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Effectiveness of Problem-Based Learning in Enhancing Entrepreneurial Mind-set Among Business Education Students in Delta State University Abraka.

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Abstract

This study investigates the effectiveness of Problem-Based Learning (PBL) in fostering entrepreneurial skills among final-year business education students in Delta State Universities. Using a mixed-methods approach, the research combines quantitative data from structured questionnaires and qualitative insights from interviews to explore students' perceptions, experiences, and the challenges associated with PBL. The target population consists of 300 final-year students from various universities in Delta State, with a stratified random sampling technique employed for participant selection. The study assesses how PBL influences students' understanding of business concepts, their problem-solving abilities, and the development of entrepreneurial traits such as creativity, innovation, and risk-taking. Data analysis involves both descriptive statistics (e.g., means, standard deviations) and inferential tests (e.g., Chi-square, t-tests) for the quantitative data, while thematic analysis is used to analyze the qualitative interview responses. Findings indicate that PBL significantly enhances students' entrepreneurial skills, with students reporting increased creativity, innovation, and risk-taking abilities. However, challenges such as resource constraints, insufficient faculty training, and large class sizes hinder its full implementation. The study recommends addressing these challenges to maximize the effectiveness of PBL in entrepreneurship education.

Keywords: Problem Based Learning (PBL), Entrepreneurial skills, Business education, Delta State.

Introduction.

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Entrepreneurship is widely recognized as a key driver of economic growth, innovation, and job creation in both developed and developing economies (Acs et al., 2022). As the global economy becomes more competitive and dynamic, fostering an entrepreneurial mindset among students has emerged as a strategic priority in business education. An entrepreneurial mindset, characterized by creativity, resilience, opportunity recognition, and risk-taking, enables individuals to navigate uncertainties and capitalize on emerging opportunities (Neck & Corbett, 2023). Developing these traits requires educational methodologies that go beyond traditional lecture-based approaches to actively engage students in problem-solving and critical thinking.

Problem-Based Learning (PBL) has gained prominence as an innovative, student-centered teaching strategy in higher education. It involves presenting learners with real-world problems, requiring them to work collaboratively to find solutions (Barrows, 2018). Unlike traditional pedagogies, PBL encourages self-directed learning, critical thinking, and the practical application of knowledge, which are essential for developing entrepreneurial competencies (Hmelo-Silver et al., 2020).

In the Nigerian context, the relevance of entrepreneurship education cannot be overstated. With a youth unemployment rate exceeding 37% in 2023 (National Bureau of Statistics, 2023), cultivating entrepreneurial skills among graduates is critical for addressing this socioeconomic challenge. Business education programs, such as those offered at Delta State Universities, are expected to equip students with the necessary knowledge and skills to create businesses and drive innovation. However, traditional teaching approaches may fall short of preparing students to think entrepreneurially or apply their knowledge effectively in real-world scenarios (Okolie et al., 2022).

PBL has the potential to address this gap by creating a learning environment where students actively engage with entrepreneurial problems. This approach aligns with the growing need for experiential learning in business education, which bridges the divide between academic theory and practical application. Despite its potential benefits, the effectiveness of PBL in enhancing entrepreneurial mindsets among business education students in Delta State Universities remains underexplored.

Statement of the Problem

Entrepreneurship is critical for addressing youth unemployment, driving innovation, and fostering economic growth, particularly in developing nations like Nigeria. However, despite the inclusion of entrepreneurship in business education curricula, many graduates lack the necessary entrepreneurial mindset to create opportunities and navigate the uncertainties of the modern business environment. This gap is often attributed to the reliance on traditional, lecture-based teaching methods that prioritize theoretical knowledge over practical application and critical thinking. Problem-Based Learning (PBL) offers a promising solution to this challenge. As a student-centered teaching approach, PBL immerses learners in real-world problems, encouraging collaboration, self-directed learning, and critical thinking. Studies have shown that PBL can

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significantly improve students' ability to solve complex problems and adapt to dynamic environments. This study seeks to address this gap by investigating the effectiveness of PBL in enhancing key entrepreneurial traits such as creativity, innovation, problem-solving, and risk tolerance among business education students at Delta State Universities.

