Counseling Entrepreneurship Based on Technology For Beginners At Sman 7 Kepulauan The Screen

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Abstract

This study aims to explore the implementation and effectiveness of technology-based entrepreneurship counseling for beginner-level students at SMAN 7 Kepulauan Selayar. The counseling program was designed using an interactive and participatory approach to improve students' understanding, interest, and readiness in initiating digital-based business ventures. The research employed a descriptive qualitative method involving 50 students, with data collected through observation, open interviews, documentation, and pre-post tests. The counseling activities included modules on formulating business ideas, simple business planning, digital marketing strategies, technology risk management, and ethical aspects of digital entrepreneurship. Findings indicate that 85% of participants improved their conceptual understanding, and 70% successfully developed simple business plans, while most showed significant enthusiasm in digital marketing practices. SWOT analysis revealed that while the content was accessible and well-received, challenges such as unequal access to digital devices persisted. Evaluation results further showed that 92% of participants were satisfied with the program, and 80% expressed interest in continuing to more advanced stages. This study underscores the importance of integrating technology in entrepreneurship education to build digital business competencies among youth. It recommends extending the training duration, involving local business practitioners, and forming school-based digital entrepreneur communities. Overall, the program proved effective in enhancing entrepreneurial knowledge, skills, and confidence, while fostering innovation and contributing to the local entrepreneurial ecosystem. The findings highlight the need for continuous support and structured follow-up to ensure sustainable impact.

1. Introduction

The rapid advancement of digital technology has reshaped various aspects of human life, including communication, education, and business. In today's digital era, the integration of technology into everyday life has become inevitable, making digital literacy a fundamental requirement for all segments of society. In particular, the business sector has undergone significant transformations, where traditional models are increasingly replaced by digital platforms. This development demands individuals to be not only consumers of technology but also active creators and innovators in utilizing digital tools to generate economic value.

For the younger generation, especially high school students, this transformation presents both challenges and opportunities. On one hand, they must adapt to the technological shift and acquire relevant competencies to remain competitive. On the other hand, the digital economy opens up a vast landscape for innovation and entrepreneurship. Students, as digital natives, have the potential to become pioneers in creating tech-driven businesses that are adaptive, responsive, and scalable. However, this potential often remains untapped due to a lack of structured educational support and guidance.

The current curriculum in most educational institutions is often insufficient to equip students with practical entrepreneurial skills, particularly those related to digital business. While academic knowledge is essential, there is a growing need for experiential learning models that focus on the application of technology in real-world business contexts. Entrepreneurship counseling based on technology can serve as an effective intervention to bridge this gap. Through such programs,



students can gain hands-on experience in developing business ideas, applying digital marketing strategies, and understanding the dynamics of tech-based enterprises.

Moreover, technological entrepreneurship education fosters creativity, innovation, and problem-solving abilities—skills that are crucial in the 21st-century workforce. It encourages students to identify local problems and develop solutions using digital tools, thereby promoting a mindset of social entrepreneurship. The fusion of technology and entrepreneurship education enables learners to create value not only for themselves but also for their communities.

SMAN 7 Kepulauan Selayar, as an educational institution located in a remote island challenges region, faces unique opportunities. Students in such areas often have limited access to technological infrastructure and entrepreneurial role models. Implementing a structured technology-based entrepreneurship counseling program in this context serves a dual purpose: it bridges the digital divide and nurtures local entrepreneurial talent. By introducing students to the basics of digital business, the school contributes to regional development and youth empowerment.

The program at SMAN 7 Kepulauan Selayar is designed to be inclusive, participatory, and practical. It emphasizes the use of digital tools that are accessible and applicable to the students' socio-economic environment. The initiative also integrates mentorship from practitioners and collaborations with local businesses, thereby enhancing the relevance and impact of the learning experience. Students are not only taught business theory but also guided through simulations and case studies that reflect real market scenarios.

This initiative aligns with the broader goal of national education policies that emphasize vocational training and entrepreneurship development. It also supports the government's vision of fostering digital transformation and innovation among youth. By embedding entrepreneurship counseling into the school system, the program ensures sustainability and scalability, enabling other schools in similar regions to replicate the model.

In the global context, the emergence of digital entrepreneurs has significantly influenced economic structures. Digital entrepreneurship offers flexible and low-cost entry into the business world, allowing young individuals to start ventures with minimal capital. It also fosters inclusivity by enabling participation from diverse social and geographic backgrounds. Hence, the integration of digital entrepreneurship education at the high school level is not only a local necessity but also a strategic response to global economic trends.

