



NARRATIVES OF ALUMNI ENTREPRENEURS OF BINOWANG NATIONAL HIGH SCHOOL IN PAQUIBATO DISTRICT

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ABSTRACT

This study aimed to explore the lived experiences of Technology and Livelihood Education (TLE) alumni regarding the influence of TLE training on their entrepreneurial mindset, skills, and business practices in Paquibato District, Davao City. Specifically, it examined how TLE contributed to the development of entrepreneurial competencies and how participants applied these skills in managing small-scale businesses. The study utilized a qualitative phenomenological research design through semi-structured interviews with selected TLE alumni engaged in small-scale businesses. The phenomenological approach allowed the researcher to gather participants' lived experiences and insights regarding the role of TLE in their entrepreneurial journey. The findings revealed that TLE training significantly developed participants' entrepreneurial competencies such as budgeting, marketing, customer service, financial management, and opportunity recognition. Experiential learning activities enhanced their confidence, creativity, resilience, adaptability, and leadership skills necessary in sustaining their businesses despite limited resources and market challenges. The study concluded that TLE serves as an important foundation for entrepreneurial preparedness, livelihood development, and economic participation among rural learners. Based on the findings, the study recommended strengthening experiential learning activities, entrepreneurship-based projects, and mentorship programs to further enhance learners' entrepreneurial skills and practical business competencies.

KEYWORDS: *Technology and Livelihood Education, entrepreneurial skills, small-scale business, livelihood development*

I. INTRODUCTION

The Problem and its Setting

The Technology and Livelihood Education (TLE) in the K to12 curriculum equips students with practical skills in various fields, including home economics, industrial arts, and small-scale business operations. However, the effectiveness of TLE in fostering entrepreneurial competencies remains a key area of interest, particularly in rural communities like in Brgy. Fatima, Paquibato District, Davao City, where small-time businesses play a vital role in the economic sustainability of the community.

Entrepreneurship education is increasingly recognized as a vital component of secondary education, particularly in economically vulnerable and rural communities where formal employment opportunities remain limited. Within this context, Technology and Livelihood Education (TLE) serves as a strategic platform for equipping learners not only with technical skills but also with Personal Entrepreneurial Competencies (PECS) which are essential for initiating and sustaining small-scale enterprises. Technical proficiency alone does not guarantee economic productivity; without entrepreneurial knowledge and behavioral competencies, skills acquired in areas such as home economics, industrial arts, and agri-fishery may not translate into viable income-generating activities. By integrating practical training with entrepreneurial skill development, TLE has the potential to transform learners into proactive economic participants capable of contributing to household income and local economic circulation. In rural districts where microenterprises drive community sustainability, strengthening the entrepreneurial dimension of TLE is not only an educational priority but also a socio-economic intervention, making it essential to examine how TLE training influences students' entrepreneurial capabilities and supports the financial growth of small-time businesses.

This study explores the impact of TLE on students' entrepreneurial skills, particularly how the development of Personal Entrepreneurial Competencies (PECS) enhances their ability to manage and sustain business ventures. It emphasizes how these acquired competencies contribute to augmenting the financial income of small-time businessmen in the district. This research aims to uncover how TLE education bridges the gap between technical expertise and entrepreneurship by documenting real-life experiences and narratives of small-time businessmen. Understanding these dynamics will help educators, policymakers, and local business sectors enhance training programs that empower students to establish and sustain income-generating activities. This study contributes to the growing body of knowledge on education-driven entrepreneurship by delving into these narratives, providing insights that may lead to curriculum improvements, policy recommendations, and community-based initiatives that support local economic development.

In many countries, particularly in Sub-Saharan Africa and South Asia, students graduate from secondary schools and vocational programs without the necessary competencies for the modern workforce. In Southern Europe and North Africa, youth unemployment remains alarmingly high in regions, with countries like Spain and Tunisia experiencing youth jobless rates above 30% (International Labour Organization (2024)). In Latin America and Southeast Asia, the digital divide continues to undermine vocational training, students



from low-income households faced lower levels of internet access, indicating a socioeconomic divide in technology access (Afzal et al., 2023).

In Northern Samar, one pressing issue in the implementation of Technology and Livelihood Education (TLE) in public secondary schools is the limited range of practical courses offered, which often centers on one or two popular strands, leaving students with insufficient exposure to essential business-related competencies (Tan, 2021). In Bulacan, many senior high school learners express that they are well-prepared to create and present business plans, with a high degree of certainty in their ability to launch small businesses. However, despite this positive outlook, students commonly face limited access to relevant training, seminars, and workshops that would enhance their practical entrepreneurial skills (Alas et al., 2023). In Echague, Isabela, students tend to show more interest in subjects other than Technology and Livelihood Education (TLE), indicating a need to enhance the appeal and relevance of TLE programs (Curan, 2023).

In Davao del Norte, the challenges faced by Technology and Livelihood Education (TLE) teachers have a direct impact on the development of students' entrepreneurial skills, underscoring the need for effective and responsive TLE training. Educators highlight the importance of pedagogical adaptability, resource optimization, and sustained professional development. These efforts are essential in enhancing the quality of TLE instruction and ensuring that students are equipped with the practical skills necessary for success in small scale entrepreneurship (Pamor et al., 2024).