Purpose of the Study

The main purpose of this study is to examine the effectiveness of Problem-Based Learning (PBL) in enhancing the entrepreneurial mindset among business education students at Delta State Universities. Specifically, the study aims to:

a) Evaluate students' perceptions of Problem-Based Learning (PBL) as a teaching method in business education.
b) Determine the influence of PBL on students' ability to identify and solve entrepreneurial problems.
c) Assess the role of PBL in fostering key entrepreneurial traits such as creativity, innovation, and risk-taking among business education students.
d) Identify the challenges associated with the implementation of PBL in business education in Delta State Universities.

Research Questions

The study was guided by the following research questions:

a) How do business education students perceive Problem-Based Learning as a teaching method?
b) What is the influence of PBL on students' ability to identify and solve entrepreneurial problems?
c) How does PBL influence the development of creativity, innovation, and risk-taking among students?
d) What are the major challenges associated with implementing PBL in business education at Delta State Universities?

1.5 Research Hypotheses

the study was tested with the following hypotheses:

a) There is no significant relationship between students' perception of Problem-Based Learning (PBL) and its effectiveness as a teaching method in business education.
b) Problem-Based Learning does not have a significant influence on students' ability to identify and solve entrepreneurial problems.
c) Problem-Based Learning does not significantly enhance the development of creativity, innovation, and risk-taking among business education students.

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d) The challenges associated with implementing Problem-Based Learning do not have a significant impact on its effectiveness in business education at Delta State Universities

1.6 Significance of the Study

This study is significant as it provides insights into the effectiveness of Problem-Based Learning (PBL) in fostering entrepreneurial mindsets among business education students. For Educators and Curriculum Developers, the findings will help improve teaching strategies by integrating PBL into business education curricula, enhancing students' practical entrepreneurial skills. For Policymakers and Higher Education Institutions the research will offer evidence-based recommendations for enhancing entrepreneurship education, contributing to policies aimed at reducing graduate unemployment in Nigeria.

Scope of the Study

The study focuses on business education students at Delta State Universities. It examines the integration of PBL into the curriculum, its impact on entrepreneurial mindsets, and the associated challenges and opportunities.

REVIEW OF RELATED LITERATURE

Conceptual Framework

Problem-Based Learning

Problem-Based Learning (PBL) is an instructional method where students engage with complex, real-world problems to develop critical thinking, problem-solving, and collaborative skills (Hmelo-Silver, 2020). PBL moves away from the traditional passive learning model, placing students at the center of the learning process as they actively participate in discovering knowledge and creating solutions (Savery, 2019). PBL has been successfully integrated into various fields of education, including business education, as it encourages the development of competencies essential for entrepreneurship. Entrepreneurial mindset refers to the cognitive and behavioral traits that allow individuals to identify opportunities, take risks, innovate, and manage uncertainty in business contexts (Frese & Gielnik, 2021). In an era where innovation and adaptability are highly valued, fostering an entrepreneurial mindset is crucial for preparing students to navigate the challenges of the modern business world (Neck et al., 2021).

Features of PBL

a. Student-Centered: PBL empowers students to take ownership of their learning by actively participating in the learning process. Students are encouraged to define learning objectives, identify learning resources, and guide the direction of their inquiry. This student-centered approach

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fosters a sense of autonomy and responsibility, motivating students to become self-directed learners.

b. Real-World Problems: PBL utilizes authentic, real-world problems or case studies to stimulate student learning and engagement. These problems are not merely academic exercises but reflect real-world challenges and complexities, making learning more relevant and meaningful for students.

c. Collaborative Learning: PBL is inherently collaborative, encouraging students to work together in small groups to analyze problems, share ideas, and develop solutions. This collaborative environment fosters teamwork, communication, and interpersonal skills, which are essential for success in both academic and professional settings.

d. Self-Directed Learning: PBL encourages students to develop self-directed learning skills. They are responsible for identifying their own learning needs, locating and evaluating information from various sources, and managing their own learning process.

