

# Outcome-Based Education (OBE) in Entrepreneurship Course: Impact on Business Plan Development and Academic Achievement

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**Abstract:** In this outcome-based education in entrepreneurship course, research presents the effectiveness of outcome-based education (OBE) in terms of business plan development and general performance in entrepreneurship courses. The investigation aims to understand the role of clearly articulated learning objectives, related to objective assessments, aligned with learning outcomes, and learning process feedback in achieving the objectives. In this study, the author targeted a cohort of third-year undergraduate students enrolled in an entrepreneurship course to assess the effectiveness of OBE in designing detailed and high-quality business plans. The results support the existence of a positive relationship between the quality of the business plans developed and the economic performance of the students, with most achieving a grade of A or A+. Using mixed methods of data collection and analysis, the study found that adopting a structured approach to OBE not only equips learners with the requisite skills in entrepreneurship but also enhances their educational performance. The contributions that emerged in the context of OBE are likely to transform existing educational practices in entrepreneurship education and stimulate further research on this pedagogical strategy to improve it further.

**Keywords:** Outcome-Based Education (OBE); Business Plan; Academic Achievement; Entrepreneurship and Impact; Effective Entrepreneurship; Learning Process; Learning Outcomes; Financial Management.

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## 1. Introduction

Outcome-Based Education (OBE) has emerged as a transformative approach in the field of education, focusing on achieving specific learning outcomes and ensuring that students get the necessary knowledge, skills, and attitudes. Unlike traditional education models that emphasise content delivery and rote learning, OBE centres on what students are expected to learn and accomplish by the end of their educational experience. This learner-centric approach aligns educational objectives with assessment methods, fostering a more meaningful and effective learning process. This paper proposes to design the impact of OBE on the learning outcomes of students enrolled in an entrepreneurship course, specifically regarding their ability to write comprehensive and high-quality business plans. The research objectives are to evaluate the correlation between the implementation of OBE and students' academic performance, as reflected in their grades. Entrepreneurship education is critical

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in cultivating the next generation of innovators, business leaders, and entrepreneurs. Effective entrepreneurship courses equip students with essential skills, such as critical thinking, problem-solving, and strategic planning, which are vital for success in the business world. Given the dynamic and practical nature of entrepreneurship, an educational framework that emphasises clear outcomes and practical skills is particularly relevant.

This research seeks to contribute to the existing body of knowledge by providing empirical evidence on the benefits of OBE in entrepreneurship education. By demonstrating how OBE can enhance both skill acquisition and academic achievement, the findings aim to inform educators, curriculum designers, and policymakers on best practices for fostering entrepreneurial talent. This research paper is organised as follows: the literature review thoroughly examines OBE concepts and their application in entrepreneurship education. The methodology section outlines the research design, including course structure, participant demographics, and data collection methods. The results section presents findings on the quality of business plans and academic performance, followed by a discussion of the implications of these findings. Finally, the conclusion summarises the key insights and suggests directions for future research.

## **2. Literature Review**

### **2.1. Outcome-Based Education (OBE) Concepts**

The OBE is an educational theory that emphasises the outcomes of the learning process. According to Spady [12], OBE is characterised by its focus on what students can do after they are taught. The primary goal is to ensure that all students reach a certain level of competence or mastery, as opposed to traditional education systems, which often emphasise time-based progression and content coverage. OBE involves setting clear, measurable outcomes that students are expected to achieve by the end of a course or program. These outcomes guide the curriculum, teaching methods, and assessment strategies, creating a cohesive and targeted educational experience [7].

### **2.2. Implementation of OBE**

Effective implementation of OBE requires alignment of curriculum design, instructional methods, and assessment practices with the intended learning outcomes. This alignment ensures that all aspects of the educational process contribute towards achieving the desired outcomes. The basic works of OBE include clearly defined learning outcomes, performance indicators, flexible learning paths, and continuous assessment and feedback. This research by Harden [11] has shown that OBE can lead to developed student engagement, a deeper understanding of the subject matter, and better retention of knowledge.

### **2.3. Entrepreneurship Education**

The researcher Kuratko [6] designed a program to equip students with the skills, knowledge, and attitudes necessary to identify and exploit business opportunities in entrepreneurship courses. It encompasses various activities, including business planning, innovation, financial management, and strategic decision-making [10]. The unique nature of entrepreneurship education, with its emphasis on practical application and real-world relevance, makes it a suitable candidate for OBE methodologies.