In conclusion, the implementation of technology-based entrepreneurship counseling at SMAN 7 Kepulauan Selayar is a timely and strategic initiative. It addresses critical gaps in student competencies, promotes inclusive economic development, and prepares the younger generation for future challenges. Through this program, students are empowered to become innovators, leaders, and agents of change in their communities, contributing to the growth of a sustainable digital economy.

2. Literature Review

Digital entrepreneurship has emerged as a significant subfield within entrepreneurship studies, driven by the rapid evolution of digital technologies. According to Hull et al. (2007), digital entrepreneurship refers to entrepreneurial initiatives that are fundamentally shaped or enabled by digital technologies such as websites, mobile platforms, and cloud computing. These initiatives often exhibit a higher degree of scalability innovation and compared traditional businesses, due to the low marginal costs and broad market reach associated with digital tools.

A central element in the development of digital entrepreneurship is the role of the younger generation, particularly students, who are often



referred to as digital natives. Farani et al. (2017) observed that millennial entrepreneurs, especially those in higher education institutions, display strong interest in utilizing digital media for business ventures. These entrepreneurs are characterized by their agility in adapting to market trends and leveraging platforms such as social media and e-commerce. To cultivate this potential, the collaboration among universities, government agencies, and industries-referred to as the Triple Helix model—is crucial (Etzkowitz & Leydesdorff, 2000). This model creates an ecosystem that supports innovation, resource sharing, and entrepreneurship education.

Le Dinh et al. (2018) structured the process of digital entrepreneurship into three key phases: ideation, start-up development, and operational management. Each phase demands a specific set of digital competencies, such as design thinking, strategic planning, and technology utilization. Similarly, Spiegel et al. (2016) argued that social capital—defined as the network of relationships and access to resources—is a critical determinant in the success of digital ventures, especially in the early stages of development.

From an educational perspective, the effectiveness of entrepreneurship counseling in developing these competencies has gained scholarly attention. Kurniawan (2008) posited that the effectiveness of a program can be assessed by its ability to achieve predefined objectives with efficient resource utilization. Firman (1987) identified three success indicators of educational programs: the achievement of learning outcomes, the quality of interactive experiences, and the availability of supportive infrastructure. In the context entrepreneurship, these indicators reflect the degree to which counseling improves knowledge, motivation, and readiness to start a business.

Entrepreneurial skills are another focal point in the literature. Suryana and Bayu (2015) classified these skills into conceptual abilities (e.g., problem-solving and planning). interpersonal skills (e.g., leadership communication), and technical skills (e.g., digital marketing and operations). Hair et al. (2012) emphasized the increasing importance of digital fluency, particularly in the areas of e-commerce, data analysis, and social media strategy, as essential tools for entrepreneurial success in the digital economy.

Davidson and Vaast (2010) introduced the concept of digital entrepreneurship as a sociotechnical phenomenon, where entrepreneurs interact with technology not merely as tools but as integral components of their business models. In this light, digital entrepreneurship also enables the democratization of business by lowering barriers to entry and enabling underserved populations to access new markets. Richter et al. (2017) extended this view by identifying digital entrepreneurship as a key contributor to economic innovation and social transformation, especially in emerging markets.

Furthermore, digital entrepreneurship has been linked to broader development agendas. The integration of technology and entrepreneurship is increasingly recognized as a strategy to enhance opportunities, employment support economic growth, and achieve sustainable development goals (UNCTAD, 2020). This is particularly relevant for remote or marginalized communities where digital tools can overcome geographic constraints and enable participation in the global economy.

In conclusion, the existing body of literature provides a robust theoretical and empirical foundation for technology-based entrepreneurship education. It underscores the necessity of equipping students with both technical and entrepreneurial competencies, facilitated by supportive ecosystems and pedagogical innovations. The implementation of entrepreneurship counseling at the high school level, especially in geographically isolated areas, emerges as a strategic intervention to empower youth, foster innovation, and drive inclusive economic growth.



3. Research Methodology

This study employed a qualitative descriptive research design aimed at exploring the effectiveness and implementation process of technology-based entrepreneurship counseling among high school students at SMAN 7 Kepulauan Selayar. The qualitative approach was chosen due to its ability to provide rich, in-depth insights into participant experiences, learning outcomes, and program impacts, especially in the context of educational interventions in rural and remote settings.

