

Article

# Using the Case Study Method in Undergraduate Entrepreneurship Education

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**Abstract:** Various methods are used in entrepreneurship education. However, the effectiveness of these methods in inculcating the much-needed improvement in entrepreneurial knowledge, skills, intentions, and ultimately entrepreneurial activity is underexplored in literature. Following the action research approach in an undergraduate entrepreneurship class of 165 students, the study investigated the students' perceptions of the case method's effectiveness in improving their entrepreneurial knowledge, skills, intentions, and ultimately entrepreneurial activity. A combination of observation methods and semi-structured interviews were used to collect qualitative data. Observation data revealed a lack of physical space for facilitator mobility and low levels of engagement by students as some of the major challenges encountered when implementing the case study method in large classes. An analysis of semi-structured interview data revealed contextual relevance, building resilience, critical thinking, innovation and creativity, entrepreneurial motivation, entrepreneurial career development, and inspiration as some of the effective contributions of using the case study method in entrepreneurship education. The study recommends that, to further enhance the effectiveness of the case study method, the environment in which case studies are applied needs to be improved to ensure that there is enough physical space for lecturer mobility and interaction with students during case-study discussions.

**Keywords:** entrepreneurship education; case study method; South Africa



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## 1. Introduction and Background to the Study

The role of entrepreneurship as an engine for economic growth, employment creation, poverty alleviation, and the overall progress of nations is held in high regard in the literature (Ajide and Dada 2023; Gomes et al. 2023; Johannisson 2016). As a result, societies in every continent have engaged in systematic efforts to increase entrepreneurial activity in their communities. This includes a global trend towards the systematic introduction of entrepreneurship education in schools and institutions of higher education to inculcate entrepreneurial thinking and skills among the youth (Tiberius and Weyland 2023). This global trend of entrepreneurship education has challenged academics, scholars, and researchers to develop better theories for understanding how entrepreneurship education policies and practices impact the inculcation of much-needed entrepreneurial skills and ultimately entrepreneurial activity among the youth. This trend extends to various fields of study, including psychology, education management, and teaching and learning methods, where scholars have accepted the challenge to advance our understanding of how teaching methods and approaches shape the development of entrepreneurial intentions, skills, knowledge, and ultimately entrepreneurial activity.

This research is important because the positive role of entrepreneurship in addressing economic growth challenges, unemployment, poverty, and inequality is widely expressed in the literature. Despite this, South Africa experiences low entrepreneurial activity when compared to similar countries such as those in the BRICS block and other African countries such as Nigeria (Pitan and Muller 2023; Tahir and Burki 2023). Part of the reason why

the country experiences such low entrepreneurial activity is the lack of entrepreneurial thinking and skills. The Global Entrepreneurship Monitor (GEM) reported that South Africa experiences a low rate of entrepreneurial activity, with only 9.2% of the adult population involved in starting up new businesses (Bowmaker-Falconer and Meyer 2022). This level of entrepreneurial activity is low when compared to other similar efficiency driven economies, whose average rate of entrepreneurial activity is at 15%. One of the reasons cited for the low entrepreneurial activity in South Africa is that the education system is not sufficiently promoting entrepreneurial thinking and skills, and this limits the individuals' preparedness to engage in business start-ups (Bowmaker-Falconer and Meyer 2022).

To address this problem, many institutions of higher learning introduced entrepreneurship into their curriculum. In the quest to inculcate entrepreneurial skills and knowledge, various teaching and learning methods are used. These include the lecture method, seminars, group projects, guest speakers, and the case study method among others (Arasti et al. 2012). However, the effectiveness of these teaching approaches is yet to be assessed, especially from the students' perspectives at the undergraduate level. In their study of Master of Business Administration education, Farashahi and Tajeddin (2018) revealed that the case study method is among the most widely used methods of teaching and learning in entrepreneurship, but its effectiveness in inculcating entrepreneurial skills and knowledge at undergraduate levels has not been evaluated. Against this backdrop, this study seeks to investigate one of the widely used approaches in teaching entrepreneurship, the case study approach.

## 2. Literature Review

An analysis of empirical studies on entrepreneurship education revealed that various teaching and learning methods are being used. These include the lecture method, hackathons, business simulations, in-service training, and the case study method, among others (Avila-Merino 2019; Chen et al. 2023; Neck et al. 2014). Avila-Merino (2019) revealed that the use of traditional teaching methods, such as the lecture method, are not effective in inculcating entrepreneurship and argued for practice-based teaching and learning methods, such as the use of hackathons, in entrepreneurship education. Similarly, Chen et al. (2023) revealed that methods such as business simulations, which are practice-based, are effective in entrepreneurship education. Miço and Cungu (2023) expressed the need to embrace non-traditional teaching and learning methods to develop entrepreneurial competences among students. Similar sentiments are echoed in other similar studies such as Neck et al. (2014), Mann et al. (2021), Koropogui et al. (2024), Motta and Galina (2023), among others. While there is a consensus in the literature that practice-based entrepreneurship education is effective in inculcating entrepreneurship education, these studies are highly fragmented and cover diverse contexts, with a strong orientation toward Western contexts. At the same time, there is lack of empirical evidence of the effectiveness of these methods in African contexts. Practice-based entrepreneurship education entails the use of practical tools and methods in teaching entrepreneurship (Neck et al. 2014). Empirical evidence from African contexts is required to assess the effectiveness of practice-based methods in entrepreneurship education, including the case study method.