The ability to generate income through entrepreneurship is an essential skill in today's competitive and ever-changing economic landscape. As the government continues to promote technical and vocational education, the Technology and Livelihood Education strand plays a significant role in equipping students with skills necessary for employment and self-sufficiency. However, there is a need to assess how well TLE Trainings translate into actual 6 entrepreneurial endeavors, particularly in rural areas where small-scale businesses are a primary source of livelihood.

In Paquibato District, many families rely on small-time businesses to sustain their daily needs. With the increasing emphasis on skills-based education, it is essential to explore whether TLE students effectively apply their training in real-world entrepreneurial settings. By analyzing narratives from small-time businessmen who were students of TLE, this research will provide a deeper understanding of the role of TLE in economic empowerment.

The findings will be beneficial in refining TLE curricula, improving instructional approaches, and designing more effective business programs that will further highlight the potential of TLE in transforming technical skills into sustainable business ventures, contributing to local economic resilience and financial independence. This study on the impact of Technology and Livelihood Education (TLE) training on students' entrepreneurial skills and its contribution to augmenting the financial income of small-time businesses in Paquibato District holds significance for various sectors.

Statement of the Problem

Specifically, this study answered the following questions:

1. How does TLE training influence alumni's entrepreneurial skills?
2. How do alumni cope with the challenges in developing entrepreneurial skills?
3. What insights can be derived from the narratives of small-time businessmen-learners to enhance the development of entrepreneurial mindsets and skills? ability of these lessons to their daily lives and future financial decisions?

Objectives of the Study

This study aimed to explore the influence of Technology and Livelihood Education (TLE) training on the entrepreneurial development of alumni who were engaged in small-time businesses. Specifically, it sought to:

1. determine how TLE training influenced the entrepreneurial skills of alumni;
2. examine how alumni coped with the challenges encountered in developing entrepreneurial skills; and
3. identify the insights derived from the narratives and lived experiences of small-time businessman-learners that helped enhance entrepreneurial mindsets and skills.

II. METHODOLOGY

Research Design

This study employed a qualitative phenomenological research design to explore the lived experiences of small-time businessmen in Paquibato District who had undergone Technology and Livelihood Education (TLE) training. The phenomenological approach was appropriate for this inquiry because it seeks to understand how individuals make meaning of their experiences, particularly regarding how TLE training influenced their entrepreneurial mindset and business practices. The focus of the research was not to generalize results but to provide an in-depth account of how TLE-trained individuals applied their acquired skills in real-world entrepreneurial settings, especially within the context of rural livelihoods.



The research procedure began with the identification of the community of interest where many former TLE students currently operate small-scale businesses. A purposive sampling technique was used to select participants who had completed TLE training and were actively engaged in entrepreneurship. An open-ended interview guide was developed to elicit detailed personal narratives regarding participants' educational background, entrepreneurial skills acquired, and the opportunities and challenges they encountered while running their businesses.

One-on-one, semi-structured interviews were conducted either face-to face or online, depending on participants' availability and access. Interviews were audio-recorded with informed consent and transcribed verbatim for analysis. Field notes were also taken to capture non-verbal cues and contextual details. The data were then organized and thematically coded to identify emerging patterns and insights. To ensure accuracy and credibility, participants reviewed their transcripts and validated the interpretations through a member checking process.

Participants

This study involved a total of 10 participants from Paquibato District, Davao City. The participants were purposely selected based on their completion of formal Technology and Livelihood Education (TLE) training in school, current operation of a small-scale, locally based business in Paquibato, and a minimum of six months of active business operation. These small-time businessmen and women engaged in ventures such as food processing, handicrafts, and service-oriented trades, providing firsthand insights into the practical application of their TLE training.

As a qualitative, purposive study, the research aimed to obtain in-depth insights from participants who had direct experience applying TLE skills in small-scale businesses. Ten participants were recruited purposively, as this sample size was sufficient to produce rich, detailed interview data and achieve thematic saturation given the study's narrow focus and practical constraints of time and resources. Participants were selected to represent different business types to maximize variation in experiences.

In qualitative inquiry, sample size determination is guided by the specific qualitative approach and the depth of the data required rather than statistical representativeness (Creswell & Creswell, 2018; Creswell & Poth, 2018). According to Creswell and Poth (2018), a sample size ranging from 3 to 10 participants is methodologically optimal and standard for studies exploring shared lived experiences within a focused domain, particularly when the sample is highly uniform. Because this study adheres to strict, purpose-driven criteria, the cohort forms a homogeneous baseline. Creswell notes that when a sample is highly uniform, data saturation, the point where further interviews yield no new informational codes or thematic developments, is reached much faster, validating the choice of 10 participants as methodologically sufficient (Creswell & Creswell, 2018). Simultaneously, participants were selected to represent different business types to maximize variation in experiences. According to Patton (2015), embedding maximum variation within a purposive strategy strengthens qualitative findings by illuminating common patterns that cut across diverse contexts, thereby enhancing the multi-layered understanding of how school-based TLE training translates to real-world rural entrepreneurship.

