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Enhancing Entrepreneurial Education in South African Primary and Secondary Schools: Perspectives from Teachers in the Limpopo Province

Abstract: This study has investigated teachers' perspectives on enhancing entrepreneurial education in South African primary and secondary schools in the Limpopo Province. It has been motivated by a gap in the literature that indicated further research was needed. A sample of 101 teachers from rural and township schools employed a quantitative method. Data were collected using a Teachers' Attitudes Towards Entrepreneurship Education questionnaire focusing on the importance of entrepreneurship education within a school context. They were analysed using the Statistical Package for the Social Sciences version 25. The study demonstrated a solid Cronbach alpha reliability score of 0.90 with satisfactory face validity. The results showed that teachers expressed a need for time, training, financial resources, physical resources for classroom use, networking opportunities and sharing best practices to successfully implement entrepreneurship education in schools. It is recommended that entrepreneurship be taught as an individual subject in schools to yield entrepreneurial-minded learners from a young age who will be innovative thinkers, problem solvers, and business-minded.

Keywords: attitude; curriculum; entrepreneurship education; primary and secondary schools

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Introduction

Global research advocates entrepreneurship as the key to economic growth and eradicating unemployment (Adeel, Daniel, Botelho, 2023; Valenciano, Uribe-Toril, Ruiz-Rea, 2019). Over and above this, entrepreneurship education has gained increasing recognition as a pivotal component of modern education systems, equipping students with essential

skills and mindsets for navigating an ever-evolving global economy (Gautam, Singh, 2015; Miço, Cungu, 2023). South Africa, a nation rich in cultural diversity and economic potential (Nyawo, Mashau, 2019), recognises the importance of nurturing a new generation of innovative thinkers and problem solvers (Burton et al., 2022). Consequently, embracing entrepreneurship education aligns South Africa with the global drive for economic growth and job creation and equips students with the critical skills needed to thrive in a dynamic and competitive world economy.

Recognising the economic challenges of youth in South Africa, especially from an economic perspective in the 21st century (Choenyane, 2020), embracing entrepreneurship education has become even more pivotal. The current unemployment rate amongst youth aged 15–35 is over 40% (Statistics South Africa, 2023). In various cases, this has led to mental challenges for young people (Mngoma, Ayonrinde, 2023) and has been linked to suicide in some cases (Phiri, Mukuka, 2017). This situation calls for South Africa to act and support its young people and align with the global perspective that advocates entrepreneurship as a catalyst for economic growth and job creation. It has been incorporated into the national curriculum; nevertheless, its integration has proven to be an intricate undertaking (Chimucheka, 2014), albeit not as an individual subject (Du Toit, Gaotlhobogwe, 2018). This absence of individual subject status presents potential challenges, including a fragmented integration of entrepreneurship concepts within existing curricula, diminished emphasis on its significance, limited allocated teaching time, and complications in crafting comprehensive and specialised learning experiences for students (Lackeus, 2015). Teachers, as facilitators, play a pivotal role in guiding students through problem-solving endeavours (Mandal, 2018), and Netshidzivhani and Molaudzi (2024) note that qualified teachers, among other factors, positively influence student performance.

It is noteworthy that the engagement of teachers in the curriculum reform process and their willingness to assume responsibility for the modifications can lead to an enhanced understanding of reform objectives and heightened commitment to its implementation (Huizinga, Nieveen, Handelzalts, 2019). Recognising teachers' role in shaping the curriculum and pedagogical approaches, Nani (2016) highlights their influence, aligning with North's (2002) proposition that teachers should participate in curriculum design.

This study examines teachers' perspectives on enhancing entrepreneurial education in South African primary and secondary schools in the Limpopo Province. It was motivated by Johansen (2018a), who argued that further study is required to examine teachers' attitudes towards enhancing entrepreneurial education, which is a gap in the literature to which this study intends to contribute. The Teachers' Attitudes Towards Entrepreneurship Education (TATEE) questionnaire was used to determine perceptions of its importance within the school context.

Literature review

Entrepreneurship education

Entrepreneurship education, rooted in its recognised role as an economic catalyst (Adeel, Daniel, Botelho, 2023), has gained prominence in education systems globally (Valenciano, Uribe-Toril, Ruiz-Rea, 2019). Emphasising its impact on student motivation and engagement, Dorji (2021) supports introducing entrepreneurship content into primary and

secondary schools. Adenutsi (2023) underscores its crucial role in job creation, income generation, empowerment and poverty reduction in low-income economies, advocating policy measures and intervention programs aligned with the objective of welfare improvements to foster high-income generating job opportunities and alleviate poverty. Adeel, Daniel and Botelho (2023) highlight students' ability to identify business prospects, showcasing the potential for recognising opportunities and pursuing ventures. Entrepreneurship education capitalises on economic potential, enriching students' learning experiences and contributing to economic growth.