Previous studies (for example see, Neck et al. 2014; Welsh et al. 2016; Miço and Cungu 2023; Musara 2015) have assessed the effectiveness of different teaching methods in different contexts. Neck et al. (2014) revealed that practice-based methods for entrepreneurship education can increase students' entrepreneurial intention, that is the desire to pursue entrepreneurial activity. Similar assertions were expressed by Welsh et al. (2016), who argued that entrepreneurship education should be seen as a method that seeks to transform the intentions, attitudes, and practices of students. In another study, Musara (2015) investigated the interaction effects of personality dimensions and teaching and learning methods in entrepreneurship on the ultimate development of entrepreneurial thinking among students. Musara (2015) revealed that personality, as moderated by teaching and learning methods in entrepreneurship, influences students' development of entrepreneurial

intentions. Other recent studies, such as [Bell and Bell \(2020\)](#), [Blanckesteijn et al. \(2021\)](#), and [Liu et al. \(2021\)](#), among others, have emphasized the important role of practice-based entrepreneurship education in developing entrepreneurship skills and knowledge. These studies, among others, affirm that teaching methods influence the development of students' entrepreneurship skills, knowledge, and attitude. However, a knowledge gap in the extant literature relates to whether teaching methods such as the case study approach are effective in inculcating entrepreneurial skills among students in contexts such as the South African Higher Education sector. Furthermore, the literature is unclear as to how participants in entrepreneurship education use the information, knowledge, and skills obtained from teaching and learning activities such as the case study method to engage in entrepreneurial activity.

Endeavors to transform and improve the effectiveness of entrepreneurship education are widely expressed in the literature (for example, see [Mars and Rios-Aguilar 2010](#); [Neck et al. 2014](#); [Welsh et al. 2016](#); [Musara 2015](#)). While studies such as [Rebeiz \(2011\)](#) provided evidence that the case study approach, such as the Harvard Case Method in Business Teaching of Master of Business Administration students, is effective, the effectiveness of the case study method among undergraduate students in South African Higher Education context remains understudied. Furthermore, a gap in the literature exists as to how students utilized the knowledge and skills obtained through case study analysis to engage in entrepreneurial activity. Against this background, this study seeks to investigate the effectiveness of the case study method in teaching entrepreneurship as well as to establish how students utilize the knowledge and skills obtained from case studies to engage in entrepreneurial activity.

The broad field of entrepreneurship education seeks to impart students with the skills and knowledge to actively participate in entrepreneurial activity to address the challenges of unemployment, poverty, and inequality. Despite many students who undertake entrepreneurial education in South Africa, there is a low level of entrepreneurial activity among the youth. The Global Entrepreneurship Monitor report (GEM) (2014–2015) reported that only 23.3% of the youth in South Africa are engaged in entrepreneurial activity ([Herrington et al. 2015](#)). This participation in entrepreneurship is among the lowest in Africa, especially when compared to countries such as Malawi and Uganda with 55.2% and 55.4%, respectively. This is concerning given the dire need for youth participation in economic activity to address economic growth challenges, unemployment, poverty, and income inequality in the country. Part of the challenge is to understand how teaching methods are used to inculcate entrepreneurial skills and knowledge that lead to youth participation in entrepreneurial activity.

Previous studies (for example, see [Neck et al. 2014](#); [Welsh et al. 2016](#); [Musara 2015](#)) reported that practice-based entrepreneurial education has an enormous potential in inculcating entrepreneurial skills and knowledge. What we do not know is whether teaching methods such as the case study approach are effective in inculcating entrepreneurial skills among the youth in South Africa. Therefore, the main questions are:

- What are the students' perceptions regarding the effectiveness of the case study method in inculcating entrepreneurial skills and knowledge among the participants in entrepreneurship education, and
- How do the participants use the skills and knowledge drawn from case studies to engage in entrepreneurial activity?

By interrogating the students' perceptions regarding the use of case studies in entrepreneurial education, this paper gives students a voice in their teaching and learning activities. As noted in [Cook-Sather \(2020\)](#), giving students a voice in their own learning activity is key for the co-creation and transformation of teaching and learning. Knowledge about the effectiveness of the case study approach in inculcating entrepreneurial skills and knowledge among the youth may contribute towards endeavors to improve the effectiveness of entrepreneurial education to facilitate the much-needed increase in youth engagement in entrepreneurial activity.