Entrepreneurial Mindset:

An entrepreneurial mindset is characterized by cognitive, emotional, and behavioral patterns that support the identification of opportunities, innovation, risk-taking, and proactive problem-solving (Frese & Gielnik, 2021). Entrepreneurs are recognized for their ability to turn challenges into opportunities and their resilience in navigating uncertainty. An entrepreneurial mindset encompasses several competencies, including:

Developing Problem-Solving and Critical Thinking Skills

In PBL, students are tasked with solving complex, real-world problems that require them to analyze information, evaluate alternatives, and develop innovative solutions (Schmidt et al., 2022). These tasks mirror the problem-solving challenges entrepreneurs face when developing new products or addressing market gaps. PBL's emphasis on critical thinking, inquiry, and investigation enhances students' ability to approach entrepreneurial challenges with a structured, creative mindset. Research has shown that students engaged in PBL perform better in problem-solving tasks and demonstrate stronger analytical skills than those in traditional learning environments (Gijbels et al., 2022). This ability to dissect problems and create solutions is directly applicable to entrepreneurship, where innovation often arises from overcoming obstacles and identifying novel solutions.

Fostering Creativity and Innovation

PBL encourages students to think creatively and explore multiple solutions to a problem. Since the problems are often open-ended and complex, there is no single "correct" solution, which requires students to come up with innovative ideas (Neck et al., 2021). Creativity and innovation are core to entrepreneurship as entrepreneurs must constantly innovate to stay competitive and meet

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evolving consumer needs. Studies indicate that PBL promotes the development of creative thinking by engaging students in real-world scenarios that challenge them to rethink conventional approaches (Bell, 2021). In business education, this aligns with entrepreneurship, where students can experiment with novel business models, marketing strategies, and operational processes.

Encouraging Risk-Taking and Decision-Making

Entrepreneurs often face uncertainty and must make decisions with limited information. PBL simulates these conditions by presenting students with complex, real-world scenarios that do not have predetermined solutions. As students navigate these situations, they are required to take calculated risks, make decisions, and assess the potential outcomes (Savery, 2019). Research by Kirkwood et al. (2022) found that PBL participants demonstrated improved decision-making skills, particularly in environments characterized by risk and uncertainty. This mirrors the entrepreneurial experience, where taking calculated risks is essential for identifying opportunities and achieving business success.

Promoting Collaboration and Teamwork

Collaboration is a critical component of entrepreneurship. Entrepreneurs often work with teams to develop and implement their ideas. PBL's emphasis on group-based problem-solving enhances students' teamwork skills by encouraging them to work together, exchange ideas, and collectively create solutions (Dolmans et al., 2021). Through these group activities, students develop interpersonal skills such as communication, negotiation, and leadership, all of which are vital in entrepreneurial ventures. In business education, PBL allows students to practice these skills in a controlled yet dynamic environment, making them better prepared for collaborative work in their future careers (Kirkwood et al., 2022).

PBL as a Pedagogical Tool for Entrepreneurial Education

In business education, PBL has emerged as a transformative tool for fostering an entrepreneurial mindset. By engaging students in real-world business problems, PBL enables them to develop a deep understanding of the complexities of entrepreneurship, including market research, resource allocation, risk management, and strategic decision-making. As students tackle business problems through PBL, they learn not only the technical aspects of entrepreneurship but also the psychological traits required to be successful, such as perseverance, adaptability, and resilience (Neck et al., 2021). Traditional business education often focuses on theoretical knowledge, which may not always be immediately applicable in real-world settings. PBL bridges this gap by presenting students with authentic business problems that require them to apply theoretical knowledge in practical situations. This hands-on learning approach enables students to see the relevance of their academic studies and better prepares them for entrepreneurial ventures (Neck et al., 2021)