Entrepreneurship education emerges as a potent force in cultivating 21st-century skills (Tarhan, 2021), gaining prioritisation in countries like Poland with support from assessments such as PISA and TIMSS (Adeel, Daniel, Botelho, 2023). Its influence extends to character development and fostering an entrepreneurial culture (Gautam, Singh, 2015), aligning with Hardie, Highfield and Lee's (2020) advocacy for its role in preparing students for an unpredictable future. Despite its acknowledged benefits, challenges persist. Miço and Cungu (2023) stress the need for teachers to master concepts through specialised training, while Zen et al. (2023) highlight a gap between theoretical importance and practical integration, extending concerns to primary and high schools. The Global Entrepreneurship Monitor (2023) expresses worry over the widespread absence of entrepreneurship education, and Dorji (2021) notes its limited integration into textbooks. The recommendation to improve existing textbook content includes experiential learning opportunities and integrating related topics into primary and secondary school textbooks, suggesting a proactive approach to embedding entrepreneurship education throughout the educational system (Dorji, 2021). Despite challenges, its significance in fostering skills, innovation, and economic progress remains a central and resounding theme.

Entrepreneurship education in South Africa

Entrepreneurship education in South Africa has gained recognition and implementation, with notable studies highlighting its role in fostering success for small and medium enterprises (Chimucheka, 2014). Rosário and Raimundo (2024) state that providing the proper education at secondary and post-secondary levels can increase the number of creative individuals with entrepreneurial capabilities. He et al. (2024) affirm that entrepreneurship education significantly enhances established businesses' performance by improving their perceived capabilities and opportunities, contributing to the existing research on its impact across various stages of entrepreneurial business development. Olotuase, Brijlal and Yan (2023) emphasise that a curriculum that is not well aligned with this context may not achieve the desired outcomes, highlighting the importance of thorough contextualisation considering national, local and institutional factors. Thus, the collective findings underscore the vital role of entrepreneurship education in South Africa, not only in fostering success for small and medium enterprises but also in contributing to the development of creative individuals with entrepreneurial capabilities.

However, there are challenges in fully implementing it as a standalone subject in South Africa (North, 2002). Ncube (2022) notes that the current curricula need to ensure the development of an entrepreneurial mindset among students. The challenges include resource constraints, particularly the shortage of experienced and trained teachers, identified as a significant inhibiting factor. Ngcobo and Khumalo (2022) identified challenges in

entrepreneurship adoption, encompassing financial constraints, its absence in state schools and insufficient support, proposing that organisations such as the National Youth Development Agency and the Department of Trade and Industry undertake robust media-based awareness campaigns targeting students and youth. Despite incorporating entrepreneurship into the fundamental education curriculum, the absence of standalone subject status brings challenges, such as fragmented integration and limited teaching time (Lackeus, 2015). In light of these challenges, Chimucheka (2014) underscores its vital importance in mitigating low entrepreneurial activity and fostering economic growth in South Africa, emphasising the need for its recognition as a standalone subject (Du Toit, Gaotlhobogwe, 2018). Thus, the imperative to establish entrepreneurship as a standalone subject is clear, marking a crucial step for South Africa's educational landscape.

Support for implementing entrepreneurship education: teachers' perceptions

Supporting teachers is pivotal in education delivery and is essential for effective entrepreneurship education (Mogliacci, Raanhuis, Howell, 2016). Teacher support is crucial for it to be effective, with engagement in curriculum development-boosting confidence and commitment (Altun, 2017; Mogliacci, Raanhuis, Howell, 2016). Ongoing teacher training and professional development are crucial for navigating its dynamic landscape (Oksanen, Oikkonen, Pihkala, 2023), emphasised by the World Bank (2021) in light of the pandemic's impact. Ensuring access to technology and digital tools is vital for interactive lessons (Budiarto, Rejekiningsih, Sudiyanto, 2021). Financial backing, ongoing training and technological accessibility are imperative (Deveci, Seikkula-leino, 2018; Mamabolo, 2020), while networking opportunities, community engagement and real-life applications enhance practical skills (Hardie et al., 2022; Blimpo & Pugatch, 2021). Highlights from a Grade 12 entrepreneurship curriculum assessment in the Kwazulu Natal province, South Africa, underscore the need for additional teaching and learning time (Dube, 2019). Essiet et al. (2024) stress curriculum alignment and resource provision, while Huber et al. (2024) highlight authenticity in assessment design, aligning with the challenges identified regarding teacher support for implementation.