### 3. Methodology

Action research was conducted in this study. According to [Johnson and Christensen \(2019\)](#), the major defining characteristic of action research is that it involves researching the researcher's practice to bridge the gap between theory and practice. The purpose of action research in education is to improve teaching and learning through collaborative, reflective, and problem-solving approaches for investigating classroom practice. In this study, the classroom practice investigated is the use of case studies to develop entrepreneurial competencies among students. A collaborative approach was employed that collected students' perceptions of the effectiveness of the case study method towards developing their entrepreneurial competencies. Thus, following the action research strategy, the researcher engaged in professional learning about their practice by following the action research process of planning, acting, developing, and reflecting on their practice. The planning phase involved designing the curriculum and integrating the case study approach into the module curriculum. This involved identifying relevant case studies used in the module and planning pre-class, in-class, and post-class activities. In the pre-class activities, students were given case studies to read individually before coming to class. For in-class activities, the lecturer engaged in oral discussions with students to summarize and analyze the case studies, and then addressed questions related to the case study. A combination of group activities and individual activities was used during the case study analysis. Observation notes were taken during the in-class activities. The in-class activities constituted the acting and developing phases of the action research process. The post-class activities included assessments and reflection exercises. The reflections were used to inform further planning and actions following the iterative and continuous action research process.

Action research is critical in this study to transform teaching and learning in entrepreneurship education. It is aligned with the transformative research paradigm ([Chilisa 2012](#)), which seeks to transform the status quo. In the context of this study, the transformation of teaching and learning in entrepreneurship education is critical as a tool for addressing issues of low economic growth, unemployment, poverty, and inequality.

#### 3.1. The Study Context

Action research generates localized findings through localized action ([Shani and Coghlan 2021](#)); thus, understanding the context of the study is critical. The study was conducted within the context of a newly established public institution of higher education in South Africa, using Bachelor of Commerce Students in their second year of study who had enrolled on the Entrepreneurship Modules. The institution was opened in 2014, with the first cohort of Bachelor of Commerce Students being enrolled in 2018. Students in the Bachelor of Commerce Studies take the entrepreneurship modules for the first time in their second year of study. Therefore, the study used 2nd-year entrepreneurship students from the Bachelor of Commerce program.

The case study method is one of the teaching and learning methods used in the entrepreneurship module. The purpose of the entrepreneurship module used in this study is to equip students with entrepreneurial knowledge and the skills needed to engage in entrepreneurial activity through new business start-ups. The competences to be developed in this module include innovation and creativity, opportunity recognition, risk-taking, self-confidence, flexibility, adaptability, and teamwork and leadership. In this module, case study analysis is included in both formative and summative assessments. The case study method is one of the teaching and learning methods that is widely used in entrepreneurship education ([Rebeiz 2011](#); [Boldureanu et al. 2020](#)), hence it has been adopted in the entrepreneurship module used in this study. However, the effectiveness of the case study method among undergraduate students in the context of African public institutions of higher learning is yet to be determined.

Since the study was conducted in a newly established public institution of higher learning, innovative and effective teaching and learning approaches are sought after as the institution is still finding ways to develop its unique footprint. Thus, an investigation

into the effectiveness of the case study method in entrepreneurship education provided some new insights into how the institution could position itself in terms of teaching and learning effectiveness.

### 3.2. Data Collection

Qualitative data were collected using observation and semi-structured interview techniques. To conduct observation, the case study method was applied during three classroom sessions in which the students' performance in the case study analysis, class participation, levels of engagement and attitudes towards the case studies presented were observed and noted. Observation is a data collection method that is focused on understanding behavior and interactions as they unfold in naturalistic and real-time settings (Katz-Buonincontro and Anderson 2020). The adapted version of the Teaching Dimensions Observation Protocol (ATDOP) (Hora and Ferrare 2010). was used to guide the observation process and note taking. Several studies in education have used the teaching dimensions observation protocol (TDOP) and confirmed its ability to facilitate consistency in observation (for examples see Hora and Ferrare 2010; Anwar and Menekse 2021). The items in the ATDOP were designed to address the research questions of this study. In this regard, understanding the students' interaction with and behavior towards the case study method can go a long way in deciphering the effectiveness of the method, alongside how students use the knowledge obtained from the case study to engage in entrepreneurial activity. This is important in informing future teaching and learning practices in entrepreneurship education using the case study method.

Three different case studies were used in each session. These cases were selected based on their relevance to each week's topic and were available in public domain sources. The case studies were made available to students via the Moodle Learning Management System one week before the class session date. This was meant to allow students the opportunity to read the case study before attending the class session. The three case studies used are shown in Table 1.

**Table 1.** Case Studies.

Session Topic	Case Study	Source
Sources of New Business Ideas	Dry Baths: the future of hygiene	<a href="https://www.wwf.org.za/?20643/Dry-Baths-the-future-of-hygiene">https://www.wwf.org.za/?20643/Dry-Baths-the-future-of-hygiene</a> , accessed on 2 August 2022
Developing a Business Model	Facebook Case Study	<a href="https://www.smartinsights.com/social-media-marketing/facebook-marketing/facebook-case-study/">https://www.smartinsights.com/social-media-marketing/facebook-marketing/facebook-case-study/</a> accessed on 2 August 2022
Social Entrepreneurship	Project Masiluleke	<a href="https://vol10.cases.som.yale.edu/project-m/">https://vol10.cases.som.yale.edu/project-m/</a> accessed on 2 August 2022

To triangulate and complement the data collected through observation, semi-structured interviews were conducted with a sample of seven (7) students in order to solicit their perceptions regarding the effectiveness of the case study method in entrepreneurship education. Through concurrent data collection and data analysis, the researcher observed that they had reached data saturation after interviewing five (5) students. Data saturation is a widely used criteria for determining the sample size in qualitative studies (Daher 2023). It involves concurrent data collection and analysis up to a point where further data collecting yields no new properties or theoretical insights (Daher 2023). To confirm data saturation, after the initial five (5) interviews, a further two (2) interviews were conducted and these did not yield any new properties or theoretical insights; thus, the final sample size was seven (7).