Data Gathering Procedure

This research followed a structured and ethical process to ensure proper data collection. The process began with a formal request for approval from Dr. Nelia B. Aga, Dean of the Graduate School. Once approval was granted, the researcher was endorsed to the Schools Division Superintendent of the Davao City Division to seek authorization to conduct the study in selected communities within Paquibato District.

Upon receiving clearance from the division office, the researcher coordinated with the Barangay Local Government Units (LGUs) in Paquibato to arrange interview schedules with identified participants. Interviews were scheduled at times most convenient for the participants to avoid disrupting their entrepreneurial activities and daily responsibilities. Coordination was conducted respectfully and with transparency to ensure full cooperation from local leaders and participants. Prior to each interview, participants' voluntary consent and understanding of the study's purpose were confirmed, in accordance with ethical research practices.

Respondents were selected through purposive sampling to deliberately include individuals who met specific criteria, such as enrollment or completion of the TLE strand, residence in Paquibato District, and active involvement in small-scale entrepreneurial businesses. Before conducting interviews, an orientation session was held with selected participants to explain the study's objectives, their roles as respondents, the voluntary nature of participation, and the measures implemented to ensure confidentiality and ethical conduct. Written informed consent was secured from all participants prior to data collection.

Data collection primarily involved semi-structured, one-on-one interviews guided by a validated interview protocol developed specifically for this study. Each interview lasted between 30 to 45 minutes and was conducted in a quiet and comfortable environment, either face-to-face within the community or through online platforms when necessary. With participants' consent, interviews were audio-recorded to ensure accuracy, and field notes were also taken to capture non-verbal cues and contextual details.

Following the interviews, audio recordings were transcribed verbatim and subjected to thematic analysis to identify key patterns, themes, and insights. This rigorous process allowed the researcher to draw meaningful conclusions about the impact of TLE training on the entrepreneurial skills of graduates and its role in enhancing the financial income of small-time businesses in Paquibato.



District. Through this systematic process, I aligned my thematic coding with Creswell's data analysis spiral to ensure the findings accurately reflect the deep, lived experiences of these local entrepreneurs.

Data Analysis

The data gathered from the interviews were analyzed using thematic analysis, a widely used method in qualitative research that focuses on identifying, analyzing, and interpreting patterns of meaning within the data. After the interviews were transcribed verbatim, the researcher thoroughly read and re-read the transcripts to become familiar with the content. This immersion helped gain an initial understanding of recurring ideas, experiences, and insights shared by participants regarding the impact of Technology and Livelihood Education (TLE) training on their entrepreneurial skills.

Following familiarization, initial codes were generated by systematically labeling significant features of the data that related directly to the research questions. These codes captured important aspects such as the application of TLE skills in business, strategies and practices adopted in entrepreneurship, and ways in which the training influenced financial outcomes for small-time businesses.

The initial codes were then reviewed and organized into broader themes that reflected the essence of participants' lived experiences and perceptions about their entrepreneurial journey after TLE training. Thematic grouping focused on key areas such as skills acquisition, practical application, entrepreneurial mindset development, financial impact, and innovative approaches in business practices.

Emerging themes were reviewed and refined to ensure accuracy, coherence, distinctiveness, and relevance to the study's objectives. Each theme was clearly defined and supported with meaningful verbatim quotes from participants to enrich the analysis and highlight authentic voices. Throughout the analysis process, the researcher practiced reflexivity to minimize personal biases that could affect interpretation, ensuring that the findings represented the participants' true perspectives. The final thematic analysis presented a rich, detailed narrative that illustrated how TLE training contributes to entrepreneurial skills and economic empowerment in the context of small-scale businesses in Paquibato District.

III. RESULTS AND DISCUSSION

Technology and Livelihood Education (TLE) Training Influence on Alumni's Entrepreneurship Skills

The findings of the study revealed that the influence of Technology and Livelihood Education (TLE) training on alumni's entrepreneurship skills was characterized by three major themes: (1) the role of TLE in developing entrepreneurial skills, (2) competency-based and experiential learning in TLE, and (3) TLE as a tool for youth empowerment and economic participation. These themes demonstrate that TLE serves as a significant educational platform that equips learners with practical competencies, entrepreneurial knowledge, and real-world experiences necessary for livelihood participation and entrepreneurial success. Through competency-based instruction and experiential learning opportunities, TLE enables learners to translate theoretical concepts into practical applications, thereby strengthening their confidence, decision-making abilities, and entrepreneurial mindset.

First, the findings highlighted the important role of TLE in developing entrepreneurial skills among the alumni. Participants emphasized that TLE provided them with foundational knowledge and competencies in business planning, resource management, opportunity recognition, marketing, and customer service. Through school-based enterprises, project-based activities, and entrepreneurial exercises, learners gained practical exposure to business operations and acquired skills that could be directly applied to income-generating activities and small-scale ventures. The participants viewed TLE as instrumental in helping them understand the fundamentals of entrepreneurship and in enhancing their ability to identify and maximize business opportunities within their communities. Moreover, the integration of practical activities allowed learners to develop confidence in managing resources, introducing products and services, and making business-related decisions. These findings suggest that TLE contributes significantly to entrepreneurial preparedness by fostering essential competencies that support the successful establishment and management of entrepreneurial ventures.