Research Questions:

The two questions posed in this study are:

- To what extent are teachers enhancing entrepreneurial education in primary and secondary schools?
- What factors contribute to successfully implementing entrepreneurial teaching and support in primary and secondary schools?

Methods

A quantitative descriptive design approach was applied to answer the research questions. A quantitative approach is a research method that emphasises the systematic collection, analysis, and interpretation of numerical data to understand, describe, and predict phenomena. It can also use surveys to collect the data (Apuke, 2017). This approach provides a structured and standardised way to measure and analyse the extent of support required, offering statistical insights into patterns and trends among the participants. The descriptive design focuses on systematically observing, documenting and summarising the

characteristics of a phenomenon or group without manipulating variables (Hicks & Peng, 2019). It allows for a comprehensive examination and documentation of the current state of entrepreneurship education, enabling a detailed analysis of teachers' perceptions and the support required across a diverse range of schools.

Data were collected manually using a TATEE questionnaire relating to the importance of entrepreneurship education within the school context.

Data analysis was conducted using SPSS version 25, which provided descriptive statistics and factor analysis, including frequencies, percentages, means, and standard deviations. These were utilised to numerically describe and compare variables, identify patterns and simplify data (Kaur, Stoltzfus, Yellapu, 2018). Ethical considerations were paramount throughout the study, with the research adhering to established guidelines to ensure participant confidentiality, voluntary participation and the transparent communication of findings, thereby upholding the integrity and ethical standards of the research process.

Participants

Stratified sampling was employed to select 101 teachers across 25 schools, all employed by the Department of Education, and teaching subjects like Life Skills, Life Orientation, Economics and Accounting. Herschel et al. (2019) highlight the widespread use and effectiveness of random sampling, a standard method in data analysis, emphasising its generality and efficiency in obtaining approximate answers with minor statistical errors for various types of queries. The Limpopo Province of South Africa's unique social and economic landscape presents an intriguing backdrop for this exploration (Botha, 2011) containing rural and township schools, offering diverse educational settings, each with challenges and opportunities (Ramoroka, 2014). By examining teachers' perspectives in this specific context, the study gains a nuanced understanding of the role of entrepreneurship education within South African schools. Out of the 101 participants, a majority, accounting for 61.8%, were female; for age, 34.7% were in the 41–50 age range, and 33.7% were 50 or above. As for teaching experience, 41.6% of participants had over 21 years of experience. Biographical data for the participants is presented in Table 1.

Table 1. Biographical data for the participants

Gender	Male		Female		
Number	39		62		
Percentage	38.6%		61.4%		
Age range	20–30	31–40	41–50	50 or above	
Number	20	12	35	34	
Percentage	19.8%	11.9%	34.7%	33.7%	
Teaching experience	0–1 years	2–5 years	6–10 years	11–20 years	Over 21 years
Number	16	17	7	19	42
Percentage	15.8%	16.8%	6.9%	18.8%	41.6%

Source: Authors own work

Instruments and procedures

Teachers' attitudes towards entrepreneurship education (TATEE) and learning is an instrument that needs to be implemented in a school (Johansen, 2018). It emphasises that questionnaires can be adapted from existing indices (Sekhon et al., 2022) and feature closed-structured questions. The TATEE questionnaire consisted of three sections; however, this study utilised only one of them to examine the support required by teachers in the implementation of entrepreneurship education. Entrepreneurial Teaching Support (ETS), adapted from Johansen (2018) encompassed items that required teachers to provide ratings on a 5-point Likert-type scale. In responding to the instrument, participants used a scale to rate their responses as follows: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. Typical examples of questions included 1. estimating the time percentage spent on entrepreneurship education weekly, 2. indicating the available time, and 3. specifying the hours per week they would prefer to allocate to entrepreneurship education.

Findings

In the first question, teachers were asked to estimate the weekly time dedicated to entrepreneurship education. The results indicate that approximately 21.8% allocate 10% to 20% of their weekly school hours. Conversely, 19.8% reported no allocation of time each week. About 16.9% of teachers indicated that 51% or more of their weekly teaching time is dedicated, suggesting a substantial commitment in certain institutions. Another 11.9% mentioned allocating 41% to 50% or 0% to 9% of their weekly time, indicating either no time or insufficient time designated in these schools.