### **2.4. OBE in Entrepreneurship Education**

Several research studies have explored the application of OBE in entrepreneurship education. According to Gibb [2], entrepreneurship courses benefit from an outcome-based approach as they align well with the need for practical skills and experiential learning. By focusing on the development of specific competencies, such as business plan writing, OBE can help students better prepare for the challenges of starting and running a business. Research by Jones and English [5] supports this view, indicating that students in OBE-driven entrepreneurship programs demonstrate higher levels of innovation, problem-solving, and business acumen.

### **2.5. Business Plan Development**

For business plan development, the ability to develop a comprehensive and viable business plan is a critical skill for aspiring entrepreneurs [4]. Business plans serve as roadmaps for new ventures, outlining business strategies, market analyses, financial projections, and operational plans. Effective business plan development requires a combination of analytical thinking, strategic planning, and creativity [10]. Research has shown that structured training and clear outcome expectations can significantly enhance students' business planning skills [3].

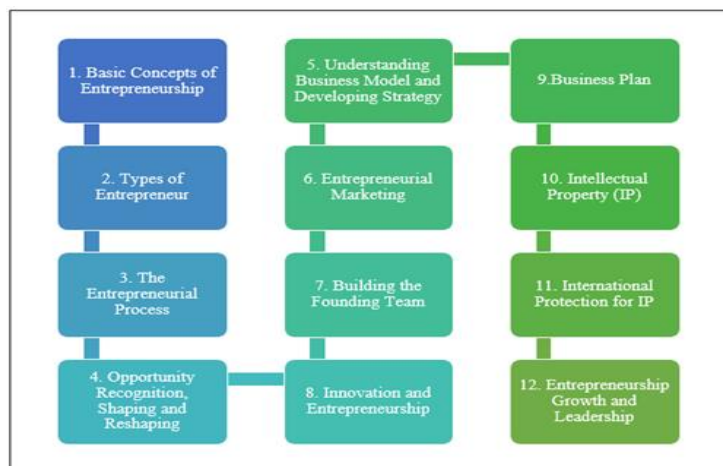
## 2.6. Academic Performance and OBE

In the meta-analysis on academic learning objectives and learning achievement, it was noted that clearly defined objectives [8]. Within the assessment of teaching and learning in the area of entrepreneurship education, there has also been evidence that OBE can improve grades and academic performance [1]. The reason for this is that the very structure of OBE is relevant and useful, allowing students to use what they have learned more effectively. As demonstrated in the above literature, OBE has great potential to improve the acquisition of both skill and academic knowledge in entrepreneurship education. It is understandable that OBE, as it encourages achieving the results of educational activities within time frames, is more structured and organised. The present research contributes to the existing evidence by examining the relationship between OBE and business plan development, as well as student performance in entrepreneurship courses, to enhance the current literature and practice.

## 3. Methodology

### 3.1. Course Design

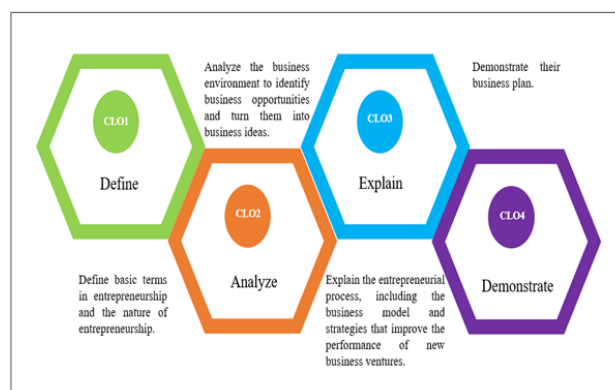
This entrepreneurship course is designed around a comprehensive syllabus covering a wide range of topics essential for developing entrepreneurial skills and knowledge. The course of lectures comprises twelve lecture contents, as shown in Figure 1.



