THE IMPORTANCE OF PROJECT-BASED LEARNING IN STUDENT ENTREPRENEURSHIP EDUCATION

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Abstract. Education is one of the main pillars in the development of a country and has an important role in creating competent and qualified human resources. Currently, the main challenge in education is to prepare students to face the world of work that continues to grow and change rapidly. This research aims to examine the importance of project-based learning in students' entrepreneurship education. This research is a literature review that uses a qualitative method approach, which means it will analyse and interpret data by relying on information and text from various sources. The study results show that project-based learning has a crucial role in students' entrepreneurship education. By providing practical experience, building practical skills, developing critical and creative thinking abilities, and stimulating creativity and initiative, this method prepares students to face the dynamic and competitive business world. In addition, project-based learning strengthens the connection between the university and the business world, enables students to understand current market dynamics, and strengthens their social and communication skills. The limitation of this study lies in the method as it relies on the availability of relevant sources, which could make it less comprehensive.

Keywords: Project-based Learning, Entrepreneurship Education, Students

INTRODUCTION

Education holds a paramount position within a nation's development process, exerting profound influence on the cultivation of capable and proficient human resources (Azzaakiiyyah et al., 2023; Ohara, 2023). Presently, we encounter intricate challenges in the realm of education, particularly in the task of readying the younger generation to confront the intricacies of an ever-shifting and swiftly progressing world of work (Said Ahmad et al., 2023). The conventional skillset can no longer suffice as the sole reservoir for success. In an era marked by globalization's inexorable advance, students must also be equipped with a heightened aptitude for innovation, robust entrepreneurial acumen, and adept problem-solving capabilities (Mahardhani, 2023). These competencies are imperative to ensure their effective and pertinent competitiveness within the increasingly intricate global landscape.

One of the educational approaches garnering increasing attention and emerging as a central focal point in the realm of education is project-based learning (PBL). Project-based learning stands out as a pedagogical strategy that places a significant emphasis on the cultivation of comprehensive understanding through immersive real-world experiences (Sukackė et al., 2022). In PBL, students actively engage in the execution of a diverse array of projects or tasks that closely mirror authentic real-world scenarios, demanding intricate problem-solving abilities (Meng et al., 2023). This pedagogical approach transcends traditional learning paradigms by affording students the opportunity to not only refine their critical thinking capacities but also to independently undertake the creative processes inherent to complex problem-solving. Moreover, PBL encourages the effective collaboration among peers, thereby nurturing teamwork and communication skills (Othman et al., 2019). Within this framework, students grapple with challenges that are intricately linked to the real world, in a context that is intricately intertwined with the intricacies of their daily lives, rendering their learning experiences highly contextualized and profoundly pertinent.

Conversely, entrepreneurship now assumes an increasingly profound and pivotal role in the ever-evolving and fiercely competitive landscape of contemporary business (Satriadi et al., 2022). The competencies that individuals harness to uncover and capitalize upon nascent business prospects, their astuteness in prudently navigating risks, and their adeptness in formulating innovative, game-changing concepts all represent indispensable facets within the sphere of prosperous entrepreneurship (Prastyaningtyas et al., 2023). It is, therefore, conspicuously evident that the incorporation of entrepreneurship as an intrinsic component of education is attaining heightened significance, harmoniously aligning with the imperatives of this swiftly metamorphosing era.
Nevertheless, the existing educational landscape is notably deficient in providing a substantial body of knowledge regarding the efficacious integration of the Problem-Based Learning (PBL) methodology into the multifaceted realm of entrepreneurship education. Furthermore, a considerable void exists when it comes to comprehending the potential ramifications it may engender in the cultivation of students' entrepreneurial inclinations across diverse educational settings (Atrup et al., 2023; Harini et al., 2023). Indeed, the dearth of a holistic understanding regarding the strategic approaches, instructional methods, and resultant outcomes of PBL's application within the domain of entrepreneurship education represents a formidable challenge that warrants attention in the pursuit of augmenting the caliber of entrepreneurship pedagogy (Loi et al., 2022). In light of this, the significance of this research endeavor becomes markedly evident. This research assumes a pivotal role by embarking on a comprehensive exploration, as it endeavors to delve more profoundly into the multifaceted implications and latent potential residing within the incorporation of PBL within the context of entrepreneurship education. This scholarly undertaking, therefore, serves as an indispensable cornerstone for the prospective development of more efficacious, pertinent, and robust programs and curricula designed to holistically nurture students' entrepreneurial spirit.