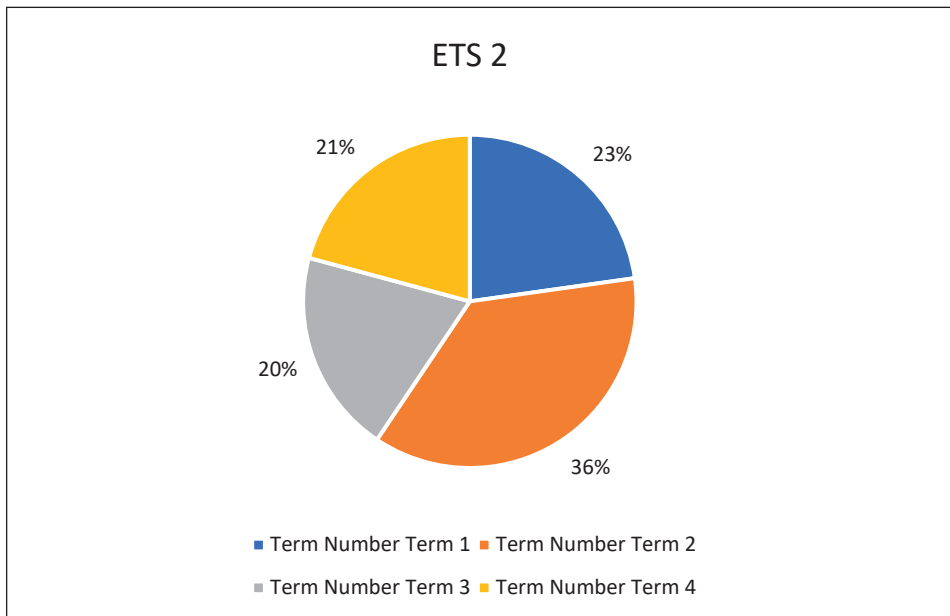
In the second question, teachers were asked to indicate the time available for teaching entrepreneurship education in the context of academic terms, and Figure 1 displays the distribution (in %) of the available time. The results show that approximately 36% reported having more time available during term two. In contrast, 23% identified term one as the period with the most available time for this subject.

In Question 3, teachers were asked to indicate the number of hours per week they would like to allocate to entrepreneurial teaching. The results shown in Figure 2 reveal that more than half (53.47%) preferred dedicating one to two hours a week to entrepreneurial teaching.

In Question 4, teachers were prompted to specify the days they would allocate for teaching entrepreneurship. The outcomes, illustrated in Figure 3, indicated that slightly less than half (43.6%) preferred to dedicate one to three days to entrepreneurship education.

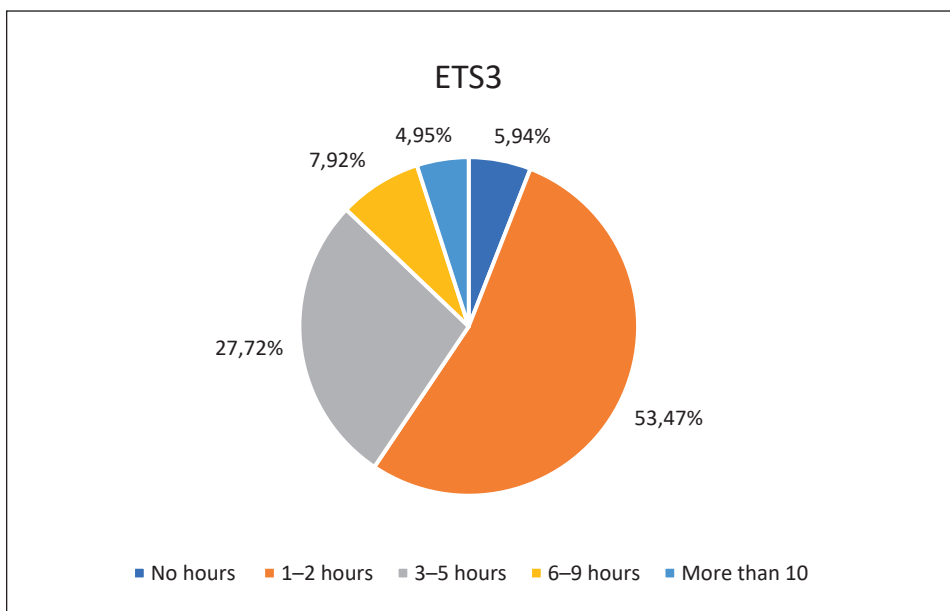
In Question 5, teachers were asked to outline the support they might need to improve their entrepreneurial teaching practices. The results revealed that less than half (45%) required further training to enhance their teaching proficiency. Additionally, 19% expressed the necessity for increased financial resources to support implementation and access to content and resources suitable for classroom use.

