges and opportunities of the entrepreneurial landscape.

By prioritizing practical experiences, fostering a supportive cultural environment, strengthening collaborations with local businesses, continuously updating the curriculum, and securing policy support and funding, educational institutions in Malta can significantly enhance the effectiveness of entrepreneurship education. These efforts will not only benefit students but also contribute to the broader economic and social development of the region, creating a thriving entrepreneurial ecosystem that drives innovation and growth.

6. CONCLUSION

This study set out to explore the integration of entrepreneurship education within Malta's vocational training framework, guided by three primary goals:

- To examine how entrepreneurship education is embedded in vocational curricula;
- To assess the perceived effectiveness of these programs from both student and lecturer perspectives; and
- To identify challenges and opportunities for enhancing entrepreneurship education in vocational settings.

The findings indicate that entrepreneurship education is indeed being integrated into vocational training through various initiatives, including curriculum reforms and partnerships with industry. Both students and lecturers recognize the value of these programs in fostering entrepreneurial mindsets and enhancing employability. However, challenges such as limited practical application, resource constraints, and cultural attitudes toward entrepreneurship persist. The comparative analysis of student and lecturer perspectives proved meaningful, as it revealed both converging and diverging views that can inform more balanced and effective program design.

While the study's goals were largely achieved, further research is needed to evaluate long-term outcomes and to develop strategies for addressing the identified challenges. By continuing to refine and support entrepreneurship education in vocational contexts, Malta can strengthen its workforce and contribute to broader economic development.

The findings from this study offer valuable insights into the state of entrepreneurship education within Malta's vocational training framework. While the program demonstrates significant potential in fostering an entrepreneurial mindset, addressing the identified challenges is crucial for its continued success. By bridging the gap between theory and practice, promoting a supportive cultural environment, and enhancing collaborations with local businesses, Malta can cultivate a robust entrepreneurship education framework that not only prepares students for their future careers but also contributes to the broader economic landscape.

Bridging the gap between theory and practice involves integrating more practical experiences into the curriculum, such as case studies, live projects, and internships. These hands-on opportunities enable students to apply theoretical knowledge in real-world contexts, thereby enhancing their learning experience and preparing them for the complexities of the business world. Practical experiences also help students develop critical thinking, problem-solving, and decision-making skills, which are essential for entrepreneurial success. By engaging in real-world projects, students can gain a deeper understanding of market dynamics, customer needs, and the operational aspects of running a business.

Promoting a supportive cultural environment that values entrepreneurship can be achieved through community initiatives that celebrate innovation and highlight successful entrepreneurial stories. This can inspire more individuals to pursue entrepreneurial ventures and create a positive perception of entrepreneurship within the community. Educational institutions can organize events such as entrepreneurship fairs, innovation contests, and guest lectures by successful entrepreneurs to foster a culture of entrepreneurship. Additionally, collaborating with local media to showcase entrepreneurial achievements can further reinforce the importance of entrepreneurship and motivate students to explore entrepreneurial opportunities.

Enhancing collaborations with local businesses is vital for providing students with mentorship and networking opportunities that can significantly impact their career trajectories. Establishing partnerships with industry professionals can offer students valuable insights into the practicalities of running a business, as well as access to potential job opportunities and internships. These collaborations can also facilitate knowledge exchange and foster a sense of community between students and local entrepreneurs. By working closely with industry partners, educational institutions can ensure that the curriculum remains relevant and aligned with the needs of the business world.

The transformation of education must reflect the realities of the modern world, equipping future generations with the skills and confidence to innovate and lead in an ever-changing environment. This includes continuously updating the curriculum to incorporate emerging trends and technologies, ensuring that students are well-prepared to navigate the dynamic business landscape. Providing resources and support for the continuous professional development of lecturers is also essential, as it enables them to stay abreast of the latest industry developments and effectively guide students. By investing in the professional growth of educators, institutions can enhance the quality of entrepreneurship education and ensure that students receive the most current and relevant knowledge.

Furthermore, it is essential to recognize the role of policy support and funding in driving these changes. Government and private sector investment in entrepreneurship education can provide the necessary resources to implement these initiatives effectively. This includes funding for training programs, technological infrastructure, and partnerships with local businesses. By securing adequate financial support, educational institutions can ensure the sustainability and scalability of their entrepreneurship education programs. Policymakers can also play a crucial role in creating an enabling environment for entrepreneurship education by developing supportive policies and frameworks that encourage innovation and entrepreneurship.

Lastly, fostering a culture of continuous improvement and innovation within educational institutions is vital.

Encouraging feedback from students, lecturers, and industry partners can help identify areas for enhancement and ensure that the curriculum remains relevant and impactful. By adopting a proactive approach to curriculum development and staying attuned to the needs of the modern workforce, educational institutions can better prepare students for the challenges and opportunities of the entrepreneurial landscape. This iterative process of curriculum improvement can lead to the development of more effective teaching methods and learning experiences that resonate with students.

By addressing the identified challenges and implementing these critical changes, Malta can cultivate a robust entrepreneurship education framework that not only prepares students for their future careers but also contributes to the broader economic landscape. This holistic approach to entrepreneurship education will equip future generations with the skills and confidence to innovate and lead, driving economic growth and development in an ever-changing environment. By prioritizing practical experiences, fostering a supportive cultural environment, strengthening collaborations with local businesses, continuously updating the curriculum, and securing policy support and funding, educational institutions in Malta can significantly enhance the effectiveness of entrepreneurship education. These efforts will not only benefit students but also contribute to the broader economic and social development of the region, creating a thriving entrepreneurial ecosystem that drives innovation and growth.

While this study provides valuable insights into the integration of entrepreneurship education in vocational

training, further research is needed to deepen understanding and inform policy and practice:

- Longitudinal Studies: Future research should track students over time to assess the long-term impact of entrepreneurship education on career outcomes, entrepreneurial activity, and employability.
- Cross-Country Comparisons: Comparative studies across different vocational education systems can help identify best practices and contextual differences in implementation strategies.
- Digital Entrepreneurship: With the increasing relevance of digital skills, future studies should explore how digital entrepreneurship is being integrated into vocational curricula and its effectiveness in preparing students for the digital economy.
- Pedagogical Innovations: Research could also examine the effectiveness of emerging teaching methods—such as simulation-based learning, gamification, and blended learning—in fostering entrepreneurial competencies.
- Equity and Inclusion: Investigating how entrepreneurship education addresses or overlooks the needs of underrepresented groups in vocational settings would contribute to more inclusive educational practices.

These directions can contribute to a more comprehensive and globally relevant understanding of entrepreneurship education in vocational contexts.

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