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Entrepreneurship Learning Innovation in Vocational High Schools: A Case Study

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ABSTRACT
This study investigates the innovation in entrepreneurship education at a vocational high school in Indonesia, focusing on the pedagogical strategies, teacher-student interactions, and learning outcomes within the context of a curriculum change. Employing a qualitative case study design, data were collected through in-depth interviews, direct observations, and document analysis. The findings reveal a significant gap between the curriculum's goals and its implementation. The learning process relies heavily on conventional, teacher-centered methods such as dictation and lecturing, which do not align with the creative and dynamic nature of entrepreneurship. Furthermore, the study identifies critical psychological and behavioral barriers, including students' shyness and fear of asking questions, which hinder active participation. Despite adequate physical facilities, the lack of varied learning resources and a supportive psychological environment prevents effective learning. This research concludes that the success of entrepreneurship education is not solely dependent on a robust curriculum or infrastructure but requires a fundamental shift towards a student-centered pedagogical approach. The study provides actionable insights for educators and policymakers on the necessity of overcoming both pedagogical and psychological obstacles to foster a sustainable and innovative learning culture in vocational education.

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1. Introduction

The role of education in national development has evolved beyond merely transmitting knowledge to actively cultivating skills and mindsets critical for a dynamic economy (Dias et al., 2024; Hammond et al., 2024). In the 21st century, one of the most significant pedagogical shifts is the integration of entrepreneurship education(Wang, 2019), which is widely recognized as a catalyst for economic growth and innovation (Dauda et al., 2019). Entrepreneurship, defined not just as the act of starting a business but as a comprehensive mindset characterized by creativity, proactivity, and resilience, is essential for a nation to thrive in a competitive global landscape (Belitski et al., 2022; Kraus et al., 2020; Nambisan, 2017). In Indonesia, this is underscored by policy frameworks, such as the National Education System Law (Powa et al., 2023), which seeks to develop self-reliant and productive citizens. Vocational high schools, in particular, are at the forefront of this mission, tasked with bridging the gap between academic learning and industry demands (Wimalasooriya & Wickramaarachchi, 2025).

Despite the consensus on the importance of entrepreneurship education, its effective implementation remains a significant challenge. Research has shown that traditional, lecture-based methods are often inadequate for fostering the dynamic skills required for an entrepreneurial mindset (Kaiyanan et al., 2024; Manseur, 2024).

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Instead, a shift towards innovative and experiential learning approaches is necessary. These include project-based learning, simulations, and case studies, which provide students with hands-on experience in problem-solving and risk-taking (Hoxmeier, 2002). However, the adoption and success of these innovative methods are highly context-dependent, influenced by factors such as school policies, teacher competencies, and available resources.

The existing body of literature provides valuable insights into the theoretical benefits of entrepreneurship education but often lacks specific (Abu, 2024; Purzer et al., 2016), localized case studies that explore the practical challenges of implementation. For instance, the transition between different curriculum frameworks, as exemplified by the policy shift from the 2013 to the 2006 Curriculum at Vocational high schools in indonesia, introduces a unique set of obstacles and opportunities. This curriculum dynamic, which requires schools to adapt their pedagogical strategies and materials, represents a critical but under-researched area. This research gap highlights the need for a focused inquiry into how specific educational institutions navigate policy changes to sustain or enhance the quality of their entrepreneurship programs.

This study aims to fill this gap by conducting a case study on the entrepreneurship learning innovation at Vocational high schools in indoensia. By meticulously examining the pedagogical strategies, teacher-student interactions, and learning outcomes in this specific context (Li, 2023), this research will contribute a detailed, empirical account of how a vocational high school adapts to and innovates within a changing regulatory landscape. The findings are expected to provide actionable insights for educators, school administrators, and policymakers on how to design and implement effective entrepreneurship curricula, thereby enhancing the readiness of vocational students to become future entrepreneurs and productive members of society. This study, therefore, not only contributes to the academic discourse on entrepreneurship education but also offers a practical model for sustainable educational innovation in developing contexts.

2. Methods

2.1 Research Design

This study employed a qualitative research approach with a case study design to deeply explore entrepreneurship learning innovation at Vocational high schools in indonesia. A qualitative methodology was chosen to gain a rich, contextual understanding of the phenomena from the perspectives of the participants (Matović & Ovesni, 2023; Thompson Burdine et al., 2021). This design allowed for an in-depth analysis of a specific educational setting and its unique challenges.

2.2 Participants and Setting

The research was conducted at Vocational high schools in indonesia. Participants were selected through purposive sampling, including the school principal, teachers of entrepreneurship-related subjects, and students. This selection ensured that a diverse range of perspectives—from institutional policy to classroom experience—was captured, providing a holistic view of the learning process.

2.3 Data Collection

Data were collected using three primary methods to ensure triangulation and enhance the credibility of the findings: in-depth interviews, direct observation, and documentation (Malterud et al., 2016). Interviews provided detailed personal accounts, observations captured real-time classroom dynamics, and document analysis offered a historical and official context of the school's curriculum and policies.