Entrepreneurial Mindset

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The entrepreneurial mindset refers to a set of cognitive, behavioral, and emotional skills that enable individuals to identify opportunities, take calculated risks, and innovate in uncertain environments (Gielnik et al., 2020). It encompasses creativity, resilience, self-efficacy, and adaptability—qualities essential for successful entrepreneurship. According to Fayolle (2022), an entrepreneurial mindset is not innate but can be developed through education and experience.

For business education students, fostering an entrepreneurial mindset is crucial in preparing them to either start their own businesses or contribute innovatively to existing organizations. This mindset enables them to navigate business uncertainties and recognize new opportunities (Frese & Gielnik, 2021). PBL promotes experiential learning, where students engage in hands-on problem-solving, teamwork, and decision-making, which are crucial in entrepreneurship. Research shows that PBL improves entrepreneurial traits such as creativity, innovation, risk-taking, and opportunity recognition (Manz & Neck, 2022). Compared to traditional lecture-based methods, PBL encourages self-directed learning and adaptability—both of which are necessary for business success (Kirkwood et al., 2022).

Methodology

The study employs a descriptive research design to explore the perceptions, experiences, and challenges related to PBL among final-year business education students. The study uses a quantitative research approach to assess the effectiveness of PBL and qualitative interviews to gain deeper insights into students' experiences. The study consists of 300 final-year business education students from universities in Delta State. The total population includes students from various institutions, with an estimated 300 final-year business education students enrolled in entrepreneurship courses that incorporate PBL. The total sample size for the study will be 300 final-year students. This sample size is considered adequate for the level of analysis needed to achieve the desired confidence and precision in the study's findings.

The study utilized both quantitative and qualitative data collection methods. A structured questionnaire was developed to gather quantitative data on the perceptions of students regarding PBL's effectiveness in business education. The questionnaire will consist of four sections: Section 1: Demographic information (age, gender, academic background, etc.) Section 2: Students' perceptions of PBL as a teaching method Section 3: The influence of PBL on students' ability to identify and solve entrepreneurial problems Section 4: The role of PBL in fostering creativity, innovation, and risk-taking.

The instrument for data collection was Questionnaire: The questionnaire was designed based on a review of relevant literature on PBL and entrepreneurship education. The reliability of the questionnaire was assessed using Cronbach's alpha, which measured the internal consistency of the scale. A Cronbach's alpha coefficient of 0.70 or higher was considered acceptable, indicating that the items on the questionnaire are consistently measuring the same underlying construct. The

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instruments were validated by experts in Faculty of Education, Business Education and Entrepreneurship.

The data collected from the questionnaires and interviews was analyzed using the following methods: Quantitative Data Analysis: The data from the questionnaires was analyzed using descriptive statistics such as means, standard deviations, frequencies, and percentages. To test the study's hypotheses, the following inferential statistical techniques was used: Chi-square tests was used to assess the relationship between students' perceptions of PBL and its effectiveness as a teaching method. T-tests was employed to determine if PBL significantly influences the development of creativity, innovation, and risk-taking among students. Qualitative Data Analysis: The qualitative data from the interviews was analyzed using thematic analysis.

Data Presentation, Analysis, and Interpretation

A total of 300 final-year business education students from Delta State Universities, participated in the study. Of the 300 questionnaires distributed, 290 valid responses were received, representing a response rate of 96.7%. This high response rate strengthens the reliability and representativeness of the findings.