**Figure 1:** Twelve course contents

### 3.2. Course Learning Outcomes (CLOs)

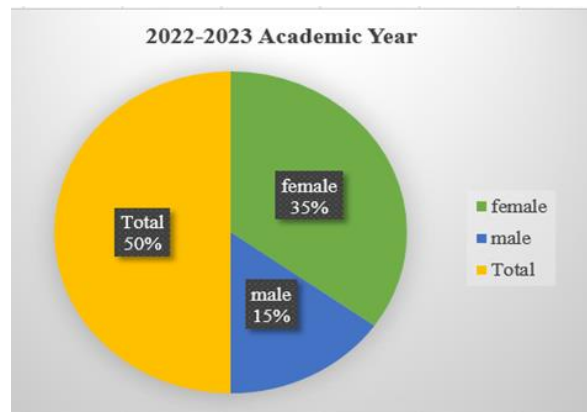
For the course learning outcomes, the course is designed to achieve the following: Figure 2 defines, analyses, explains, and demonstrates. According to the research by Thant et al. [9], course objectives (CO) are specific and measurable statements that describe what students should be able to do by the end of a course.



**Figure 2:** Course learning outcomes

### 3.3. Participants

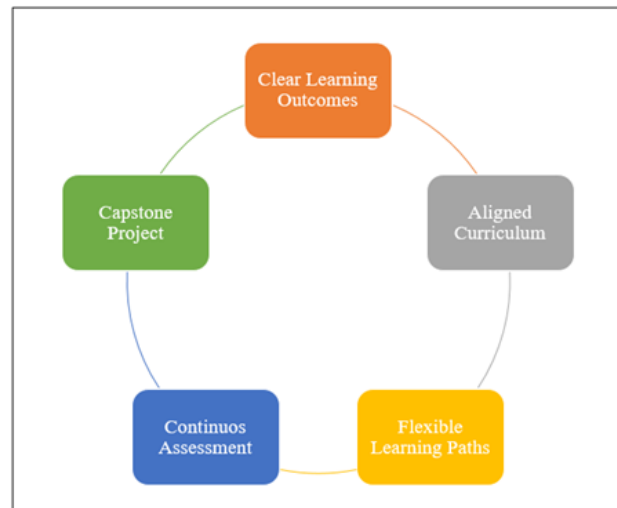
This research collects undergraduate students enrolled in the entrepreneurship course during the 2022-2023 academic year. This group consisted of 33 students, with 10 male students and 23 female students. The course is purposed to provide students with essential entrepreneurial skills and knowledge. Various activities, including assignments, presentations, case studies, and guest lectures, were incorporated to enhance their learning experience. The records from this group will be analysed to assess the impact of the course on students' entrepreneurial intentions and capabilities (Figure 3).



**Figure 3:** Entrepreneurship courses in the 2022-2023 academic year

### 3.4. Implementation of OBE

This course was designed and provided using Outcome-Based Education (OBE) principles, focusing on achieving the specified CLOs. Key elements of the OBE implementation are illustrated in Figure 4.

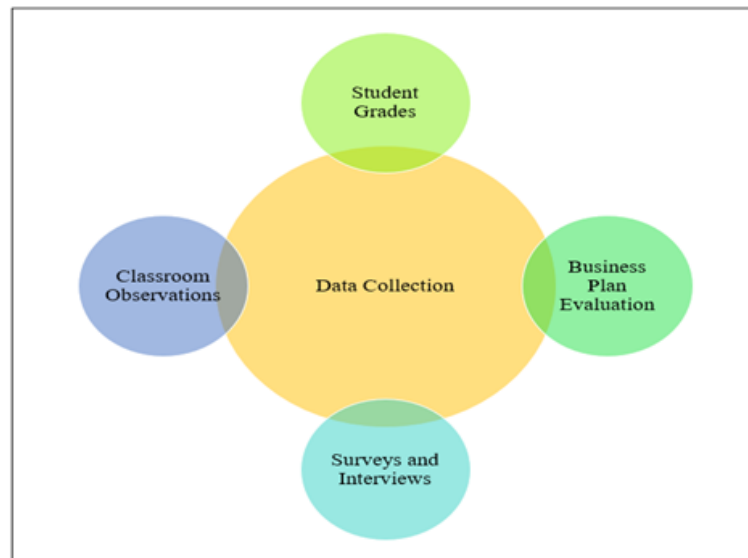


**Figure 4:** Key elements of the OBE implementation

The CLOs were explicitly communicated to students at the beginning of the course. These outcomes guided all instructional activities and assessments. For the aligned curriculum, the course contents were structured to progressively build the knowledge and skills required to achieve the CLOs. Each module was designed to contribute directly to one or more CLOs. For flexible learning paths, students were provided with various learning resources and activities, such as lectures, case studies, group papers, and guest lectures from entrepreneurs, to cater to different learning styles. Continuous assessments (formative assessments), including quizzes, assignments, and presentations, were used to provide ongoing feedback to students. Summative assessments, such as mid-term and final exams, were aligned with the CLOs to evaluate student performance. The development and presentation of a business plan served as the capstone paper, integrating all the knowledge and skills acquired during the course.