Second, the study revealed the significance of competency-based and experiential learning approaches in strengthening learners' entrepreneurial competence and technical proficiency. Participants consistently described the practical and hands-on nature of TLE as a valuable learning experience that enabled them to apply acquired knowledge and skills in real-life situations. Activities such as mini-projects, work immersion, skills demonstrations, and other experiential learning opportunities provided learners with meaningful exposure to actual work and business environments. As a result, they developed stronger technical skills, improved work habits, and increased confidence in performing entrepreneurial and employment-related tasks. The participants also emphasized the crucial role of teacher mentorship and guidance in facilitating the effective application of learned competencies. Through continuous support, teachers helped learners refine their skills, solve problems, and gain a deeper understanding of entrepreneurial processes. These findings indicate that competency-based and experiential learning approaches enhance not only technical competence but also learners' readiness for future employment and entrepreneurial opportunities.

Furthermore, the findings demonstrated that TLE serves as a powerful tool for youth empowerment and economic participation. Participants described TLE as an empowering subject that enhanced their financial literacy, leadership abilities, decision-making skills,



and entrepreneurial independence. Through practical learning experiences and school-based entrepreneurial activities, learners developed the capacity to manage financial resources effectively, make informed decisions, and utilize available opportunities for income generation. The participants further emphasized that TLE enabled them to recognize and maximize local economic opportunities, allowing them to contribute actively to livelihood activities within their communities. In addition, the development of leadership and communication skills strengthened their confidence in managing entrepreneurial responsibilities and collaborating with others. These experiences illustrate how TLE extends beyond skills acquisition by empowering learners to become active participants in community development and economic growth.

To sum, the findings confirmed that Technology and Livelihood Education (TLE) training significantly influences the entrepreneurial skills, confidence, and economic participation of alumni. By integrating practical knowledge, competency-based instruction, experiential learning, and teacher mentorship, TLE equips learners with the competencies necessary for business planning, resource management, marketing, customer service, financial literacy, leadership, and opportunity recognition. The study further revealed that TLE contributes to the development of self-confidence, resilience, creativity, and an entrepreneurial mindset that supports sustainable livelihood participation. Consequently, TLE serves as an important foundation for entrepreneurial preparedness and economic engagement by bridging classroom learning with authentic entrepreneurial experiences and real-world livelihood opportunities.