Semi-structured interviews were used to collect data. Semi-structured interviews involve asking open-ended and probing questions about a phenomenon of interest (Creswell 2014). Mears (2017, p. 183) noted that semi-structured interviews enable the researcher to

“learn what another person knows about a topic, to discover and record what that person has experienced, what he or she thinks or feels about it, and what significance or meaning it might have”. For this reason, semi-structured interviews were used to learn about the student’s perception of the effectiveness of the case study method, their experiences, and feelings about the case study method as well as how they intend to use the knowledge gained from case studies in their entrepreneurial journey. During the in-depth interviews, participants were asked their perceptions regarding:

- The suitability of the case study methodology to their learning contexts.
- The extent to which the case study method increased the level of knowledge and skills on entrepreneurship.
- The development of critical thinking, creativity, and innovation skills.
- The motivation to engage in entrepreneurship activity is drawn from case studies analyzed.
- Their understanding of entrepreneurship career issues.
- Their ability to overcome entrepreneurship challenges.
- The acquisition of self-confidence and self-efficacy to engage in entrepreneurial activity.

Probing questions were also included in the interview to obtain an in-depth understanding of the participants’ perceptions regarding the effectiveness of the case study method in entrepreneurship education. The interviews were audio-recorded with the permission of the participants. In cases where the participants did not wish to be audio recorded, detailed notes were taken during the interviews. Each interview took between 25 to 30 min. Data collection took place in August 2022.

### 3.3. Data Analysis

Data collected were transcribed from their original medium (audio recordings, observation notes) into a text that could then be analyzed (Du Plooy-Cilliers 2014). The raw data were then grouped and formed part of common themes, which were analyzed to determine the students’ perceptions of the effectiveness of the case study method of teaching entrepreneurship.

Thematic content analysis was used to analyze the data. Using this qualitative data analysis method, the common themes that emerge from the data were identified and interpreted to explore the students’ perceptions of the effectiveness of the case study method in improving their entrepreneurial skills and knowledge. Thus, the themes were used to identify possible improvements to the processes of teaching and learning in entrepreneurship education.

The following thematic content analysis steps and procedures, as outlined by Du Plooy-Cilliers (2014), were followed. The steps and procedures are shown in Table 2.

**Table 2.** Steps and procedures in thematic content analysis.

Steps	Description	Procedures
1.	Data preparation	Transcription of the collected data including any other notes, such as non-verbal cues, where relevant.
2.	Defining coding units to be analysed	Examine the transcribed data closely and break it down into chunks of text which form part of concepts or ideas.
3.	Coding scheme and category development	Make sure that each code, theme, and category is properly defined and exhaustive, mutually exclusive, and specific.
4.	Testing the coding scheme	Use a sample of text to confirm the consistency and clarity of the coding scheme.

Table 2. Cont.

Steps	Description	Procedures
5.	Coding of all text	Use open coding, axial coding, and selective coding to analyse the data as follows: <ol style="list-style-type: none"> <li>1. Open coding—grouping identified smaller concepts together into bigger categories of concepts.</li> <li>2. Followed by axial coding—looking for connections and relationships across the identified categories from open coding, and possibly merging some categories.</li> <li>3. Followed by selective coding—selecting the core categories or themes that “closely correspond with the typical behaviour that has been observed in the field or codes that most adequately describe the central notion of the research study” (Du Plooy-Cilliers 2014).</li> </ol>
6.	Assess the coding consistency	Recheck the coding for consistency.
7.	Interpreting the data	Conclude from the analysed data.
8.	Report the methods and findings	Write a report on the methods and findings from the data.

#### 4. Findings

The findings of this study are divided into two major sections (Observation findings and In-depth interview findings). The observation findings cover class attendance, class participation, and levels of engagement as well as students’ performance in case study analysis. The semi-structured interviews findings cover student’s perceptions regarding the case study method’s suitability to the learning context, entrepreneurship knowledge and skills gained from case studies, motivation to engage in entrepreneurship activity, understanding of entrepreneurship career issues, ability to overcome entrepreneurship challenges, and the acquisition of self-confidence and self-efficacy to engage in entrepreneurial activity.

##### 4.1. Observation Findings

###### 4.1.1. Class Attendance

On average, about 78% of students attended all three class sessions in which the case study method was applied. Table 3 shows class attendance during the three sessions in which the case study method was employed.

Table 3. Class Attendance.

Session No.	Session Type	Session Topic	Case Study	Raw Attendance (Out of 165)	Percentage Attendance
1.	Online	Sources of New Business Ideas	Dry Baths: the future of hygiene	124	75%
2.	F2F	Developing a Business Model	Facebook Case Study	118	71%
3.	Online	Social Entrepreneurship	Project Masiluleke	144	87%
<b>Average Attendance</b>					<b>78%</b>

The highest class attendance was observed in session three (87%) while the lowest class attendance was observed in session two (71%). When compared to other sessions in which the case study method was not used, class attendance in all three sessions was good.