1. Research Setting and Participants

The study was conducted at SMAN 7 Kepulauan Selayar, a senior high school located in a geographically remote region of Indonesia. The participants consisted of 50 students from various academic backgrounds who voluntarily enrolled in the entrepreneurship counseling program. The program was facilitated by a team of trainers and mentors with backgrounds in digital business, education, and technology.

2. Data Collection Techniques

To ensure comprehensive data collection, multiple qualitative data gathering techniques were utilized:

- **Observation**: Researchers conducted direct observations during all counseling sessions. Observational data focused on student engagement, interaction, and response to instructional strategies.
- In-depth Interviews: Semi-structured interviews were conducted with selected participants, facilitators, and school staff to capture individual perceptions, experiences, and suggestions for program improvement.
- **Questionnaires**: Pre- and post-program questionnaires were distributed to all participants to measure changes in knowledge, interest, and perceived entrepreneurial readiness.

• **Documentation**: Program-related materials, including activity plans, teaching aids, student work (business plans, digital marketing designs), and facilitator reports, collected as supporting documentation.

3. Data Analysis Procedure

The collected data were analyzed using content analysis and thematic analysis techniques. The process included the following steps:

- 1. Data Reduction: Raw data from observations, interviews. and questionnaires were categorized based on key indicators such as understanding of digital entrepreneurship, level of engagement, and skill acquisition.
- 2. **Coding and Categorization**: Recurring patterns, themes, and categories were identified, such as digital literacy, innovation capacity, collaboration, and business plan development.
- 3. **Interpretation**: Data were interpreted in relation to the objectives of the counseling program, the theoretical framework of digital entrepreneurship, and existing literature.
- 4. Validation: Triangulation was applied by cross-verifying information from various (observations, interviews, sources questionnaires) to enhance the credibility and reliability of the findings.

4. Research Instruments

To support the data collection process, the following instruments were used:

- **Observation checklist** to record classroom interaction and behavioral indicators of learning.
- **Interview guide** with open-ended questions aligned to the study's objectives.
- Likert-scale questionnaires to assess students' self-evaluation regarding entrepreneurial knowledge, digital skills, and business interest before and after the counseling.

 Rubrics for evaluating student performance in business simulation tasks.

5. Ethical Considerations

Ethical clearance was obtained from the school administration. All participants provided informed consent and were assured of the confidentiality and anonymity of their responses. Participation in the study was voluntary, and students had the right to withdraw at any point without consequences.

6. Limitations of the Study

This research was limited to a single high school in a specific regional context. As such, generalizations should be made cautiously. The short duration of the intervention also limits the ability to assess long-term impacts. However, the insights generated provide a valuable foundation for further research and program development in similar settings.

4. Results and Discussion

4.1. Results

The implementation of technology-based entrepreneurship counseling at SMAN 7 Kepulauan Selayar involved 50 students from various class levels and academic interests. Data were obtained through pre-post questionnaires, observations, and interviews. The results are categorized into three main indicators: changes in entrepreneurial knowledge, digital skills acquisition, and entrepreneurial motivation.

a. Improvement in Entrepreneurial Knowledge

Post-program evaluation revealed a significant increase in students' understanding of entrepreneurship concepts. Before the counseling, only 38% of participants could accurately define entrepreneurship and its relevance to digital business. After the program, this number increased to 85%, as shown in the pre- and post-questionnaire scores. Students were able to articulate core concepts such as

business models, digital platforms, and value proposition design.

b. Acquisition of Digital and Business Planning Skills

During simulation and workshop sessions, 70% of participants were able to independently design simple digital business plans. Most students selected product ideas rooted in local contexts—such as processed seafood products and regional souvenirs—and combined them with digital marketing strategies via Instagram and TikTok. Additionally, students demonstrated basic proficiency in creating simple promotional media and understanding online customer engagement.

c. Increased Entrepreneurial Motivation

Observation and interview data indicated that 80% of participants expressed increased interest in pursuing entrepreneurial activities after completing the counseling. Many students reported that they had never previously considered business as a viable future path, especially using technology. The program's interactive, hands-on nature was frequently cited as a key motivational factor. Students expressed excitement and confidence in presenting their business ideas publicly.

d. SWOT Analysis of Program Implementation

- **Strengths**: Interactive delivery, culturally relevant content, student enthusiasm.
- Weaknesses: Limited availability of digital devices among students.
- **Opportunities**: Strong school support and potential integration into curriculum.
- **Threats**: Lack of internet stability in certain areas of the school.