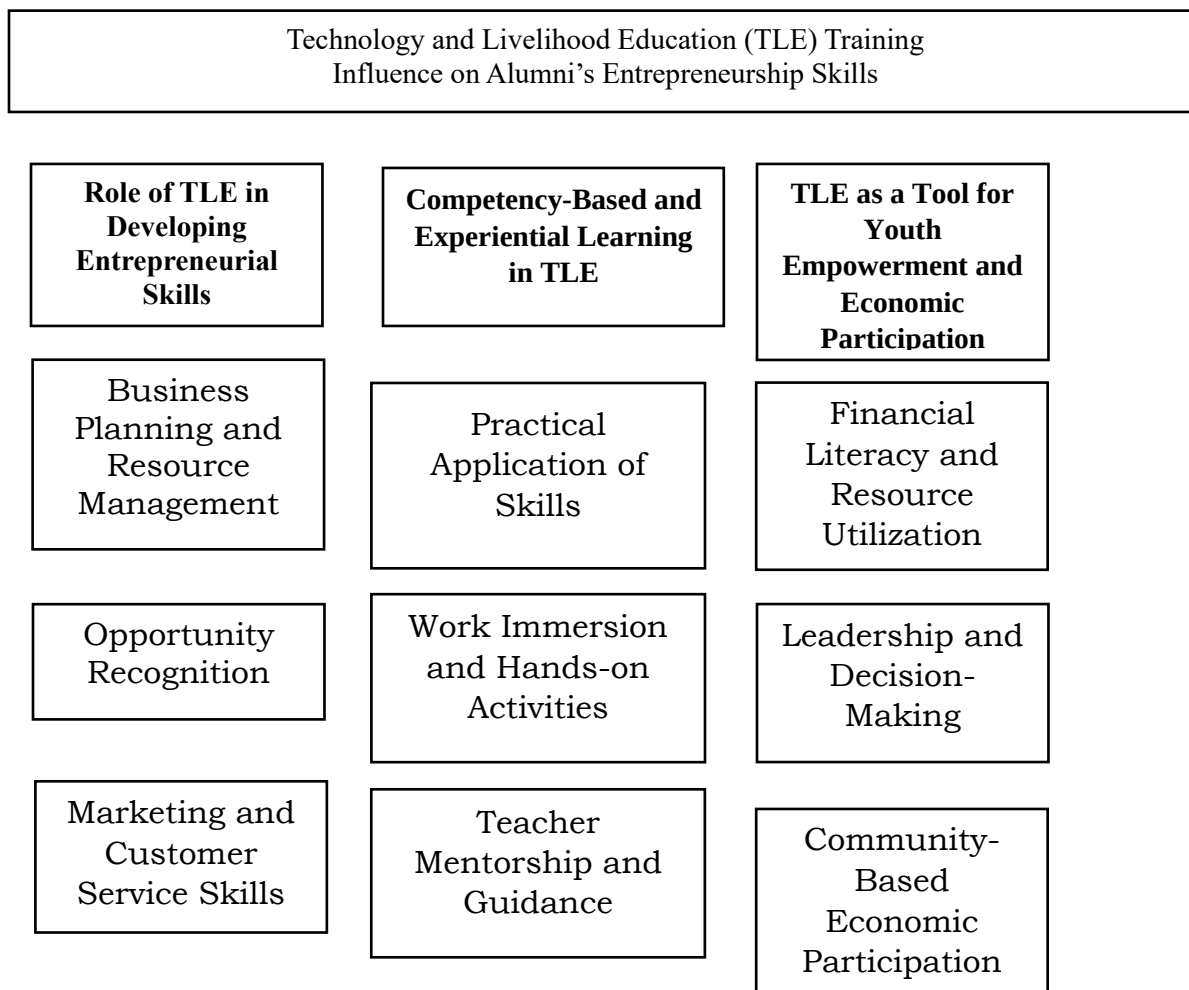


Figure 1. Technology and Livelihood Education (TLE) Training Influence on Alumni's Entrepreneurship Skills



Coping Strategies of Alumni in Entrepreneurial Skill Development

The findings of the study revealed that the coping strategies of alumni in entrepreneurial skill development were characterized by three major themes: (1) characteristics and development of an entrepreneurial mindset, (2) the effect of entrepreneurial skills on small businesses, and (3) real-life applications of entrepreneurial training in rural communities. These themes demonstrate that entrepreneurial success extends beyond the acquisition of technical skills and involves the development of adaptive attitudes, strategic thinking, and practical competencies that enable individuals to navigate challenges and sustain entrepreneurial activities. The findings further suggest that TLE training plays a significant role in helping alumni develop the resilience, creativity, and entrepreneurial capabilities necessary for managing businesses within resource-constrained rural environments.

First, the study highlighted the characteristics and development of an entrepreneurial mindset among the participants. The findings revealed that TLE contributed to the cultivation of resilience and adaptability, creativity and innovation, and strategic thinking and positivity. Participants emphasized that entrepreneurship requires the ability to respond effectively to challenges, adjust to changing circumstances, and remain committed despite setbacks. They described how TLE helped them develop flexibility in dealing with business uncertainties and encouraged them to view challenges as opportunities for growth and improvement. Moreover, participants recognized the importance of creativity and innovation in developing products, improving services, and responding to customer needs despite limited resources. The findings also demonstrated that TLE fostered strategic thinking by encouraging learners to plan for the future, make informed decisions, and maintain a positive outlook toward entrepreneurial endeavors. These experiences enabled participants to become more confident, proactive, and motivated in pursuing business opportunities. Overall, the findings indicate that TLE contributes significantly to entrepreneurial mindset development by strengthening learners' psychological readiness, resilience, and long-term entrepreneurial orientation.

Second, the findings revealed the positive effect of entrepreneurial skills on the sustainability and performance of small businesses. Participants explained that the entrepreneurial competencies acquired through TLE enabled them to manage business operations more effectively, improve customer relations, and identify opportunities for growth and income generation. One of the most significant contributions of TLE was the development of financial management and budgeting skills, which helped participants organize resources, monitor profits and expenses, and maintain smoother business operations. The participants also highlighted the value of communication and customer relation skills in building trust, addressing customer concerns, and improving customer satisfaction. Through entrepreneurial training, they became more confident in making business decisions and managing interactions with clients and customers. In addition, opportunity recognition and innovation emerged as important entrepreneurial competencies that enabled participants to explore new ideas, improve products, and identify alternative sources of income. These findings suggest that entrepreneurial skills acquired through TLE enhance business effectiveness, strengthen competitiveness, and contribute to the sustainability of small-scale enterprises.

Furthermore, the study demonstrated the real-life applications of entrepreneurial training in rural communities. Participants described how they actively applied the entrepreneurial knowledge and skills learned through TLE in managing their businesses and livelihood activities. Skills related to budgeting, pricing, inventory management, product development, marketing, and risk-taking were frequently utilized in their daily business operations. These practical applications allowed participants to improve business efficiency and make more informed entrepreneurial decisions. However, the findings also revealed that rural entrepreneurs continue to face challenges such as limited capital, inadequate resources, fluctuating income, and small customer markets. Despite these constraints, participants remained committed to applying their entrepreneurial competencies and adapting their business practices to local conditions. The participants further emphasized that TLE helped them recognize economic opportunities within their communities and motivated them to engage in livelihood activities that contribute to local economic development. These experiences illustrate how entrepreneurial training serves as a valuable tool for promoting economic participation, self-reliance, and livelihood sustainability in rural areas.