### 3.5. Data Collection

Data were collected from various sources to evaluate the impact of OBE on student outcomes, including student grades, business plan evaluations, surveys and interviews, and classroom observations, as illustrated in Figure 5.



**Figure 5:** Data collection sources

Academic performance data, including grades for individual assessments and final course grades, were collected for both cohorts. In the business plan evaluation, business plans developed by students were assessed using a rubric that evaluated various dimensions, including feasibility, innovation, market analysis, financial projections, and overall presentation quality. Feedback was gathered from students through surveys and interviews to gain insights into their learning experiences and perceptions of the OBE approach. Observations of classroom interactions and student engagement during lectures and group activities were conducted to assess the effectiveness of instructional strategies.

### 3.6. Data Analysis

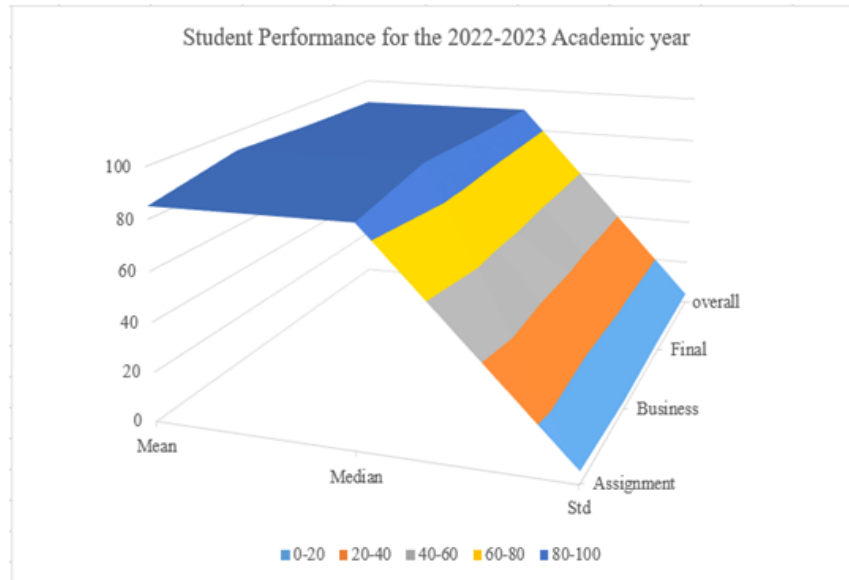
The collected data were analysed using both quantitative and qualitative methods. In the quantitative analysis, statistical analysis was performed on student grades to determine the distribution of grades and identify any significant differences between the two cohorts. Descriptive statistics, such as mean, median, and standard deviation, were used to summarise the data. For the qualitative analysis, the content analysis was conducted on the business plans and student feedback to identify common themes and patterns. Qualitative data from surveys and interviews were coded and categorised to extract meaningful insights. The following Table 1 summarises the quantitative analysis of student performance for the 2022-2023 academic year.

**Table 1:** Student performance for the 2022-2023 academic year

Assessment	Mean	Median	Std Dev
Tutorial/ Assignment/ Class Participation	85	86	5
Business Plan	92	93	3
Final Exam	90	91	4
Overall Grade	89	90	4

Table 1 compares the mean, median, and standard deviation of student grades for key assessments and overall grades across the cohort. The average score for tutorial, assignment, and class participation is 85, with a median of 86. This indicates that the central tendency of the scores is slightly above the average. The standard deviation of 5 suggests a moderate spread of scores around the mean, indicating that while most students scored around 85-86, there is some variation in their scores. The average score for the business plan assessment is 92, with a median of 93. This suggests that the scores are generally high, with most students performing well in this assessment. The low standard deviation of 3 indicates that the scores are tightly clustered around the mean, reflecting consistent student performance. The average score for the final exam is 90, with a median of 91. This shows that students performed well on average, with most scores close to the median. The standard deviation of 4 signifies

a relatively small spread of scores, indicating that the majority of students' performance was closely aligned with the mean. The average overall grade is 89, with a median of 90. This indicates that the overall performance of students is high, with a central tendency slightly above the average. The standard deviation of 4 suggests that the overall grades are relatively consistent among students, with most grades falling within a range of 4 points of the mean. Figure 6 illustrates the overall performance of students for the 2022-2023 Academic year.