Our research aims to comprehensively examine and explore the importance of integrating project-based learning in the realm of student entrepreneurship education. We will dive deep into how the Problem-Based Learning (PBL) approach can be implemented as a powerful tool in facilitating the development of entrepreneurial skills. More specifically, we will explore the ways in which PBL, through its interactive and project-oriented approach, can foster various key aspects of the entrepreneurial spirit, such as innovative creativity, deep strategic thinking, and proficiency in overcoming complex business challenges. Given its depth and complexity, this research will provide substantial insights into improving the effectiveness of entrepreneurship education. This is because previous research revealed the use of active learning models, such as case studies, business simulations and project work, significantly improved students' skills in starting and managing their own businesses (Raharjo et al., 2023). Students who engage in these learning methods show a better level of understanding of entrepreneurial concepts and have a higher level of confidence to start their own business (Cahyono et al., 2023).

Through this research journey, we hope to generate consistent and robust empirical evidence that concretely supports the integration of Problem-Based Learning (PBL) Approach into the entrepreneurship education curriculum. We believe that the results of this research will be an invaluable contribution to the educational literature and provide a strong foundation for
advocating the use of PBL as an effective learning method in preparing students for success in the increasingly dynamic world of entrepreneurship. In a broader perspective, the research is also expected to provide useful guidance to educators and educational decision-makers. It will help them develop and implement relevant and effective learning methods in the context of entrepreneurship education. We believe that the findings from this research will play an important role in shaping better and more relevant educational practices, resulting in graduates who have deeper skills and understanding of the rapidly changing business world. In addition to the direct benefits to education, this research also has the potential to be a significant contribution to the development of more contextualised and relevant pedagogy in the face of global changes in education. We are confident that this research will pave the way for a more in-depth consideration of how entrepreneurship education can be adapted to global changes, so that graduates of this education are prepared to face the challenges and opportunities that exist in the real world.

METHOD

This research is a literature review that adopts a qualitative approach, which means it will analyse and interpret data by relying on information and texts from various sources. The main focus of a qualitative literature review is to collate, evaluate and integrate existing knowledge on the topic under study, namely the importance of project-based learning in student entrepreneurship education. In this research, data will be collected from various sources relevant to the topic under study, such as scientific journals, books, research reports, and other articles. The data period covers the time from 2014 to 2023, which allows the researcher to see developments, trends, and changes that have occurred during this period. This time span was chosen because it focuses on a relatively recent and relevant period. Understanding of the topic of entrepreneurship can evolve quickly, and more recent data can reflect the latest trends, practices and discoveries. During this period, many data sources and scholarly literature became more accessible through digital libraries and online databases. This allows researchers to gather more comprehensive information. Finally, the selection of this time span allowed the researcher to explore the latest developments in entrepreneurship education, as well as social, economic and technological changes that might affect the field. In the data collection process, we used academic databases, digital libraries, and trusted scholarly sources to search for articles, books, reports, and other documents relevant to the topic of entrepreneurship. We used the Google Scholar search engine. Next, we applied selection criteria to select relevant sources according to the research objectives. These criteria may include year of publication,
methodological quality, and topic relevance. Finally, it leads to analysis and synthesis. This means that once the sources are selected, the researcher will analyse and synthesise the information found in the literature. This involves collecting qualitative data, such as findings, ideas, and concepts, which will then be collated and analysed to provide a deeper understanding of the topic.

The qualitative approach in the literature review allows researchers to describe and characterise complex and multidimensional issues in greater depth (Elo et al., 2014). In addition, this method makes it possible to involve multiple sources of information and cover a range of different viewpoints, thus enriching the analysis and strengthening the validity of the findings. The data collection process will involve meticulous text analysis, searching for information, and categorising relevant data for the research topic. Subsequently, the author will collate this information in a structured format, compare and synthesise findings from multiple sources, and identify patterns, themes and trends that emerge from the collected data.