#### 4.1.2. Class Participation and Engagement

Active participation and engagement were observed by taking stock of the students who responded to the lecturer's oral questions during the session. Participation in the class discussion was dominated by a few students. An analysis of the participation notes shows that 12, 26, and 14 students responded directly to the oral questions posed during sessions 1, 2, and 3, respectively, as shown in Table 4.

**Table 4.** Class Participation and engagement.

Session No.	Session Type	Session Topic	Case Study	Number of Students Who Responded to Oral Questions	Raw Attendance	Percentage Participation and Engagement
1.	Online	Sources of New Business Ideas	Dry Baths: the future of hygiene	12	124	10%
2.	F2F	Developing a Business Model	Facebook Case Study	26	118	22%
3.	Online	Social Entrepreneurship	Project Masiluleke	14	144	10%
<b>The average level of participation and engagement</b>						<b>14%</b>

The highest level of participation was recorded in session two, which was held on a face-to-face basis. Students had an opportunity to engage with each other during group discussions in face-to-face sessions and break-out rooms in online sessions. In both instances, the levels of active participation were lowest during online classes. The low levels of student engagement could be attributed to the class size, which makes it impossible for all the students to actively participate. The class participation and engagement levels were used to reflect on students' acceptance and levels of excitement with the use of case study method in the module.

#### 4.1.3. Students' Performance in the Case Study Analysis

Student performance in case study analysis was observed using the end-of-session Multiple Choice and Short Answer quizzes. Since the quizzes were not compulsory, some of the students did not complete the quizzes, resulting in the number of attempts being 107, 78, and 102 in sessions 1, 2, and 3, respectively, as shown in Table 5. The number of attempts is higher in online classes than in face-to-face classes. This could be attributed to the fact that the quizzes for both online and face-to-face classes were administered on an online platform; some students during the face-to-face session reported a lack of access to quizzes either due to not having an internet-enabled device in class or poor internet connectivity.

**Table 5.** Students' performance in the case study analysis.

Session No.	Session Type	Session Topic	Case Study	Number of Attempts	Average Score
1.	Online	Sources of New Business Ideas	Dry Baths: the future of hygiene	107	82%
2.	F2F	Developing a Business Model	Facebook Case Study	78	66%
3.	Online	Social Entrepreneurship	Project Masiluleke	102	54%

The highest level of performance was recorded in Section 1, with an average score of 82%, while the lowest level of performance was recorded in Section 3, with an average score of 54%.

#### 4.1.4. The Physical/Online Class Environment

The face-to-face class session was conducted in a large-racked classroom setting with a seating capacity of 200 seats. This setting made it impossible for the lecturer to move around and monitor students’ discussions during group discussions. On the other hand, online classes were held on Microsoft Teams. While the mobility of the lecturer during break-out room discussions was not a problem, the lecturer could not observe the physical reactions of the students during discussions as students were not required to switch on their videos during discussions.

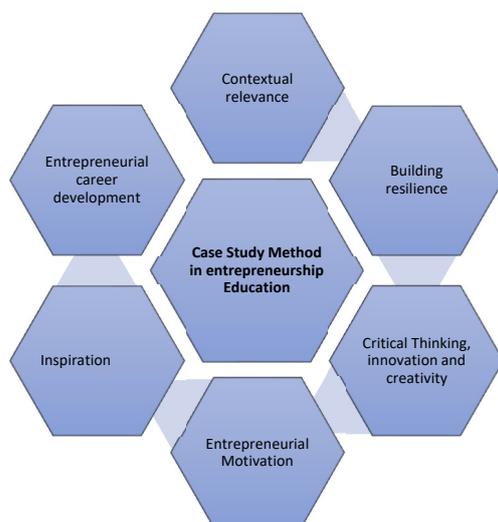
#### 4.2. Semi-Structured Interview Findings

Semi-structured interviews were conducted with a sample of five (5) students who volunteered to participate in the interview. The sample consisted of two female and three male participants aged between 20 and 23 years. All the participants were black Africans born in South Africa. Table 6 shows the participant’s background information.

**Table 6.** Participant Background Information.

Participant No.	Gender	Age
1.	Female	20
2.	Male	23
3.	Male	21
4.	Female	23
5.	Male	20
6.	Female	24
7.	Female	22

The analysis of semi-structured interviews reviewed six major themes regarding the effectiveness of using the case study method in entrepreneurship education, namely contextual relevance, building resilience, Critical Thinking, Innovation and Creativity, Entrepreneurial Motivation, Entrepreneurial career development, and Inspiration as shown in Figure 1.



**Figure 1.** Themes on the effectiveness of the case study method.

#### 4.2.1. Contextual Relevance

The participants interviewed in this study confirmed that the case study method is relevant and applicable to their learning contexts. However, a major theme emerged that students prefer case studies that are drawn from familiar contexts and about people who they can relate with. For example, Participant 2 indicated that they learned a lot from the story of Ludwick Marishane (Dry Baths: the future of hygiene) primarily because they are also originally from Limpopo so they could strongly relate to the story. In this regard, Participant 2 said, "...the story of Ludwick Marishane was so personal to me, I come from Limpopo, and I could relate to the story at a personal level". Participants 3 and 5 who both came from KwaZulu Natal expressed similar sentiments regarding the Project Masiluleke case study, which is based on a story from KwaZulu Natal. This finding suggests the need for contextually relevant case studies in entrepreneurship education.