2.4 Data Analysis

The collected data were analyzed using the Interactive Model of Data Analysis (Huberman & Miles, 2002). This iterative process involved data reduction (summarizing and condensing raw data), data display (organizing data into charts and narratives), and conclusion drawing and verification (interpreting findings and cross-checking them against the raw data). This systematic approach ensured that the conclusions were well-supported by the evidence.

3. Results

3.1 Implementation of Entrepreneurship Learning

The implementation of entrepreneurship learning in Class X TKR is based on the School-Based Curriculum (KTSP) and utilizes the Lesson Plan (RPP) as its main guide. Flexibility is applied, where the teacher may repeat the material if students do not understand it, although this sometimes causes a single topic to extend beyond one session.

The dominant teaching method is dictation and lecturing, with the teacher using a single textbook as a reference. This limits students' learning resources and makes comprehension difficult. An informant expressed their dependence on this method:

> *"...we don't have an entrepreneurship textbook, so when there is a discussion, it will be dictated or read out, and the students write it down while listening..." (Informant SP)*

Furthermore, the teacher also attempts to connect the material to daily life to facilitate understanding:

> *"...when delivering entrepreneurship learning material, the teacher sometimes links or provides examples similar to the material being*

discussed with everyday life." (Teacher Informant)

The classroom atmosphere sometimes varies between serious and relaxed, as expressed by a student informant:

"...the entrepreneurship teacher is sometimes serious and sometimes relaxed in delivering the material, so the atmosphere can be tense at times and at other times we can laugh calmly..." (Student Informant)

3.2 Obstacles in Entrepreneurship Learning

In-depth interviews with students and the teacher revealed several key obstacles that affect the learning process and comprehension. These obstacles are summarized in the following table with direct quotes as evidence.

Table 1. Interview Results on Entrepreneurship Learning Obstacles

No.	Aspect of Obstacle	Interview Quote
1.	**Fast Material Delivery**	*"I often fall behind when it's dictated or I'm taking notes because the reading speed is too fast."* (Informant SP)
2.	**Lack of Comprehension and Concentration**	*"...I don't quite understand or get the explanation because there is noise when explaining, and the explanation is mixed with things that are not in the lesson, so I get sleepy and can't concentrate."* (Informant MD)
3.	**Shyness and Fear to Ask**	*"If asked to ask questions, I don't ask even if I don't understand, I don't want to ask because I'm shy, afraid of answering wrong."* (Informant DI)
4.	**Lack of Focus and Student Behavior**	*"...when the entrepreneurship lesson is going on, some people listen, some are serious about learning, but some are just busy with themselves without listening to the teacher at the front of the class."* (Informant MJ)
5.	**Limited Learning Media**	*"...the teacher only explains using one book that the teacher has."* (Informant MJ)

In short, the common obstacles that arise are the speed of dictation, material being mixed with unrelated contexts, and classroom noise that makes it difficult for students to concentrate. The impact of these obstacles is that students prefer to ask friends rather than the teacher due to feelings of shyness and fear of being laughed at.

3.3. Classroom Conditions

The Class X TKR classroom has a size of 8x6 meters and is equipped with standard facilities such as desks, chairs, a whiteboard, an LCD projector, and a hanging screen. The overall condition of the room is considered adequate for the learning process. This condition was also confirmed by an interview with an informant:

"The condition of the Class X TKR room is quite adequate because the number of students and the size of the room are in accordance with the standards set in the KTSP curriculum." (Informant PA)

However, class cleanliness is sometimes inconsistent because students on cleaning duty are often late. The existence of a cleaning schedule and disciplinary sanctions, such as push-ups or cleaning the toilet, shows the school's effort to discipline students. This also supports a more comfortable learning atmosphere.

In addition, classroom dynamics also reflect varying levels of student engagement. Out of approximately 32 students, only about one-third (10–12 students) actively participate in discussions, respond to questions, or show attentiveness during lectures. The remaining majority tend to be passive, with some preferring to simply listen, while others are distracted or engaged in unrelated activities. This imbalance between active and passive learners highlights the challenge for teachers in creating an inclusive and participatory learning environment, particularly in entrepreneurship education that ideally requires collaboration and active involvement.

4. Discussion

The findings reveal a significant discrepancy between the normative goals of the entrepreneurship curriculum—which aims to foster creativity, independence, and an entrepreneurial mindset in students—and the practical reality of classroom instruction. Although the school formally adheres to the School-Based Curriculum, its implementation is predominantly conventional. The pervasive reliance on dictation and lecturing, as revealed by an informant's quote that students "write down while listening" because they have no access to their own textbooks, signifies a fundamentally teacher-centered approach. This one-way mode of instruction starkly contrasts with the principles of modern entrepreneurship education, which emphasize active, interactive, and experiential learning methods such as project-based learning and business simulations (Avinta Ika Nurrahma et al., 2023; Cheah & Apostolatos, 2024). The limited availability of learning media, with only a single textbook for the teacher's use, further exacerbates this situation, forcing students into a passive role and significantly hindering pedagogical innovation.