One of the advantages of a qualitative literature review is its flexibility in understanding and explaining complex phenomena, as it is not limited by numerical or statistical constraints (Rahman, 2016). This method also allows researchers to gain deep insights into how the topic under study has evolved over time, as well as how concepts and understandings of the topic have changed over the years. In this research, it is important to scrutinise the reliability and credibility of the sources used, as well as critically analyse the information collected. With a qualitative approach, the researcher must be able to present findings objectively and reflectively, provide clear and accurate interpretations, and recognise the limitations of the methods and data used (Bradshaw et al., 2017). The conclusion of this research will hopefully provide a comprehensive picture of the development of the topic under study over the 2014 to 2023 time period, and may also provide recommendations for further research that can broaden the understanding of issues related to the topic.

RESULTS

Entrepreneurship education has an irreplaceable role in preparing students with the indispensable skills to succeed in the increasingly complex and dynamic business world of the modern era (A. Zen et al., 2023). In fulfilling its function, entrepreneurship education faces a deepening demand to present learning materials in a more relevant and interactive way (Ausat et al., 2023). One approach that is increasingly found to be relevant and important is the project-based learning method. This approach creates a dynamic that places students in a more active, immersive and practical role in their learning process. The presence of this method in
entrepreneurship education has a very important impact, and there are a number of reasons that underlie its deepening importance in the context of student entrepreneurship education (Manafe et al., 2023).

Firstly, it is worth emphasising that the project-based learning approach offers an invaluable opportunity for students to develop hands-on practical skills. In entrepreneurship classes that adopt this approach, students are regularly assigned tasks that require them to design, develop and manage real-world business projects (Z. Zen et al., 2022). Such projects can cover a wide range of scales, from small businesses to challenging start-ups, or even active roles in existing business projects. Thus, students not only gain a theoretical understanding of entrepreneurship, but they are practically involved in the realities of the business world. Through this experience, students can experience first-hand how to manage a business in its various aspects, including strategic decision-making, interaction with customers, dealing with unexpected challenges, and day-to-day operational management. The important point is that the practical skills acquired in this learning process are a substantial added value. Students do not just grasp entrepreneurial concepts from textbooks, but they actually engage in immersive and often complex real-world experiences (Darling-Hammond et al., 2020). This is a valuable opportunity for students to develop skills that will not only be useful in their entrepreneurial journey, but also in a variety of future professional contexts. As such, the project-based learning approach becomes a strong foundation in entrepreneurship education, helping students not only to understand, but also to actually apply entrepreneurial principles in the context of the ever-changing real world.

In addition to the aforementioned benefits, it should be emphasised that the project-based learning approach also has a very positive impact on developing critical and creative thinking skills in students. As they face various challenges that arise during the implementation of business projects, students are faced with the demand to think creatively in order to find the most effective and innovative solutions (Yazar Soyadi, 2015). Not only that, they must also be able to think critically in evaluating every decision they make, analysing existing data, and identifying opportunities and risks that may arise in their business context. These critical and creative thinking skills are valuable assets that are highly relevant in the complex and uncertain world of entrepreneurship. Success in entrepreneurship often relies heavily on an individual's ability to tackle unexpected problems, formulate innovative solutions and adapt quickly to continuous change (Ausat et al., 2023; Gadzali et al., 2023). Thus, through a project-based learning approach, students are given the opportunity not only to gain knowledge and understanding of business, but also to exercise and hone their critical and creative thinking
skills. These abilities are not only instrumental in business success, but also have wider relevance in various aspects of their professional and personal lives. Thus, the project-based learning approach plays a very important role in shaping students' intellectual and creative abilities to face a future filled with challenges and opportunities (Zhou, 2023).