#### 4.2.2. Building Resilience

An analysis of data in this study revealed that the application of the case study method in entrepreneurship education helps to build resilience among students. In this regard, Participant 1 said, "The case studies assisted me in transforming challenging circumstances into successful initiatives". Furthermore, the participant expressed that case studies enabled them to understand the notions of turning difficult circumstances into opportunities when they said, "...Through this, I can now comprehend that even the most difficult circumstance can be examined and turned into an opportunity" (Participant 1).

From the case studies presented to students, participants indicated that they learned more about resilience from the story of Ludwick Marishane, founder of DryBath. Participant 4 expressed this strongly when they said, "...I want to be like Ludwick Marishane because despite the challenges he experienced he kept strong and pushing until he succeeded". Similar sentiments were also expressed by participants 2, 3, 5, and 7.

#### 4.2.3. Critical Thinking, Innovation, and Creativity

Among the skills highlighted by participants, critical thinking, innovation, and creativity were the most popular skills drawn from case studies. Participant 1 indicated, "...I think through analyzing case studies and the good scores that I got, I am now a critical thinker". Furthermore, innovation and creativity emerged as other skills that emerged from the case study analysis. Specifically, Participant 4 indicated that the Facebook case study has taught him "...how to be creative and innovative to make more money". Similarly, Participant 3 noted that "...the way the founders of Project Masiluleke used technology in addressing issues of HIV/AIDS was very innovative and creative. I am now looking for opportunities to apply their techniques". These sentiments indicate that students were inspired to be creative and innovative through the stories from the case studies that they analyzed.

#### 4.2.4. Entrepreneurial Motivation

Entrepreneurial motivation is one of the outcomes that participants reported gaining from the case studies. It is interesting to note that all participants confirmed that the case studies used in this research project motivated them to start their businesses. Participant 2 strongly emphasized this theme when he said, "...I am so motivated to start my own business, if my homeboy did it, I can also do it and succeed". Similar sentiments were also expressed by Participant 4 who said that "...the Facebook story always motivates me...".

#### 4.2.5. Inspiration

Participants also revealed that, through reading and analyzing case studies, they were inspired to engage in entrepreneurial activities. All participants indicated that the case studies used in this research project were very inspirational. Participants 1, 2, 4, 5, and 6 indicated that they were most inspired by the case study on Project Masiluleke and the case study on Dry Baths: the future of hygiene. Only participant 3 indicated that he was inspired by the Facebook case study. Participant 3 said that "...I am fascinated

by technology, therefore I was most inspired by the Facebook case study". This finding suggests the need to understand the students' interests to guide the choices of case studies to use.

#### 4.2.6. Entrepreneurial Career Development

Overall, analysis of the data gathered in this study reveals that the case study method in entrepreneurship education inspires entrepreneurial career development among students. Participants reported that through inspiration from the case studies stories they are now considering entrepreneurship as a career option. For example, Participant 2 indicated that "...the story of Ludwick Marishane inspired me a lot, I am now considering following in his footsteps and starting my own business also". This affirms that the use of case studies in entrepreneurship education has a potential effect on the overall entrepreneurial career development among students.

### 5. Discussions and Conclusions

The study set out to establish the effectiveness of the case study method in entrepreneurship education as well as how participants in entrepreneurship education use the skills and knowledge obtained from case studies in their pursuit of entrepreneurial endeavors. The findings of this study reveal that, from the student's perspective, the case study method in entrepreneurship education addresses some of the entrepreneurship knowledge and skills needs such as critical thinking, innovation, creativity, resilience, motivation, inspiration, and overall entrepreneurial career development. This finding is critical, especially given the importance of critical thinking, innovation, and creativity to entrepreneurial success. Similarly, resilience and motivation in the face of entrepreneurial challenges are important. Thus, the use of the case study method in building these skills and entrepreneurial attributes is very important.

The finding that contextually relevant case studies are preferred by students is very important, considering the current discourse on the decolonization of the curriculum in South African higher education institutions. Decolonization of the curriculum relates to the departure from the current discourse, which is reliant on Eurocentric theories and knowledge (Ncanywa 2023). These Eurocentric theories are, in most cases, devoid of the African context and their imposition on the African scholar perpetuates social injustices that disadvantage the African student. By using locally sourced case studies, students will be introduced to familiar contexts to which they can easily relate, thus improving their knowledge retention and application. The finding of this study aligns with a study by Woods et al. (2022) who argued for the need for reconstruction of entrepreneurship education by using indigenous pedagogy and learning. Furthermore, this finding is a direct response to the call-in study by Ncanywa (2023), who argued for an Afrocentric curriculum in the South African higher education system.