To sum, the findings confirmed that alumni developed a variety of coping strategies in entrepreneurial skill development through their experiences in TLE and real-world business engagement. The participants demonstrated resilience, adaptability, creativity, innovation, and strategic thinking in addressing the challenges associated with operating small-scale enterprises. TLE training strengthened their entrepreneurial mindset and equipped them with practical competencies in financial management, communication, customer relations, opportunity recognition, and business innovation. The study further revealed that entrepreneurial success is influenced not only by technical knowledge but also by perseverance, optimism, and the ability to adapt to changing economic conditions. Consequently, TLE serves as an important foundation for entrepreneurial development by preparing learners to sustain livelihood activities, overcome business challenges, and participate meaningfully in the economic growth of their communities.

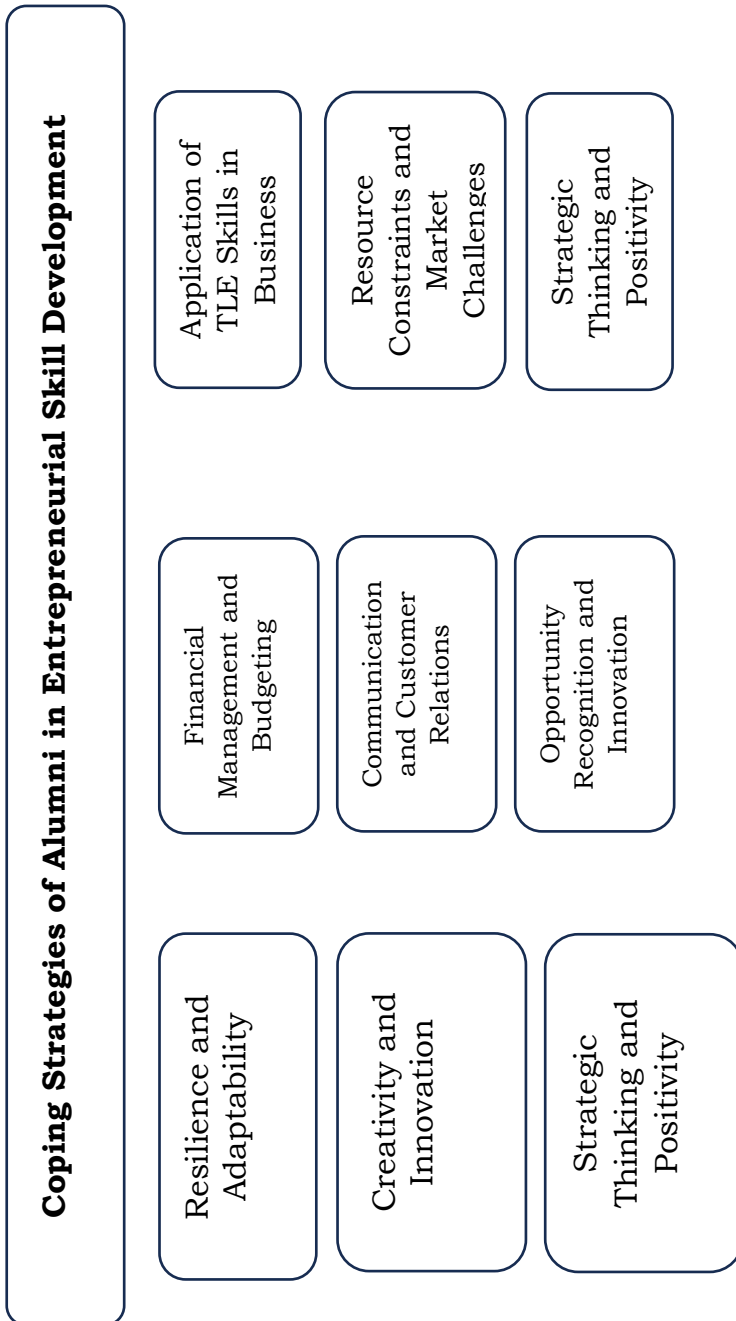


Figure 2. Coping Strategies of Alumni in Entrepreneurial Skill Development



Insights from the Narratives of Small-time Businessmen-learners

The findings of the study revealed that the insights drawn from the narratives of small-time businessmen-learners were characterized by three major themes: (1) lived experiences and narratives in improving TLE instruction, (2) strategies and practices adopted in business ventures, and (3) best practices and innovative approaches in entrepreneurship. These themes illustrate how learners applied the entrepreneurial and technical competencies acquired through Technology and Livelihood Education (TLE) in real-life business contexts while navigating the challenges of operating small-scale enterprises in rural communities. The findings further demonstrate that TLE serves as a valuable foundation for entrepreneurial development by fostering practical skills, adaptive thinking, and innovative business practices that support livelihood sustainability and economic participation.

First, the study highlighted the lived experiences and narratives of participants in improving TLE instruction. The findings revealed that TLE provided learners with practical entrepreneurial and technical competencies that became directly applicable to their business activities. Participants emphasized that skills in selling, bookkeeping, costing, product development, and customer relations helped them manage their enterprises more effectively and participate actively in livelihood opportunities. Beyond technical competencies, the participants also described how TLE contributed to the development of confidence, teamwork, and creativity. Through collaborative activities, project-based learning, and entrepreneurial exercises, learners gained valuable interpersonal and entrepreneurial attributes that enabled them to work effectively with customers, family members, and business partners. Moreover, participants recognized the need for more hands-on training, business simulations, and real market exposure to better prepare learners for the realities of entrepreneurship. While they acknowledged the value of TLE instruction, they believed that increased experiential learning opportunities, adequate instructional materials, and stronger industry exposure would further enhance entrepreneurial preparedness. These findings suggest that TLE instruction becomes more meaningful when practical experiences are integrated with classroom learning, allowing learners to develop both technical competencies and entrepreneurial confidence.