In addition to the previously stated benefits, it is important to note that project-based learning is also an invaluable vehicle for students to develop social skills and the ability to collaborate (Azzaakiyyah, 2023). In the context of complex business projects, students are often placed in situations where they need to actively work in teams, interact with diverse customers and collaborate with a range of potential business partners. This process provides students with valuable experience in understanding and applying important concepts such as effective communication, good leadership skills, and the ability to work with others in harmony. These skills are invaluable assets in the world of entrepreneurship, where strong social networks, the ability to establish good relationships, as well as the ability to manage conflict and co-operate in diverse situations play a crucial role in achieving success. In other words, through project-based learning, students are not only given the opportunity to develop intellectual aspects, but also social and emotional aspects that are invaluable in their preparation to become successful entrepreneurs (Shin, 2018). These abilities will support them in facing the challenges in an increasingly complex and globalised business world. Thus, the project-based learning approach is not only about building conceptual understanding, but also about equipping students with skills and competencies that they can apply in their various life situations (Markula & Aksela, 2022).

Furthermore, it is important to disclose that project-based learning, in addition to providing the benefits already outlined, also provides valuable opportunities for students to practically test and pilot the business ideas they develop. This opens up opportunities for them to understand in greater depth whether their planned business has real potential to achieve success in a competitive market. Through the execution of real business projects, students can directly interact with real-world challenges that they may face when running their own business (Radianto & Santoso, 2017). They can measure customer response, assess the sustainability of their business model, and gain invaluable insights into how their business will perform in the real environment. In other words, project-based learning provides an opportunity for students to approach market realities in a very practical and immersive way (Zang et al., 2022). In this context, the results obtained from the execution of these business projects can help them identify changes they need to make, improve their strategies, or even make important decisions such as terminating the project if the results are inadequate or if there are significant changes.
in market conditions. Project-based learning is therefore a powerful tool in helping students understand business realities better and minimise the risks that may be associated with their future business ventures.

In addition to the direct benefits described earlier, it is important to note that project-based learning also has a positive impact on developing students' confidence as future entrepreneurs. As students successfully face and complete real business projects, they gradually build a strong sense of confidence in their ability to face challenges in the competitive business world. The positive experience of completing such projects gives them the confidence that they have the necessary skills, knowledge and abilities to succeed in their entrepreneurial journey (Irfan et al., 2021). This creates a strong mental foundation that will be of great benefit when they start their own ventures after graduation. This sense of confidence also allows them to face the uncertainties and risks that are often inherent in the business world with more poise and confidence. So, in addition to equipping students with practical skills and knowledge, project-based learning also serves as a very effective tool in building a strong psychological foundation for students (Maros et al., 2021). This is an important part of their preparation to face the challenges they may encounter in pursuing their entrepreneurial careers amidst the fierce competition in the business world.

In the overall perspective, there is no denying that the project-based learning approach plays a very important role in enriching students' entrepreneurship education. More than just a teaching method, it represents a solid foundation for developing diverse skills and competences that are crucial in the world of entrepreneurship. First of all, the project-based learning approach proves to be an effective tool in shaping practical skills that can be immediately applied in a business context (Al-Busaidi & Al-Seyabi, 2021; Sutrisno, 2023). Students are given the unique opportunity to actively apply the entrepreneurial concepts they learn in real-life situations. This process creates a strong foundation for the development of practical skills such as business planning, resource management and marketing strategies (Purnomo, 2023; Rijal, 2023; Salamah, 2023; Sari, 2023; Sudirjo, 2023; Sukenti, 2023). In addition, this approach also plays an important role in developing critical and creative thinking skills (Rukman et al., 2023). Through complex business projects, students are encouraged to formulate creative solutions to emerging challenges. They also have to hone their critical thinking skills in evaluating decisions and analysing data obtained during project implementation. Last but not least, this approach provides students with invaluable opportunities to test and develop their business ideas directly in the real world. This helps them identify weaknesses, understand strengths, and recognise changes needed in their business
model. Moreover, the results obtained from these projects can also boost their confidence as aspiring entrepreneurs. Therefore, holistically, the project-based learning approach makes entrepreneurship education more relevant, action-orientated, and provides greater benefits for students who aspire to develop a career in the dynamic and competitive world of entrepreneurship (Bagea et al., 2023). In this perspective, this approach becomes a key pillar in creating an education that truly prepares students to pursue opportunities and face challenges in the ever-evolving business world.