An exposition of the challenges experienced during the implementation of the case study method in entrepreneurship education is of practical relevance to the continual quest for effective teaching and learning approaches in entrepreneurship education. The environment in which case studies are applied needs to be improved to ensure that there is enough physical space for lecturer mobility and interaction with students during case-study discussions. Furthermore, the application of the case study method requires smaller class sizes. This finding is particularly important in resource-constrained teaching environments, such as South African public institutions of higher learning (Moyo and McKenna 2021; Ncanywa 2023).

The study adds to the existing theories of entrepreneurship education by considering the effectiveness of the case study method in teaching entrepreneurship in the quest to improve the overall effectiveness of entrepreneurship education. It is, however, important to acknowledge that this study has its limitations. The major limitation of this the study is that it applies action research to a localized context of a selected public institution of higher learning in South Africa. This implies that the findings may not be generalizable to

other contexts. Second, the study is a qualitative study using a small sample size, albeit one achieving data saturation. The implication of this is that further quantitative studies can be conducted to increase the generalizability of the study findings. Overall, it is envisaged that the findings of this study will guide future studies and possible improvements to the processes of teaching and learning in entrepreneurship education, and ultimately lead to economic growth, poverty alleviation, and employment creation via increased entrepreneurial activities.

Even though the case study method addresses some of the entrepreneurial skills, some entrepreneurial skills are not addressed. Furthermore, students have different learning styles, some of which are not compatible with the case study method. Therefore, there is a need to complement the case study method with other practice-based methods of teaching entrepreneurship such as Business Simulation and In-Service Training, among others.

While this study has revealed aspects of the effectiveness of the case study method on inculcating entrepreneurial skills and knowledge from the student's perspective, further studies are required to track as well as measure the application of these skills over time. This can be done by conducting quantitative longitudinal studies using alumni as participants. Furthermore, the perspectives of educators regarding their application of the case study method may also be investigated using both qualitative and quantitative research methods.

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## References

- Ajide, Folorunsho. M., and James T. Dada. 2023. Poverty, entrepreneurship, and economic growth in Africa. *Poverty and Public Policy* 15: 199–226. [\[CrossRef\]](#)
- Anwar, Saira, and Muhsin Menekse. 2021. A systematic review of observation protocols used in postsecondary STEM classrooms. *Review of Education* 9: 81–120. [\[CrossRef\]](#)
- Arasti, Zahra, Mansoreh Kiani Falavarjani, and Narges Imanipour. 2012. A Study of Teaching Methods in Entrepreneurship Education for Graduate Students. *Higher Education Studies* 2: 2–10. [\[CrossRef\]](#)
- Avila-Merino, Alfonso. 2019. Learning by doing in business education. Using hackathons to improve the teaching and learning of entrepreneurial skills. *Journal of Entrepreneurship Education* 22: 1–36.
- Bell, Robin, and Heather Bell. 2020. Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. *Journal of Small Business and Enterprise Development* 27: 987–1004. [\[CrossRef\]](#)
- Blankesteijn, Marlous, Bart Bossink, and Peter van der Sijde. 2021. Science-based entrepreneurship education as a means for university-industry technology transfer. *International Entrepreneurship and Management Journal* 17: 779–808. [\[CrossRef\]](#)
- Boldureanu, Gabriela, Alina Măriuca Ionescu, Ana-Maria Bercu, Maria Viorica Bedrule-Grigoruță, and Daniel Boldureanu. 2020. Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability* 12: 1267. [\[CrossRef\]](#)
- Bowmaker-Falconer, Angus, and Natanya Meyer. 2022. *Fostering Entrepreneurial Ecosystem Vitality: Global Entrepreneurship Monitor South Africa 2021/2022 Report*. Stellenbosch: Stellenbosch University.
- Chen, JiaChun, Liangziye Tang, Honghong Tian, Ruiqiu Ou, Jingan Wang, and Quan Chen. 2023. The effect of mobile business simulation games in entrepreneurship education: A quasi-experiment. *Library Hi Tech* 41: 1333–56. [\[CrossRef\]](#)
- Chilisa, Bagele. 2012. *Indigenous Research Methodologies*. Los Angeles: Sage.
- Cook-Sather, Alison. 2020. Respecting voices: How the co-creation of teaching and learning can support academic staff, underrepresented students, and equitable practices. *Higher Education* 79: 885–901. [\[CrossRef\]](#)
- Creswell, John W. 2014. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th ed. Thousand Oaks: Sage.
- Daher, Wajeeh. 2023. Saturation in qualitative educational technology research. *Education Sciences* 13: 98. [\[CrossRef\]](#)
- Du Plooy-Cilliers, Franzél. 2014. Research paradigms and traditions. In *Research Matters*. Edited by F. du Plooy, C. Davis and R.-M. Bezuidenhout. Cape Town: Juta and Company, pp. 18–35.

