

Review

Combating youth's unemployment rate by integrating entrepreneurship in middle school education

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Abstract

Entrepreneurship plays a pivotal role in fostering job creation and economic growth, underscoring the need to encourage and support youth in establishing and developing businesses. In Tanzania, where the unemployment rate stands at 2.75% as of 2021, the rising rate (from 2.2% in 2019) necessitates a profound discussion on education for poverty reduction. This study addresses three key questions: (i) from the international experiences, can the entrepreneurship education be effectively integrated into mainstream secondary schools? (ii) What strategies are preferably employed in other countries to integrate entrepreneurship into secondary education? (iii) Based on international experiences, what contextual approach can be adopted by Tanzania to integrate entrepreneurship into middle school education? By employing the PRISMA framework, document review was primarily employed to gain valuable insights. The findings highlighted the importance of teaching entrepreneurship from an early age, recommending strategies such as extracurricular activities, integration of entrepreneurship into related subjects like computer education, and offering it as a stand-alone subject, all while considering contextual factors. Although challenges persist, it is evident that Tanzania's main hurdle in entrepreneurship education and reducing unemployment lies primarily on political willingness rather than financial capacity.

Keywords Entrepreneurship · Unemployment · Curriculum · Integration · Systematic review

1 Introduction

An ability and readiness to organize, develop and run businesses or enterprises alongside all the uncertainties for the purpose of making profit is called entrepreneurship [29]. At its basic stage, entrepreneurs are individuals or small groups of people who decide to make partnerships and create new businesses [33]. The relationship between youths' entrepreneurship skills and poverty reduction is well documented [6, 7, 12]. Generally, youths' unemployment rates can greatly be lessened by policies which encourage and support youths towards business establishment and development [23, 24, 34]. Entrepreneurship is an engine for job creation and economic growth in the country, for it is one of the means of acquiring productive employment and improving livelihood [3]. There are remarkable efforts from national and international governments in both, developing and developed countries to ensure entrepreneurs of all age groups achieve their goals. UNESCO's Sustainable Development Goal 1 (SDG 1) specifically addresses issues related to youth empowerment and poverty reduction [58].

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Apart from policy environment at the government level, it is suggested that entrepreneurship is fundamentally a personal issue, and there are psychological characteristics inside an individual which motivate them to become or persevere in entrepreneurship [25]. Personal characteristics like passion, optimism and locus of control (a degree to which an individual feels that sense of agency in their life) are very prominent in becoming or persevering in entrepreneurship [11, 14]. An individual characterized with internal locus of control believes that things happening to them are greatly influenced by their own attitudes, mistakes, and action [4]. In this case, internal locus of control is more favorable toward becoming or persevering in entrepreneurship compared to the external one, where the feeling is that other forces (i.e., others' action, luck and environmental factors) are responsible for things happening in an individual's life [57]. Other personal factors like entrepreneurial self-efficacy, risk-prosperity, and risk perception are the key personal attributes which are linked to entrepreneurship and achievement [52]. Generally, entrepreneurs are people who are able to convert ideas and vision into profitable actions, engage persistently and vigorously in operating businesses or companies [9]. Opportunity recognition, exploitation, innovation and the value creation are all personal characteristics of start-up intention which help people to grow and become successful [20].

Thus, entrepreneurship can therefore be considered as personal, social, and a political phenomenon which is explained by individual properties, their relationship to other people, and the rules or policies (politics) which govern their daily interaction [23, 41, 42]. The concept underpins several theories of entrepreneurship like social capital theory, effectuation theory, social identity theory, and the bricolage theory [56]. In a social environment, young entrepreneurs benefit from successful entrepreneurs who act effectively, transmitting enthusiastic behaviors, and creating favorable environment for emerging ones to achieve their goals [5, 31]. Generally, a successful entrepreneur is a result of their personal attributes, social, and legal environment which are established to support and protect them. At the center of all these factors, education system is one of the fundamental enablers of entrepreneurship, implemented under the guidance of policies as the government tries to provide people with all the necessary skills to adapt with uncertainties that they will inevitably face.

2 The current context

The International Labor Organization (ILO) has projected a slight rise of global unemployment to 208 million in 2023, around 3 million more than that of 2022, with the employment growth rate of 1%, less than half of the rate which was recorded in 2022 [27]. Globally, South Africa tops the list of countries which are projected to have the highest percent of unemployed people in 2023, about 35.6% of the working population (country's workforce) being unemployed, followed by Sudan (30.6%), Spain (12.3%), and Brazil (9.5%) [63]. The situation poses a threat to global economic growth, and central bankers specifically, for job the market has remained a significant part of a global economy. The rise of unemployment rate and an unemployed population highly contributes to inflation; hence, deliberate intervening efforts should be imposed to rescue the economy.

In Tanzania specifically, by 2021 the unemployment rate among the working group (2.75%) was below the average of Sub-Saharan region (6.45%). As (Table 1) shows, female youths' unemployment rates in 2015 (4.5%) and 2021 (5.2%) were higher compared to male youths' rates of 3.1% and 3.3% in 2015 and 2021 respectively [64]. Generally, although the country's rate of unemployment among the working age population (15–64 years) in 2021 was below the global average (6.25%), below the average of lower-middle income countries (6.8%), and Sub-Saharan Africa (6.45%), its growth within five years (from 2.15% in 2015 to 2.75% in 2021) threatens the country's present and future economic stability [66]. Deliberate policy and enforcement efforts are imperative to solve the problem in the country, given that out of almost 60 million people (total population), almost only 50% is of working age [65] (Table 1).