DISCUSSION

In addition to the benefits emphasised above, it is important to understand that project-based learning in students' entrepreneurship education has a broader dimension in equipping them to face challenges and take advantage of opportunities that arise in the ever-changing and evolving business world. The business projects undertaken by students not only give them practical experience in applying entrepreneurial concepts, but also allow them to experience market dynamics firsthand (Wardana et al., 2020). This is because the projects usually reflect current business trends and situations. In this process, students become familiar with the real situations they may encounter when they eventually start and run their own businesses. In addition, the experience gained from these business projects gives students the opportunity to identify and respond to rapid and dynamic market changes. They learn to adapt their business strategies, develop products or services that are responsive to changing customer needs, and even spot new opportunities that may arise in a rapidly changing business environment. In other words, project-based learning not only prepares students to run their own businesses with the necessary practical skills, but also helps them develop the adaptability and responsiveness to market changes that characterise the modern business world (Anjum et al., 2022). This enables them to face challenges with more confidence and capitalise on opportunities in a dynamic and uncertain business world.

In addition to the benefits mentioned above, it should be emphasised that the project-based learning approach also acts as a catalyst that stimulates creativity in identifying new business opportunities and exploring innovative ideas in an entrepreneurial context (Sun & Kim, 2022). One of the distinctive features of this approach is that it gives students the freedom to choose the type of business they wish to pursue in their project. In this sense, the approach provides students with a unique opportunity to explore their interests and passions in depth, which they may not have previously considered as business opportunities. This process serves as a key driver in helping students identify business opportunities that they have not thought of before.
By creating an environment that supports creativity and experimentation, project-based learning provides an ideal backdrop for developing new ideas in the world of entrepreneurship (Weng et al., 2022). Students can undertake projects that involve innovative ideas and try out approaches that they have never considered before. This, in turn, can lead to innovations that benefit the business world, as well as prepare students to become entrepreneurs who are able to spot and capitalise on opportunities that others have not yet identified (Wanof, 2023). Thus, project-based learning is not just about teaching practical skills, but also about opening the door to imagination and creativity in developing innovative and potentially successful business ideas (Mutiasari et al., 2023).

Furthermore, it should be noted that project-based learning approaches not only provide students with the opportunity to develop practical business skills, but also make a significant contribution in honing their presentation skills and communication abilities. In learning environments that utilise business projects, students are often faced with tasks that require them to present their business ideas (Ilonen, 2021). They may be required to speak in front of lecturers, teammates, or even potential investors or customers. This process not only involves conveying information, but also requires the ability to articulate the business vision clearly and convincingly. As such, students are repeatedly exposed to the challenges of public speaking, and this becomes a valuable opportunity to develop confidence in their communication (Ausat, 2023; Suherlan, 2023). They learn how to structure effective presentations, organise ideas well, and craft convincing messages. These honed presentation and communication skills have a significant positive impact in entrepreneurship (Harahap et al., 2023; Sutrisno et al., 2023). In the competitive business world, the ability to speak confidently in front of the public, present ideas clearly, and influence others are very important skills (Karneli, 2023). Students who are familiar with various presentation situations during project-based learning have an added advantage when they enter the business world as entrepreneurs.

It is important to point out that project-based learning has great potential in building strong links between universities and the business world, with various positive implications that go beyond the direct educational benefits for students (Chi, 2023). In this approach, students are often involved in business projects involving established local companies or even newly established startups. This collaborative process allows universities to build valuable connections with actors in the business world. By engaging these companies in education, they can provide valuable insights into industry trends, current practices, and challenges faced in day-to-day business. Furthermore, engaging students in projects involving the business world presents an opportunity for them to interact and learn directly from experienced professionals.
It is not just about gaining theoretical insights, but also about gaining an in-depth understanding of how theories are applied in daily practice. Students can gain a better view of business dynamics, industrial policies, and the innovations that take place within them. The importance of this kind of connection between the university and the business world is that it helps connect theory with practice. Students don't just learn business concepts in abstraction, but they see how they are applied in real situations. As a result, they are better equipped to deal with the complex and changing business world after graduation. Thus, in addition to providing direct benefits in terms of education, the project-based learning approach also helps strengthen the bond between the university and the business world, generates valuable co-operation, and helps prepare students for success in the real business world (Audreylia & Ekadjaja, 2014).