- Farashahi, Mehdi, and Mahdi Tajeddin. 2018. Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The International Journal of Management Education* 16: 131–42. [[CrossRef](#)]
- Gomes, Sofia, João J. Ferreira, and João M. Lopes. 2023. Entrepreneurial conditions and economic growth in entrepreneurial ecosystems: Evidence from OECD countries. *The International Journal of Entrepreneurship and Innovation* 2023: 1–19. [[CrossRef](#)]
- Herrington, Mike, Jacqui Kew, and Penny Kew. 2015. *Global Entrepreneurship Monitor South Africa Report 2015*. Cape Town: University of Cape Town.
- Hora, Matthew Tadashi, and Joseph J. Ferrare. 2010. *Teaching Dimensions Observation Protocol (TDOP)*. Madison: Wisconsin Center for Education Research, University of Wisconsin–Madison.
- Johannisson, Bengt. 2016. Limits to and prospects of entrepreneurship education in the academic context. *Entrepreneurship and Regional Development* 28: 403–23. [[CrossRef](#)]
- Johnson, R. Burke, and Larry Christensen. 2019. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. New York: Sage publications.
- Katz-Buonincontro, Jen, and Ross C. Anderson. 2020. A review of articles using observation methods to study creativity in education (1980–2018). *The Journal of Creative Behavior* 54: 508–24. [[CrossRef](#)]
- Koropogui, Siba Théodore, Étienne St-Jean, and Safaa Zakariya. 2024. Usefulness of Practice-Based Pedagogical Approaches for Nascent Student Entrepreneurs. *Entrepreneurship Education and Pedagogy* 7: 22–61. [[CrossRef](#)]
- Liu, Haibin, Sadan Kulturel-Konak, and Abdullah Konak. 2021. Key elements and their roles in entrepreneurship education ecosystem: Comparative review and suggestions for sustainability. *Sustainability* 13: 10648. [[CrossRef](#)]
- Mann, Llewellyn, Rosemary Chang, Siva Chandrasekaran, Alicen Coddington, Scott Daniel, Emily Cook, and Timothy D. Smith. 2021. From problem-based learning to practice-based education: A framework for shaping future engineers. *European Journal of Engineering Education* 46: 27–47. [[CrossRef](#)]
- Mars, Matthew M., and Cecilia Rios-Aguilar. 2010. Academic entrepreneurship (re)defined: Significance and implications for the scholarship of higher education. *Higher Education* 59: 441–60. [[CrossRef](#)]
- Mears, Carolyn. 2017. In-depth interviews. In *Research Methods & Methodologies in Education*, 2nd ed. Edited by R. Coe, M. Waring, L. Hedges and J. Arthur. London: Sage.
- Miço, Heliona, and Jonida Cungu. 2023. Entrepreneurship education, a challenging learning process towards entrepreneurial competence in education. *Administrative Sciences* 13: 22. [[CrossRef](#)]
- Motta, Victória Figueiredo, and Simone Vasconcelos Ribeiro Galina. 2023. Experiential learning in entrepreneurship education: A systematic literature review. *Teaching and Teacher Education* 121: 1–12. [[CrossRef](#)]
- Moyo, Temwa, and Sioux McKenna. 2021. Constraints on improving higher education teaching and learning through funding. *South African Journal of Science* 117: 1–7. [[CrossRef](#)] [[PubMed](#)]
- Musara, M. 2015. Inculcating Entrepreneurial Thinking: The interplay between personality and Entrepreneurial education. Paper presented at Fourth International Conference On Advances in Economics, Management and Social Study, Kuala Lumpur, Malaysia, September 26–27.
- Ncanywa, Thobeka. 2023. Eurocentric, Westernized, or Afrocentric curriculum in one university in the Eastern Cape: An entrepreneurship approach. *International Journal of Research in Business and Social Science (2147–4478)* 12: 113–20. [[CrossRef](#)]
- Neck, Heidi M., Patricia G. Greene, and Candida G. Brush. 2014. Practice-based entrepreneurship education using actionable theory. In *Annals of Entrepreneurship Education and Pedagogy–2014*. Drottham: Edward Elgar Publishing.
- Pitan, Oluyomi Susan, and Colette Muller. 2023. Assessment of strategies for preparing graduates for the disruptive workplace: Evidence from Nigeria and South Africa. *Journal of Teaching and Learning for Graduate Employability* 14: 15–30. [[CrossRef](#)]
- Rebeiz, Karim S. 2011. An insider perspective on implementing the Harvard Case Study Method in business teaching. *US-China Education Review A* 5: 591–601.
- Shani, Abraham B., and David Coghlan. 2021. Action research in business and management: A reflective review. *Action Research* 19: 518–41. [[CrossRef](#)]
- Tahir, Muhammad, and Umar Burki. 2023. Entrepreneurship and economic growth: Evidence from the emerging BRICS economies. *Journal of Open Innovation: Technology, Market, and Complexity* 9: 1–7. [[CrossRef](#)]
- Tiberius, Victor, and Michael Weyland. 2023. Entrepreneurship education or entrepreneurship education? A bibliometric analysis. *Journal of Further and Higher Education* 47: 134–49. [[CrossRef](#)]
- Welsh, Dianne HB, William L. Tullar, and Hamid Nemati. 2016. Entrepreneurship education: Process, method, or both? *Journal of Innovation and Knowledge* 1: 125–32. [[CrossRef](#)]
- Woods, Christine, Kiri Dell, and Brigid Carroll. 2022. Decolonizing the business school: Reconstructing the entrepreneurship classroom through indigenizing pedagogy and learning. *Academy of Management Learning and Education* 21: 82–100. [[CrossRef](#)]

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