Table 4.1: Demographic Information of Respondents

Demographic Variables	Frequency (n=290)	Percentage (%)
Gender		
Male	140	48.3
Female	150	51.7
Age Group		
18–22 years	80	27.6
23–26 years	150	51.7
27–30 years	60	20.7
Academic Performance		
1st Class	35	12.1
2nd Class Upper	130	44.8
2nd Class Lower	90	31.0
Third Class	35	12.1

The demographic table reveals a relatively balanced distribution of male (48.3%) and female (51.7%) students. Most respondents fall within the 23–26 years age group (51.7%), and the majority of the respondents fall within the second-class upper category (44.8%).

Research Question 1: How do business education students perceive Problem-Based Learning (PBL) as a teaching method?

Table 4.2: Perceptions of PBL as a Teaching Method

Statement	Mean	SD	Level of Agreement

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PBL enhances my understanding of business concepts.	4.3	0.85	Strongly Agree
PBL encourages critical thinking and problem-solving skills.	4.5	0.78	Strongly Agree
PBL allows me to apply theoretical knowledge to real-life scenarios.	4.4	0.79	Strongly Agree
PBL is an effective way to learn entrepreneurship concepts.	4.2	0.80	Agree
I prefer PBL over traditional lecture-based teaching methods.	4.1	0.83	Agree

The students' perceptions of PBL as a teaching method are overwhelmingly positive. With a mean score of 4.3 and 4.5 on most items, students strongly agree that PBL enhances their understanding of business concepts, encourages critical thinking, and allows them to apply theoretical knowledge in real-life contexts. The mean score of 4.1 suggests that students prefer PBL to traditional teaching methods, though there is still a significant appreciation for conventional methods.

Research Question 2: What is the influence of PBL on students' ability to identify and solve entrepreneurial problems?

Table 4.3: Influence of PBL on Problem-Solving Abilities

Statement	Mean	SD	Level of Agreement
PBL helps me identify real business problems.	4.2	0.79	Agree
PBL encourages me to think critically about business challenges.	4.4	0.81	Strongly Agree
PBL helps me develop practical solutions to business problems.	4.3	0.80	Agree
PBL has improved my ability to approach entrepreneurial issues creatively.	4.5	0.76	Strongly Agree
PBL enables me to work collaboratively on solving entrepreneurial problems.	4.2	0.77	Agree

The results indicate that PBL has a positive influence on students' ability to identify and solve entrepreneurial problems. The mean scores of 4.3 and 4.4 demonstrate that students strongly agree that PBL encourages critical thinking and helps them approach entrepreneurial problems creatively. This suggests that PBL is an effective tool for enhancing problem-solving and entrepreneurial skills among students.

Research Question 3: How does PBL influence the development of creativity, innovation, and risk-taking among students?

Table 4.4: Influence of PBL on Creativity, Innovation, and Risk-Taking

Statement	Mean	SD	Level of Agreement
PBL has helped me become more creative in solving business problems.	4.5	0.77	Strongly Agree

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PBL has increased my willingness to take risks in entrepreneurial endeavors.	4.3	0.80	Agree
PBL encourages me to think outside the box when considering business solutions.	4.4	0.79	Strongly Agree
PBL fosters an innovative mindset in tackling business challenges.	4.6	0.74	Strongly Agree
PBL has enhanced my ability to recognize entrepreneurial opportunities.	4.3	0.82	Agree

Interpretation: The data reveals that PBL significantly influences the development of creativity, innovation, and risk-taking among business education students. With mean scores ranging from 4.3 to 4.6, the findings suggest that students believe PBL encourages creativity, fosters innovation, and increases their willingness to take risks in entrepreneurship. This aligns with the key objectives of PBL in cultivating entrepreneurial traits.

4.6 Research Question 4: What are the major challenges associated with implementing PBL in business education at Delta State Universities?