In addition to the aforementioned benefits, it is important to recognise that a project-based learning approach also has a significant impact on the development of proactivity and initiative in students, which are valuable assets in a dynamic entrepreneurial context. In a project-based learning environment, students are given greater responsibility for managing their own learning (Almulla, 2020). They are given the freedom to identify problems relevant to the project they are working on and seek effective solutions. This process encourages them to be proactive in overcoming obstacles that may arise in their projects, and take initiative steps to achieve the set goals. This proactive and initiative attitude has great relevance in the world of entrepreneurship, where entrepreneurs need to be able to identify opportunities, overcome obstacles, and take quick and appropriate actions to achieve their business goals. The ability to take control of their own learning process and to seek solutions in complex situations are invaluable skills in this context. Thus, a project-based learning approach is not only about providing practical knowledge, but also about helping students develop the mental attitude required in the dynamic world of entrepreneurship. Students who have become accustomed to this proactive attitude and initiative will have an added advantage in facing business challenges and achieving success in their entrepreneurial endeavours (Suehara Vanity M. Barit, 2023).

In order to draw a comprehensive conclusion, it is important to highlight that the project-based learning approach in student entrepreneurship education has many significant benefits that encapsulate a number of important aspects. Firstly, this approach integrates real-life experience, in-depth practical skills development, enhanced creativity, and proactive attitude building in the education of university students. This is a powerful combination as it results in graduates who are better prepared to face the realities of the highly competitive business world. Students are familiar with real-world situations and problems, enabling them to adapt quickly and take the steps needed to achieve their business goals. Secondly, it should be noted that this
approach also provides significant benefits to the educational institutions themselves. By engaging students in business projects involving local companies or other business entities, universities can build valuable connections with the business world. This can create opportunities for knowledge exchange, joint research, and employment opportunities for students. In addition, universities can also benefit in terms of reputation and image, by demonstrating their active involvement in supporting real-world relevant education. This can make universities more attractive to prospective students and potential business partners. Overall, it is important to continue to encourage and develop project-based learning approaches in student entrepreneurship education due to its widespread and sustainable benefits. By providing practical insights, developing essential skills, and building necessary attitudes, this method helps students to succeed in the dynamic world of entrepreneurship. Moreover, it also benefits universities by strengthening ties with the business world and creating graduates who are ready to face challenges in modern entrepreneurship.

CONCLUSION

Project-based learning plays a crucial role in students' entrepreneurship education. By providing practical experience, building practical skills, developing critical and creative thinking abilities, and stimulating creativity and initiative, it prepares students for the dynamic and competitive business world. In addition, project-based learning strengthens the connection between the university and the business world, enables students to understand current market dynamics, and strengthens their social and communication skills. In an era where innovation and rapid adaptation are key to success in entrepreneurship, project-based learning is an important cornerstone in equipping students with the skills and knowledge they need to become successful entrepreneurs.

RECOMMENDATIONS

Suggestions that can be given for the results of this study include: 1) Continue to strengthen the integration of project-based learning in the entrepreneurship curriculum. Faculties and educational institutions should prioritise the development and implementation of relevant business projects to provide practical experience to students. 2) Facilitate connections with the business world. Universities should be active in building partnerships with local companies, startups, and business communities to provide students with real-world opportunities to execute their business projects. 3) Provide mentorship support. Students can greatly benefit from guidance and encouragement from experienced entrepreneurs or lecturers who are experts in
entrepreneurship. This kind of support can help them overcome obstacles and pursue opportunities. 4) Continuous evaluation and improvement. Universities should conduct regular evaluations of project-based learning programmes to ensure that they remain relevant to changes in the business world and meet student needs. 5) Encourage innovation and experimentation. Entrepreneurship education should facilitate experimentation and innovation among students, encouraging them to think outside the box and create novel solutions to business challenges. With a growing commitment to project-based learning, universities can make a significant contribution to creating innovative and successful young entrepreneurs who will shape the future of global entrepreneurship.

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REFERENCES