4.2. Discussion

The results underscore the effectiveness of technology-based entrepreneurship counseling in enhancing student competencies in digital business, even within a geographically limited



environment such as Kepulauan Selayar. These findings align with the views of Hull et al. (2007) and Le Dinh et al. (2018), who argue that digital entrepreneurship thrives when foundational skills and ecosystem support are present.

a. Bridging the Digital and Entrepreneurial Gap

The counseling program successfully bridged the knowledge gap by offering hands-on learning experiences that linked theoretical content with practical application. integration of local contexts with global digital tools mirrors the pedagogical approach suggested by Farani et al. (2017), who emphasized that entrepreneurship education should be localized yet globally minded. The students' ability to create context-aware business plans confirms the program's relevance and adaptability.

b. Strengthening Soft and Technical Skills

The students not only acquired technical skills in using digital platforms but also demonstrated growth in soft skills such as teamwork, public speaking, and creative problem-solving. These competencies are critical in 21st-century entrepreneurship, as highlighted by Suryana and Bayu (2015). The role of simulation-based learning was particularly important in enhancing communication and leadership abilities among participants.

c. Challenges and Future Considerations

Despite the program's success, several challenges were identified, particularly regarding access to devices and consistent internet connectivity. These barriers align with findings from Spiegel et al. (2016), who noted that infrastructural limitations can inhibit digital business development in rural areas. To mitigate this, future programs should consider blended learning strategies and integrate communitybased support systems, including partnerships with local entrepreneurs or ICT centers.

d. Policy and Educational Implications

The program's outcomes suggest a strong case for scaling up technology-based entrepreneurship education at the high school level. Aligning with the national education roadmap for digital transformation, programs can serve as models for other remote schools in Indonesia. Furthermore, embedding digital entrepreneurship in school curricula would institutionalize this learning and ensure sustainability beyond pilot projects.

5. Conclusion and Recommendations 5.1. Conclusion

This study concludes that technology-based entrepreneurship counseling is an effective educational intervention for enhancing entrepreneurial competencies among high school students, particularly in remote and underserved regions such as SMAN 7 Kepulauan Selayar. The program successfully increased students' knowledge of entrepreneurship, improved their digital and business planning skills, significantly raised their motivation to engage in entrepreneurial activities.

By combining theoretical instruction with experiential learning—such business simulations, group discussions, and project-based assignments—the counseling model bridged the gap between conventional education and the demands of the digital economy. Students were not only able to conceptualize and design simple tech-driven businesses but also demonstrated growth in soft skills such as communication, collaboration, and critical thinking.

The counseling initiative aligns with the national agenda for digital transformation and youth empowerment and highlights the critical role of schools in nurturing future entrepreneurs. The findings reaffirm the need for structured, context-sensitive, and inclusive entrepreneurship education programs that leverage digital tools to prepare the younger generation for active participation in the modern economy.



5.2. Recommendations

Based on the outcomes of the program and analysis, several recommendations proposed to enhance the effectiveness and scalability of future implementations:

- 1. Extend **Program Duration**: A longer counseling period—ideally spread multiple sessions or davs—is recommended to allow deeper exploration of topics such as digital marketing, financial literacy, and business ethics.
- 2. Integrate into School **Curriculum:** Schools should consider incorporating digital entrepreneurship modules into the formal curriculum or extracurricular activities to ensure continuity and long-term impact.
- 3. Strengthen Technological Infrastructure: stakeholders Educational and local government should collaborate to improve digital access and internet connectivity in remote schools, enabling students to practice with real digital tools.
- 4. Involve **Industry Practitioners**: The inclusion of guest speakers, local entrepreneurs, and digital business mentors can provide students with real-world insights and practical guidance.
- 5. Establish Student **Entrepreneurship Communities:**

Creating digital entrepreneurship clubs or incubators within the school can sustain student interest, facilitate peer learning, and support the development of student-led startups.

6. Conduct Longitudinal Monitoring and **Evaluation:**

To measure long-term outcomes, future programs should include post-intervention follow-ups to assess students' entrepreneurial progress and track business idea development.

7. Policy and Scaling: **Support** Educational authorities at regional and national levels should consider supporting the scale-up of such programs to other schools, particularly in rural and remote areas, to democratize access digital to entrepreneurship education.

adopting these recommendations, similar programs can be refined, replicated, and expanded to foster a generation of young, innovative, and digitally literate entrepreneurs capable of driving inclusive and sustainable economic growth.

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