Beyond these pedagogical constraints, the study identifies crucial psychological and behavioral barriers that directly impact learning effectiveness. A key finding is that students' shyness and fear of asking questions are not merely individual issues but rather a symptom of a less-than-supportive learning environment. The fear of making mistakes or being laughed at by peers creates a psychologically unsafe atmosphere, which inhibits the openness and

collaboration essential for entrepreneurial skill development. This is evidenced by a student's confession, "If asked to ask questions, I don't ask even if I don't understand, I don't want to ask because I'm shy, afraid of answering wrong." Furthermore, students' lack of concentration, often due to noise and the teacher's tendency to deviate from the main topic, highlights a deeper issue of disengagement. The passive behavior of some students, who are "just busy with themselves without listening to the teacher," points to a lack of internal motivation that current teaching methods fail to address.

The dominance of psychological barriers, particularly students' shyness, can also be interpreted in light of broader cultural and institutional contexts. In Indonesian classrooms, especially in traditional or rural school settings, students are often socialized to maintain respect for authority figures such as teachers by remaining quiet and avoiding direct confrontation or questioning. This cultural expectation reinforces passive learning behavior and discourages active participation, as speaking up may be perceived as challenging authority or risking embarrassment in front of peers. Additionally, the school environment itself may lack mechanisms to normalize mistakes as part of the learning process. Instead, mistakes are often stigmatized, which amplifies students' fear of failure. These intertwined cultural and environmental factors explain why shyness becomes a dominant barrier in entrepreneurship education, where creativity, risk-taking, and communication should be key competencies.

The research findings have significant implications for both school management and education policymakers. While the physical classroom facilities at Vocational high schools in indonesia are deemed adequate, this alone is insufficient to guarantee successful entrepreneurship learning. Innovation requires more than just infrastructure; it demands a fundamental pedagogical paradigm shift and a substantial investment in teacher capacity. Schools must prioritize continuous professional development for teachers to master interactive and experience-based teaching methods. The study also underscores that curriculum changes, such as the one experienced by the school, will not be effective without comprehensive support. Policymakers must ensure the availability of adequate learning resources, including diverse textbooks and digital media, and provide ongoing support for teachers to adapt to new curriculum demands. Ultimately, the research concludes that achieving the goals of entrepreneurship education depends not only on a robust curriculum framework but also on the ability to overcome deep-seated pedagogical and psychological barriers through student-focused innovation and adequate systemic support from all stakeholders.

5. Conclusion

This study concludes that while the formal implementation of entrepreneurship learning at Vocational high schools in indonesia is guided by the School-Based Curriculum (KTSP), its effectiveness is significantly hampered by the prevailing pedagogical and psychological factors. The learning process relies heavily on conventional methods such as dictation and lecturing, which do not align with the curriculum's goal of fostering a creative and entrepreneurial mindset. Students become passive recipients of information and have difficulty understanding the material, leading to inconsistent learning outcomes where some students pass and others do not.

A major finding is the presence of psychological barriers that inhibit student engagement. Students expressed shyness and fear of being laughed at, which prevented them from asking questions directly to the teacher, preferring to seek clarification from peers. This highlights a learning environment that, despite having adequate physical facilities, is not psychologically safe or conducive to active participation. Furthermore, a lack of varied learning resources, specifically the use of only one textbook for the teacher, contributes to students having incomplete notes and a lack of understanding.

Ultimately, the research demonstrates that the success of entrepreneurship education is not solely dependent on a well-designed curriculum or sufficient physical infrastructure. It requires a fundamental shift towards a student-centered pedagogical approach that addresses both the practical limitations of teaching methods and the psychological barriers that prevent active student participation. To achieve the curriculum's objectives, schools must focus on providing continuous support for teachers and creating a supportive learning culture that encourages inquiry and independent thinking among students.

Article Information Form

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Authors' Contribution

Syahrul Amin: Conceptualized the study, developed the methodology, performed data collection, conducted the analysis, and wrote the original draft of the manuscript.

Mahmudin: Provided supervision, contributed to the theoretical framework, and reviewed and edited the manuscript.

Declaration of Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Artificial Intelligence Statement

The authors confirm that Artificial Intelligence (AI) tools were used to assist with grammar and syntax checking, as well as refining the clarity and academic tone of the manuscript. The authors confirm that AI was not used for critical processes such as data collection, data analysis, or the interpretation of results. All content was thoroughly reviewed and validated by the authors.

Ethical Approval

This study was conducted in accordance with the ethical standards of the institutional and national research committees. The research protocol was approved by the Dinas pendidikan with approval number 12/SMK/2/VI/2024. Informed consent was obtained from all participants prior to data collection.

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