Figure 1. The percentage distribution of time available to teach entrepreneurship



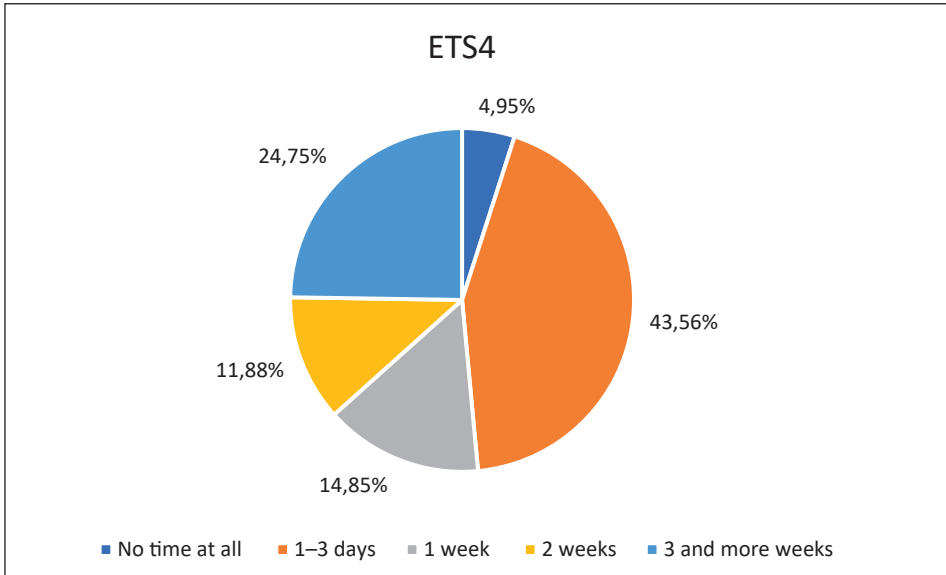
Source: Authors own work

Figure 2. Time in hours a week to teach entrepreneurship



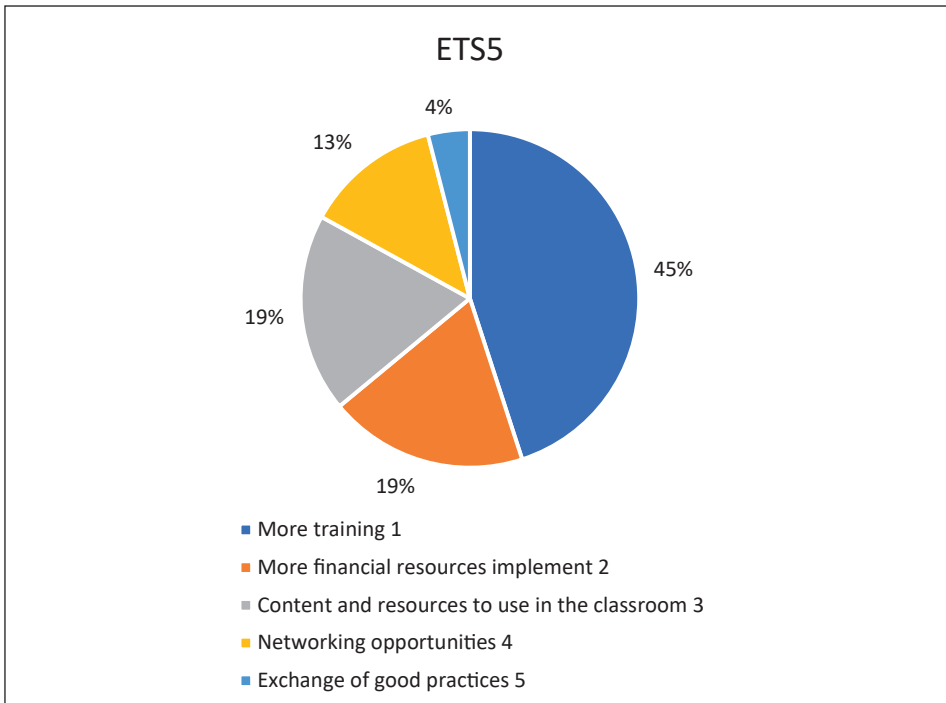
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Figure 3. The number of days to teach entrepreneurship



Source: Authors own work

Figure 4. Type of support needed to improve entrepreneurship teaching



Source: Authors own work

Discussion

Participating teachers identified several critical factors required for effective entrepreneurial teaching. They highlighted a need for more time to teach entrepreneurship education, emphasising the importance of sufficient time for effective instruction. Comparable concerns were observed in contexts like Kwazulu Natal, indicating a national issue (Dube, 2019). Furthermore, in the context of our research, a greater allocation of time, especially for hands-on components like the Business Day project, occurred during term two.