**Figure 6:** Overall performance of students in the 2022-2023 academic year

The standard deviations for all assessments are relatively low (ranging from 3 to 5), indicating consistent performance among the students across different assessment types. The means and medians across all assessments are high (ranging from 85 to 93), reflecting generally good performance by the students. The medians are slightly higher than the means in most cases, which may suggest a slight positive skew in the score distribution, where a few lower scores slightly lower the average, but most scores are high. For the qualitative analysis, Table 2 presents the findings in a structured format that summarises the common themes and patterns identified from student feedback, business plan evaluations, and classroom observations.

**Table 2:** Qualitative analysis for the 2022-2023 academic year

Patterns	Theme	Business plan evaluations	Classroom Observations
Student Feedback	Improved Understanding	Students reported a better understanding of entrepreneurial concepts and processes.	"I now have a clearer understanding of how to develop a business plan."
	Practical Application	Students appreciated the practical nature of the assignments and papers.	"The hands-on papers helped me apply what we learned in class."
	Continuous Feedback	Continuous assessment and feedback were seen as helpful for improving performance.	"The feedback on assignments was very useful for my improvement."
Business Plan Evaluation	Quality of Plans	Business plans showed significant improvement in structure, feasibility, and innovation.	Evaluators noted that the plans were well-structured, feasible, and innovative.
	Comprehensive Analysis	Plans included detailed market analysis, financial projections, and strategic planning.	"The market analysis section was very thorough and insightful."
	Creativity and Innovation	Students demonstrated high levels of creativity and innovative thinking in their business ideas.	"Several business plans presented highly innovative concepts."

Classroom Observations	Student Engagement	High levels of student participation and engagement were observed during lectures and group work.	Observers noted active participation and lively group discussions.
	Collaborative Learning	Students frequently collaborated and helped each other, fostering a collaborative learning environment.	“Group papers encouraged collaboration and peer learning.”
	Application of Concepts	Students effectively applied theoretical concepts to practical scenarios during classroom activities.	“Students could apply theoretical concepts in practical tasks.”

According to Table 2 above, the qualitative analysis reveals several key themes. Students achieved a deeper understanding of entrepreneurial concepts, which was reflected in their ability to articulate and apply these concepts in their business plans and other assignments. The practical nature of the course, including hands-on papers and continuous feedback, was highly valued by students and contributed to their learning. The business plans produced by students were of high quality, demonstrating comprehensive analysis, creativity, and innovation. High levels of engagement and collaboration were observed, indicating a positive and interactive learning environment. Some quotes from student feedback are “The hands-on papers helped me apply what we learned in class.”, “The market analysis section was very thorough and insightful.”, “Group papers encouraged collaboration and peer learning.”

#### 4. Findings and Discussion

Implementing Outcome-Based Education (OBE) in entrepreneurship courses had a significant impact on both business plan development and academic achievement among students. The above findings show a notable improvement in the quality and comprehensiveness of business plans created by students under the OBE framework. These plans consistently demonstrated a deeper understanding of market dynamics, financial projections, and strategic planning than traditional approaches. In this research, students enrolled in OBE-driven entrepreneurship courses demonstrated a higher level of intense engagement and motivation, which ultimately led to improved academic outcomes. In terms of numbers, for instance, average grades improved significantly, while the dropout rate decreased over the years in the OBE approach compared to the traditional approach. Additionally, responses from students indicated that they took more ownership in the results of their studies due to entrepreneurship education promoting a positive change in their attitude towards it.

These results, in combination with the learners' overall performance in the course, demonstrate the effectiveness of OBE in equipping individuals with OBE skills and preparing them for practical undertakings in the field of entrepreneurship. The outcomes of this research on Outcome-Based Education (OBE) in entrepreneurship courses present compelling evidence of the influence of OBE on business plans and student academic achievements. There was a somewhat radical shift in the understanding of the OBE principles as the emphasis within the constraints of the traditional education system shifted to competency-oriented assessment. A clear outcome of the OBE implementation outlined above was an improvement in the quality of business plans. Students were helped in this direction by structuring course objectives in terms of specified learning outcomes.