Table 4.5: Challenges Associated with Implementing PBL

Challenge	Mean	SD	Level of Agreement
Lack of resources (e.g., materials, technology) to implement PBL effectively.	3.8	0.88	Agree
Insufficient training for lecturers on PBL implementation.	3.9	0.84	Agree
Large class sizes make it difficult to implement PBL effectively.	4.0	0.85	Agree
Resistance to change from traditional teaching methods.	3.7	0.90	Agree
Lack of time to fully engage in PBL-based learning activities.	3.6	0.92	Agree

Interpretation: The challenges of implementing PBL include resource constraints (mean score of 3.8), insufficient lecturer training (mean score of 3.9), and large class sizes (mean score of 4.0). The data indicates that while students recognize the potential of PBL, practical barriers such as lack of resources, insufficient training for faculty, and resistance to shifting from traditional teaching methods pose significant challenges. These issues need to be addressed to optimize PBL implementation.

Hypothesis Testing

The study tested four null hypotheses based on the research questions. The results of the hypothesis testing are presented in this section, along with the necessary tables and interpretations.

Hypothesis 1: There is no significant relationship between students' perception of PBL and its effectiveness as a teaching method.

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This hypothesis was tested using Chi-square analysis to determine whether there is a significant relationship between students' perceptions of Problem-Based Learning (PBL) and its effectiveness in business education.

Table 4.6: Chi-Square Test for Students' Perception of PBL and Its Effectiveness

Perception of PBL	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Effectiveness	120	130	30	10	290

Chi-Square Test Results:

$\chi^2 = 25.7$, df = 3, $p < 0.05$

Interpretation:
The Chi-square test revealed a significant relationship between students' perceptions of PBL and its effectiveness as a teaching method ($\chi^2 = 25.7$, $p < 0.05$). Therefore, the null hypothesis is rejected, indicating that students' perceptions of PBL significantly influence its perceived effectiveness in business education.

Hypothesis 2: PBL does not have a significant influence on students' ability to identify and solve entrepreneurial problems.

This hypothesis was tested using a t-test to compare the mean scores of students on their ability to identify and solve entrepreneurial problems after exposure to PBL.

Table 4.7: t-Test for Influence of PBL on Problem-Solving Ability

Group	Mean	Standard Deviation (SD)	t-value	p-value
Problem-Solving Ability (PBL)	4.3	0.80	4.1	0.00

Interpretation:
The results from the t-test ($t = 4.1$, $p < 0.05$) indicate that PBL significantly influences students' ability to identify and solve entrepreneurial problems. Since the p-value is less than 0.05, we reject the null hypothesis, meaning that PBL has a significant positive impact on students' problem-solving abilities.

Hypothesis 3: PBL does not significantly enhance the development of creativity, innovation, and risk-taking among business education students.

This hypothesis was tested using a t-test to assess whether PBL enhances students' creativity, innovation, and risk-taking.

Table 4.8: t-Test for the Influence of PBL on Creativity, Innovation, and Risk-Taking

Group	Mean	Standard Deviation (SD)	t-value	p-value
Creativity, Innovation, & Risk-Taking (PBL)	4.4	0.78	5.2	0.00

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Interpretation:
The results of the t-test ($t = 5.2$, $p < 0.05$) indicate that PBL significantly enhances the development of creativity, innovation, and risk-taking among business education students. Given that the p-value is less than 0.05, we reject the null hypothesis, meaning PBL plays a significant role in developing these entrepreneurial traits.

Hypothesis 4: The challenges associated with implementing PBL do not have a significant impact on its effectiveness.

This hypothesis was tested using a t-test to determine whether challenges in implementing PBL have a significant impact on its effectiveness in business education.

Table 4.9: t-Test for Impact of Challenges on PBL Effectiveness

Group	Mean	Standard Deviation (SD)	t-value	p-value
PBL Effectiveness (Challenges)	3.8	0.88	3.8	0.00

Interpretation:
The t-test results ($t = 3.8$, $p < 0.05$) suggest that challenges related to the implementation of PBL have a significant impact on its effectiveness in business education. Since the p-value is less than 0.05, we reject the null hypothesis, meaning that the challenges faced in implementing PBL significantly affect its effectiveness.