Second, the findings revealed the various strategies and practices adopted by participants in managing and sustaining their business ventures. Participants emphasized the importance of innovation and market responsiveness in maintaining customer interest and adapting to changing consumer demands. They described how experimentation, customer feedback, and awareness of market trends enabled them to improve products and services and remain competitive within their communities. The findings also highlighted the role of resourcefulness and entrepreneurial bricolage in overcoming financial and operational constraints. Participants demonstrated creativity in maximizing available resources, utilizing recycled materials, and leveraging family and community networks to sustain business operations despite limited capital. In addition, financial management and strategic marketing emerged as essential business practices that contributed to operational stability and profitability. Through budgeting, record keeping, promotional planning, and the use of both traditional and digital marketing approaches, participants were able to improve customer engagement and strengthen business performance. These findings indicate that entrepreneurial success in rural settings is shaped by the ability to innovate, adapt, and strategically manage available resources in response to economic challenges.

Furthermore, the study identified several best practices and innovative approaches in entrepreneurship that contributed to the sustainability of participants' businesses. One of the most significant practices was continuous learning and the use of customer feedback to improve products and services. Participants emphasized that listening to customers, observing market trends, and learning from fellow entrepreneurs enabled them to make informed business decisions and maintain customer satisfaction. Another important practice involved creative resource utilization and collaboration, where entrepreneurs maximized available materials and relied on family and community support to sustain production and business operations. These collaborative efforts allowed participants to reduce costs, increase efficiency, and address resource limitations effectively. The findings also revealed the importance of resilience, flexibility, and experimentation in entrepreneurial success. Participants viewed challenges, uncertainties, and even failures as opportunities for learning and growth. Their willingness to experiment with new ideas, adapt to changing market conditions, and persist despite difficulties enabled them to sustain their businesses and remain optimistic about future opportunities. These experiences demonstrate that entrepreneurship requires not only technical and managerial competencies but also a growth-oriented mindset characterized by resilience, adaptability, and continuous improvement.

To sum, the findings confirmed that the lived experiences of small-time businessmen-learners demonstrate the practical relevance of Technology and Livelihood Education (TLE) in developing entrepreneurial competencies applicable to real-world business environments. The participants highlighted that TLE equipped them with essential skills in selling, bookkeeping, financial management, customer relations, and product development while also fostering confidence, teamwork, creativity, and adaptability. The study further revealed that successful entrepreneurial practice involves innovation, resourcefulness, strategic management, continuous learning, collaboration, and resilience. Consequently, TLE serves as an important foundation for entrepreneurial preparedness by bridging classroom learning with authentic business experiences and enabling learners to navigate the opportunities and challenges of entrepreneurship in rural communities.