It was evident in their ability to marry theory with practice, resulting in well-rounded plans that were strong in areas such as market studies, financial evaluation, and strategic thinking. Such skills are essential for entrepreneurial individuals who want to develop their ideas into a business framework. OBE resulted in better performance, and the students also showed greater engagement. Results showed that there was a significant improvement in the written average scores as well as a decrease in the number of students who dropped out when traditional methods of instruction were compared with those that employed OBE. The learners' satisfaction can be attributed to several reasons, including clearer learning goals, tailored learning paths, and greater overall motivation, which stem from a sense of personal responsibility for the learning outcomes. Students felt more confident in applying their learning in practice, which is crucial in developing the entrepreneurial skills necessary for entrepreneurship.

Qualitative feedback from students highlighted a change in their approach towards learning. Most students indicated that they felt a stronger sense of ownership in their learning and understood the practical implications of what they were taught about their futures in business better. This suggests that OBE would be beneficial in enhancing academic performance and contributing to a well-rounded learning process, which equips students with the necessary tools for entrepreneurship. In this research, the features of OBE are to enhance business plan development and academic achievement in entrepreneurship courses. By focusing on clearly defined learning outcomes and competency-based assessments, OBE empowers students to acquire essential entrepreneurial skills while achieving higher academic standards. Future research could investigate the long-term

effects of OBE on entrepreneurial success after graduation and refine strategies for effective implementation across diverse educational settings.

## 5. Conclusions

The OBE implementation in entrepreneurship courses achieved positive impacts on business plan development as well as the academic achievement of the students in this research. This study has shown that the course objectives completed by the students helped improve the quality and factual content of the students' business plans. It has been found that OBE encourages students to combine practical knowledge and theoretical knowledge with entrepreneurial skills, due to its strong focus on practice and competency-based evaluation methods. The outcomes suggest that OBE fosters greater student engagement, satisfaction, and academic performance. Students participating in courses related to entrepreneurship based on OBE attained better grades and lower dropout rates than those taught through conventional means.

This improvement is indicative of the students' enhanced understanding and ability to apply the concepts of entrepreneurship more effectively, which is crucial, given that the students will be applying the lessons to real-life challenges in the future. Further, the qualitative feedback from the students has been more supportive of students' positive learning experience using OBE. Students felt more responsible for their learning and demonstrated a sense of efficacy in applying their knowledge in the field of entrepreneurship. Such outcomes are crucial for cultivating an entrepreneurial mindset and preparing students to become proactive agents of change in their respective fields.

While the benefits of OBE in entrepreneurship education are evident, the successful implementation of OBE requires careful planning, faculty support, and alignment with industry needs. Addressing these challenges is crucial for sustaining the positive impacts observed in this research across various educational contexts. This proposed research underscores the transformative potential of Outcome-Based Education in enhancing business plan development and academic achievement in entrepreneurship courses. By emphasising clear learning outcomes and fostering competency-based learning experiences, OBE equips students with the necessary skills and knowledge to succeed as future entrepreneurs. Further research and continued exploration of the best practices will contribute to maximising the effectiveness of OBE in preparing students for the dynamic challenges of the entrepreneurial landscape.

### 5.1. Further Extension and Recommendations

Building upon the findings and conclusions of this research, further extension and refinement of OBE in entrepreneurship courses can enhance its effectiveness and impact, as shown in Table 3.

**Table 3:** Some recommendations for future research and practice

Impacts	Future research	Recommendations
Industry Collaboration	Foster closer collaboration with industry partners to ensure that the OBE curriculum and learning outcomes remain aligned with current market trends and industry demands.	Engaging industry professionals in curriculum development and guest lectures can provide students with real-world insights and practical skills.
Faculty Development	Provide ongoing training and support for faculty members to effectively design, implement, and assess OBE in entrepreneurship courses.	This includes developing competencies in outcome-based assessment methods, integrating experiential learning opportunities, and adapting teaching strategies to promote student engagement.
Cross-Disciplinary Integration	Explore opportunities for cross-disciplinary integration of OBE principles within entrepreneurship education.	Collaborative papers with disciplines such as marketing, finance, and technology can enrich students' understanding of holistic business operations and innovation.
Student Feedback Mechanisms	Establish robust mechanisms for collecting and utilising continuous feedback from students regarding their OBE experiences.	This feedback can inform curriculum improvements, instructional strategies, and support services to enhance student learning outcomes and satisfaction.
Case Studies and Best Practices	Compile and disseminate case studies and best practices of successful OBE implementations in entrepreneurship education.	This knowledge-sharing can benefit educators and institutions seeking to adopt or refine OBE approaches in their programs.