Summary of Hypothesis Testing

Table 4.10: Summary of Hypothesis Testing Results

Hypothesis	Test Type	χ^2/t-value	p-value	Decision
H_{01}: There is no significant relationship between students' perception of PBL and its effectiveness	Chi-square	25.7	0.00	Rejected
H_{02}: PBL does not have a significant influence on students' ability to identify and solve entrepreneurial problems	t-test	4.1	0.00	Rejected
H_{03}: PBL does not significantly enhance the development of creativity, innovation, and risk-taking	t-test	5.2	0.00	Rejected
H_{04}: The challenges associated with implementing PBL do not have a significant impact on its effectiveness	t-test	3.8	0.00	Rejected

Discussion of findings

This study examined the effectiveness of Problem-Based Learning (PBL) in enhancing entrepreneurial skills among business education students in Delta State Universities. The findings reveal that Students strongly agreed that PBL enhances their understanding of business concepts (mean = 4.3), fosters critical thinking (mean = 4.5), and helps them apply theory to real-world

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problems (mean = 4.4). These results align with previous studies highlighting the effectiveness of PBL in promoting deep learning (Barrows, 1996; Savery, 2006). Although students prefer PBL over traditional methods (mean = 4.1), they still value the benefits of lecture-based teaching, suggesting a blended approach may be ideal. The study also indicates that PBL enhances students' problem-solving skills, with high mean scores for identifying real business problems (mean = 4.2) and developing practical solutions (mean = 4.3). PBL also encourages creativity (mean = 4.5), supporting research that PBL nurtures critical and innovative thinking (Jonassen, 2000; Hmelo-Silver, 2004). PBL significantly fosters creativity (mean = 4.5), innovation (mean = 4.6), and risk-taking (mean = 4.3), essential entrepreneurial traits. These findings align with research suggesting that PBL provides a platform for students to explore innovative solutions and practice risk-taking (Trede, 2012; Blenker et al., 2014). The challenges identified include resource constraints (mean = 3.8), insufficient faculty training (mean = 3.9), and large class sizes (mean = 4.0). These barriers are consistent with the literature, which emphasizes the need for adequate resources and faculty development for effective PBL implementation (Dochy et al., 2003; Barrows, 1996). Resistance to traditional methods (mean = 3.7) and limited time for PBL activities (mean = 3.6) also hinder its full implementation. The findings highlight that while PBL is highly effective in developing entrepreneurial skills, addressing challenges such as resource limitations and faculty training is essential. A blended approach combining PBL with traditional methods could further enhance student engagement and learning outcomes.

Conclusion

The study concluded that Problem-Based Learning is an effective method for enhancing the entrepreneurial mindset among business education students. PBL fosters the development of crucial entrepreneurial traits such as creativity, innovation, and risk-taking, which are fundamental for success in the business world. While the results were generally positive, the study highlighted the challenges faced in implementing PBL at Delta State Universities, particularly regarding resources, lecturer training, and logistical issues. These challenges need to be addressed to fully realize the potential of PBL as a pedagogical tool in business education.

Recommendations

a) Training for lecturers: To maximize the effectiveness of PBL, faculty members should receive regular training in PBL methodologies. This will ensure that they can guide students effectively and create an environment that promotes active learning and problem-solving.
b) Incorporate Real-World Case Studies: Business education programs should integrate more real-world case studies and entrepreneurial challenges into the curriculum. This would provide students with hands-on experience and further develop their problem-solving and entrepreneurial skills.

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c) Continuous Evaluation and Feedback: It is recommended that the effectiveness of PBL be continuously evaluated through student feedback and performance assessments. Regular evaluation will help in refining the PBL approach and ensuring that it remains responsive to student needs and industry trends.
d) Encourage Collaboration with Industry Partners: The university should explore partnerships with local businesses and entrepreneurs. Such collaborations would provide students with opportunities to engage with industry professionals and gain real-world entrepreneurial experience.

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