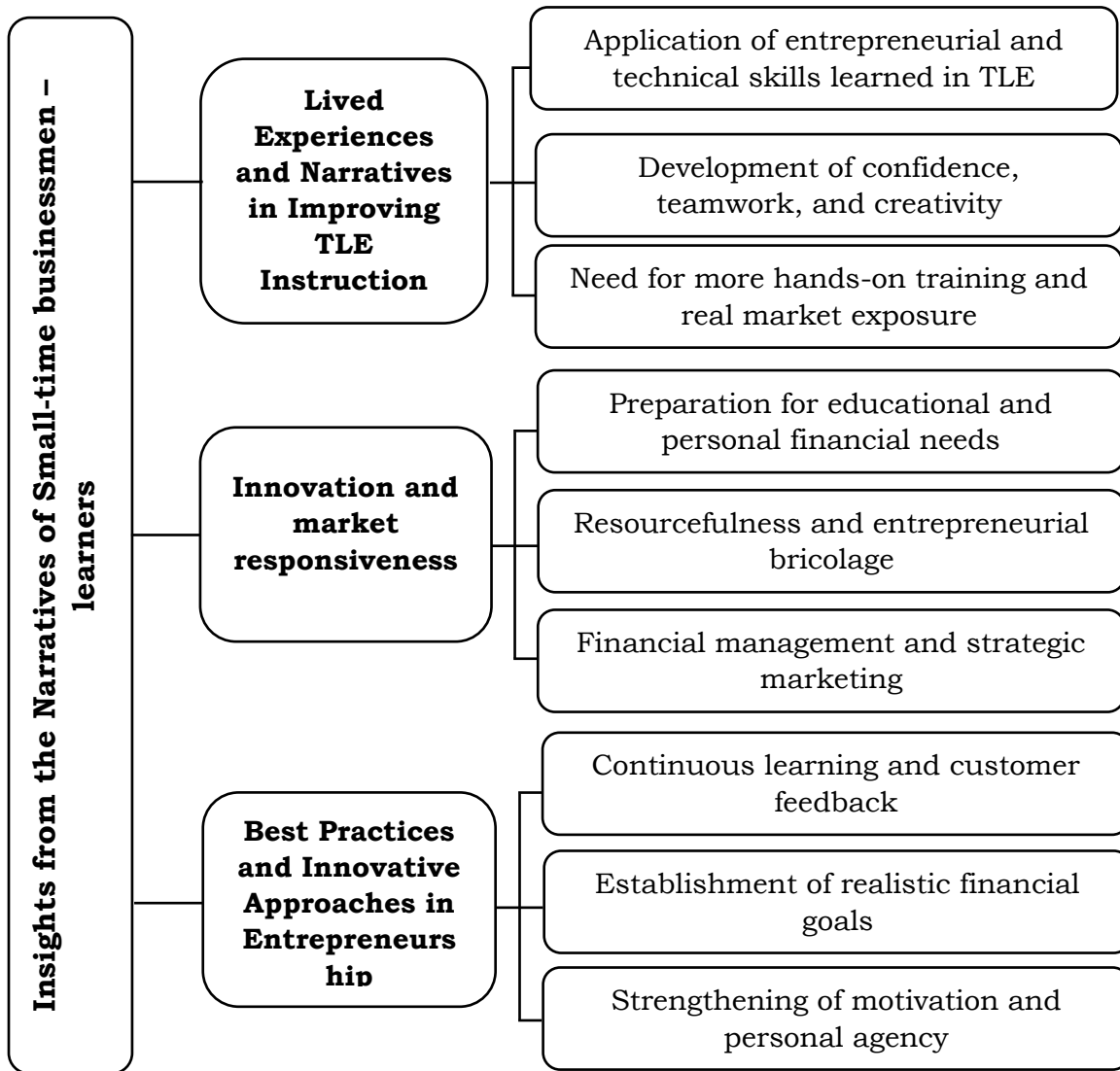


Figure 3. Insights from the Narratives of Small-time businessmen – learners

IV. IMPLICATIONS, AND RECOMMENDATIONS

Implications

Based on the thematic analysis of the empirical data, I identified three major overarching implications regarding how vocational training translates into local economic activity.

1. The findings of the study indicate that Technology and Livelihood Education (TLE) plays a significant role in shaping the entrepreneurial mindset, technical competencies, and business practices of alumni engaged in small-scale enterprises in Paquibato District. Through competency-based and experiential learning approaches, participants acquired practical skills in budgeting, marketing, customer service, product development, and business management that became essential in their entrepreneurial activities. TLE training also fostered confidence, creativity, resilience, and opportunity recognition, enabling participants to become more self-reliant and proactive in addressing economic challenges within their communities.

2. The study further revealed that hands-on learning experiences, teacher mentorship, work immersion, and school-based entrepreneurial activities significantly contributed to participants' entrepreneurial growth and readiness for business engagement. Participants viewed TLE not only as a subject that develops technical skills but also as a transformative educational experience that



empowered them to apply their learning in real-life economic activities. Their experiences demonstrate that entrepreneurship education becomes more meaningful when connected to contextualized, practical, and community-based learning opportunities.

3. Moreover, the findings suggest that TLE training contributes not only to individual livelihood development but also to broader community economic participation. Participants became more capable of generating income, managing limited resources, and adapting to the demands of small-scale entrepreneurship. Despite challenges such as limited capital and resource constraints, the participants demonstrated resilience, innovativeness, and determination in sustaining their ventures. Overall, the study affirmed that TLE serves as an important platform for empowering rural learners to become entrepreneurial, skilled, and economically productive individuals.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are offered:

1. TLE teachers should continue implementing competency-based, experiential, and entrepreneurship-oriented instructional strategies that emphasize practical application, problem-solving, and real-world business experiences. Activities such as school-based enterprises, business simulations, product development, and work immersion may further strengthen learners' entrepreneurial competencies and confidence.

2. Teachers should provide continuous mentorship, guidance, and contextualized learning opportunities that encourage students to identify local business opportunities, manage resources effectively, and develop innovative solutions to community needs. Strengthening teacher support and industry exposure may help learners apply entrepreneurial concepts more effectively.

3. Schools and educational leaders should enhance TLE implementation by improving facilities, instructional resources, industry partnerships, and training opportunities for teachers. Schools should also strengthen entrepreneurship-related programs and community linkages that provide learners with authentic entrepreneurial experiences and exposure to local business environments.

4. Parents and community stakeholders should support students' entrepreneurial development by encouraging participation in livelihood activities, family businesses, and community-based enterprises. Providing opportunities for learners to practice entrepreneurial skills within the household and community may strengthen their confidence, independence, and economic participation.

5. Curriculum developers and policymakers should strengthen entrepreneurship integration within the TLE curriculum by emphasizing innovation, financial literacy, resource management, and experiential learning approaches. Policies and programs that support rural entrepreneurship education and livelihood training should also be expanded to address the economic realities of rural communities.

6. Future researchers should conduct further studies on the long-term impact of TLE training on entrepreneurial success, livelihood sustainability, and community development. Researchers may also explore the experiences of graduates from other technical-vocational specializations and examine additional factors influencing entrepreneurial engagement among rural youth.

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