Global Perspectives	Consider cultural and regional variations in entrepreneurial ecosystems when implementing OBE.	Adapting OBE frameworks to local contexts and global perspectives can better prepare students for the diverse entrepreneurial challenges they will face worldwide.
Evaluation of Soft Skills	In addition to technical skills, assess the development of soft skills such as communication, teamwork, resilience, and ethical decision-making within OBE frameworks.	These skills are critical for entrepreneurial success and should be integrated into learning outcomes.

## 5.2. Limitations

This research has several limitations that should be acknowledged when interpreting its findings on Outcome-Based Education (OBE) in entrepreneurship courses, as outlined in Table 4.

**Table 4:** Limitations of the proposed system

No.	Findings	Description
1	Generalizability	The findings may be specific to the institution, course structure, and student demographics involved in the research.
2	Sample Size and Selection Bias	The research's sample size and composition could influence the generalizability of the results.
3	Time Constraints	The duration of the research may have restricted the ability to capture the long-term impacts of OBE on entrepreneurial outcomes.
4	Resource Availability	Implementation of OBE requires adequate resources, including faculty training, technological support, and administrative commitment.
5	Measurement Challenges	Assessing the effectiveness of OBE in entrepreneurship education involves complex measurements of learning outcomes, which may vary in clarity and reliability.
6	External Factors	External factors, such as economic conditions, industry trends, and regional policies, can influence students' entrepreneurial experiences and outcomes.

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**Ethics and Consent Statement:** The study was conducted in accordance with ethical guidelines. All participants were assured of the confidentiality and anonymity of their responses.

## References

1. A. Fayolle and B. Gailly, "From craft to science: teaching models and learning processes in entrepreneurship education," *IEEE Eng. Manag. Rev.*, vol. 40, no. 2, pp. 95–116, 2012.
2. A. Gibb, "In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: Creative destruction, new values, new ways of doing things, and new combinations of knowledge," *International Journal of Management Reviews*, vol. 4, no. 3, pp. 233–269, 2002.
3. B. Honig, "Entrepreneurship education: Toward a model of contingency-based business planning," *Acad. Manag. Learn. Educ.*, vol. 3, no. 3, pp. 258–273, 2004.

4. B. R. Barringer and R. D. Ireland, "Entrepreneurship: Successfully launching new ventures," 4th ed., *Pearson*, London, United Kingdom, 2012.
5. C. Jones and J. English, "A contemporary approach to entrepreneurship education," *Education + Training*, vol. 46, no. 8/9, pp. 416–423, 2004.
6. D. F. Kuratko, "The emergence of entrepreneurship education: Development, trends, and challenges," *Entrep.. Theory Pr.*, vol. 29, no. 5, pp. 577–597, 2005.
7. J. Biggs and C. Tang, "Teaching for quality learning at university," 4th ed. *McGraw-Hill*, New York, United States of America, 2011.
8. J. Hattie, "Visible learning: A synthesis of over 800 meta-analyses relating to achievement", *Routledge*, London, United Kingdom, 2009.
9. K. S. Thant, M. M. Khaing, and H. H. K. Tin, "Mapping the course objectives and program learning outcomes of software engineering course by Bloom's revised taxonomy," *Middle East Research Journal of Engineering and Technology*, vol. 3, no. 9, pp. 33–38, 2023.
10. R. Killen, "Teaching strategies for outcomes-based education", *Juta and Company Ltd*, Cape Town, South Africa, 2007.
11. R. M. Harden, "Developments in outcome-based education," *Med. Teach.*, vol. 24, no. 2, pp. 117–120, 2002.
12. W. G. Spady, "Outcome-based education: Critical issues and answers," *American Association of School Administrators*, Arlington, Virginia, United States, 1994.