Training was another issue looked at. While less than half of the teachers felt they needed more training for improved entrepreneurship teaching, the study emphasised the importance of continuous professional development. Acknowledging the existence of training programs, research also underscores the importance of tailoring support and training to accommodate the varying needs of teachers at different stages for the successful implementation of entrepreneurship education (Oksanen, Oikkonen, Pihkala, 2023). Teachers expressed the need for financial resources as they facilitate collaborations with local businesses, enhancing the teaching process. The study reinforced the necessity of financial support from both government and the private sector (Ngcobo, Khumalo, 2022; Mamabolo, 2020).

A significant need for classroom resources and infrastructure was identified. To this end, a lack of resources can hinder the implementation of entrepreneurship education and affect teaching methods. The importance of adequate resources and infrastructure to foster success was corroborated by Essiet et al. (2024). Teachers also highlighted the importance of networking opportunities to enhance their knowledge and teaching practices, which are valuable tools for professional development and career advancement. These were also the findings of a study by Hardie, Lee and Highfield (2022) emphasising the potential benefits of establishing networks among local businesses, schools and other stakeholders.

In addition to the networks, there is the exchange of good practice, and some teachers expressed the need for this. The study noted the importance of sharing innovative teaching approaches and best practices (Blimpo, Pugatch, 2021), particularly within the Fourth Industrial Revolution and Education 4.0 (Nel-Sanders, Thomas, 2022). Accentuating innovation and best practices aligns with South African government initiatives to support entrepreneurship.

In conclusion, establishing effective entrepreneurship education requires addressing various factors, including time allocation, training, financial resources, classroom materials, networking opportunities and the exchange of good practices. These findings underscore the importance of a comprehensive approach to supporting teachers in delivering high-quality entrepreneurship education. By addressing these factors, South African schools can better equip students with the skills and mindset needed for success in an ever-changing global landscape.

Limitations of the study

Regarding limitations, the study could not incorporate a qualitative approach to gather teachers' perspectives on optimal methods for delivering entrepreneurship education. Additionally, excluding students from the study constituted a limitation, as their insights could have provided valuable contributions and enhanced the understanding of subject implementation dynamics.

Conclusion

This study examined the crucial aspects of entrepreneurship education within South African primary and secondary schools, focusing on teachers' perspectives in the Limpopo Province. The findings highlight the critical requirements for establishing effective entrepreneurial teaching and support. Time allocation, training, financial resources, classroom materials, networking opportunities and the exchange of good practices emerged as pivotal factors. The study revealed that teachers recognise the significance of entrepreneurship education for learners and express a need for adequate time to teach the subject comprehensively. While some teachers felt they needed additional training, the availability of professional development opportunities was acknowledged. Financial resources and classroom materials were identified as essential to facilitate practical and innovative teaching methods.

Furthermore, networking opportunities and sharing best practices were valuable tools to enhance teachers' knowledge and instructional approaches. These findings underline the importance of a holistic approach that addresses curriculum content and equips teachers with the necessary resources and skills. Establishing strong networks among teachers, local businesses, and other stakeholders can further enrich the teaching and learning experience and foster a culture of entrepreneurship from an early age. This study contributes to the broader discourse on entrepreneurship education by shedding light on teachers' perspectives in South African schools.

Recommendations

This research's findings can influence educational policies, curriculum design, and resource allocation to foster a more conducive environment for entrepreneurship education. Ultimately, the goal is to empower learners with the skills and knowledge needed to thrive in an increasingly competitive and dynamic global landscape.

Future research could look at replication and diversity to validate and extend the findings. It should replicate the investigation across diverse provinces and educational settings in South Africa, especially in rural areas. Other research could look at readiness and technology integration; thus, a comprehensive inquiry into the readiness of the Department of Basic Education to implement entrepreneurship as an explicit subject would provide valuable insights into institutional preparedness, challenges and opportunities.

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