Table 1 The global unemployment rate among the labor force (15–64 years) from 2015 to 2021

Region	Total %		Youth male % (15–24 years)		Youth female % (15–24 years)	
	2015	2021	2015	2021	2015	2021
Global	6.05	6.25	15.2	15.8	16.7	18.1
LMIC	5.85	6.8	10.7	11.7	12.2	13.5
Sub-Saharan Africa	6.25	6.45	17.3	17.4	18.5	19.6
Tanzania	2.15	2.75	3.1	3.3	4.5	5.2

LMIC means Lower Middle Income countries

Education participation remains a problem across all levels in Tanzania (from primary to the university levels), as only 2.3% of adult population have university education, 81.7% have primary education, 0.7% with training after primary education, 14.4% with secondary education, and 0.8% with training after secondary education [60]. From 2015 to 2021, the average unemployment rate among people with basic education as their highest level of education in the country was lower (0.6%) than those with advanced education (4.0%). The unemployment rate among people with intermediate education was only 0.3% [66]. While the university enrolment rate was only 8% in 2020, the youths' motivation toward technical and vocational education and training (TVET) is low, considered by many as a second choice [59]. The incompatibility of secondary school curriculum with the real-life situation, inaccessibility of higher education, and lower motivation towards enrolling to TVET colleges are three major problems facing secondary school graduates, leading to higher rate of unemployment.

The overall aim of this study was to explore the best strategies which are employed by different countries, and recommended by different theories in integrating entrepreneurship in secondary school main stream education. Specifically, the study aimed at answering the following questions; (i) Can entrepreneurship be integrated in the mainstream secondary schools? (ii) What are the strategies or mechanisms used in other countries, through which entrepreneurship is integrated into the mainstream secondary education? (iii) Based on international experiences, and by considering the context of Tanzania, what can be the suitable approach of integrating entrepreneurship in middle school education?

3 Methodology and methods

To answer the prescribed questions, a document review approach was employed, where we located and synthesized primary research studies on entrepreneurship, secondary education, employment, job creation, entrepreneurship and the approaches of integrating it into the mainstream education system. By using a strict method of combining data from different scientific studies, document review provides more reliable information compared to those which can be achieved by individual studies [46, 69]. Because some individual studies may have too small sample size and ungeneralizable, the document review reduced the probability of deceitful results, leading to effective research-oriented practices [68]. We synthesized the available evidences to inform all who are responsible in the process of designing education (decision making), including policy makers and law enactors.

3.1 Design

In this study, we based on our objective and guiding questions to develop the criteria of inclusion and methods of analyzing the review. The criteria of identification, screening, and considering the eligibility of documents were specified, documented prior the protocol, and were used as guidelines throughout the review processes. The development of reviewing protocol and processes of reporting findings were guided by the updated version of Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) [43].

3.2 Document selection criteria

In this review, studies were included after considering the following eligibility criteria: (i) published by reputable publishers (for books and book chapters) and reputable peer-reviewed journal (for articles); (ii) written in English language; (iii) either longitudinal or cross-sectional; (iv) provide unique experiences of entrepreneurship education, and/or its integration in the mainstream education system; and (v) published between 2013 and 2023. Studies were excluded when they did not meet the above specified criteria, the reliability values below the acceptable threshold of 0.7 [26], and case studies which are limited to specific context [45].

3.3 Document search strategy

Three experts (A.F, B.M, and D.K) conducted an independent electronic database search using SCOPUS, at the same time on the same day (15th May 2023), the process which was repeated on 22nd May 2023. Truncation operators, wild-card characters, and Boolean combinations composed the search algorithm [50]. We used the building block strategy, where the queries (search) were divided into three key concepts (A, B, and C), including the synonyms and variants. Then we added the concepts together by using the Boolean "AND" with a modified searching strategy in SCOPUS database. The

search terms included derivatives and combinations, and it captured all the relevant key words, titles and abstract related to, (i) entrepreneurship; (ii) education; (iii) integration of entrepreneurship education in schools. We used filters to limit our search results only to English peer-reviewed theoretical and empirical studies. We used SCOPUS because it is one of the global multidisciplinary databases for academic literature that includes visualization tools for analyzing search results. By January 2023 SCOPUS had 20.54 million open access documents. It covers a number of journals from different subject areas like Physical Sciences (9065 journals), Health Science (7596 journals), Life Sciences (5164 journals), Social Sciences and Humanities (11,526 journals) [48].

3.4 Screening and data extraction

From the SCOPUS database, the total number of studies identified was 1202, of which 1199 of them were retained after deleting 3 duplicates. These studies were then imported into web-based software program (Rayyan QCRI) for independent review of studies that needed to be included in our systematic review. Three reviewers (A.F, B.M, and D.K) independently screened the titles together with their abstract, and 656 articles were excluded for the criteria mentioned in previous section. Out of 543 records which were sought for retrieval, 19 of them did not have full text. With the efforts of directly contacting authors, only 5 answered within three-week time frame, making the total of 642 studies proceeding into further step of eligibility.

The eligibility analysis was performed by two of the three authors (A.F, B.M, and D.K), and 612 studies were excluded for reasons indicated in Fig. 1. Throughout the processes, any discrepancies emerged was solved by discussion, with the notes being explicitly written for references and reflection. In the case of lacking consensus about the exclusion and inclusion, a fourth reviewer (M.O) was invited to help the primary reviewers reach the exclusion/inclusion agreement. 30 articles progressed to the data extraction stage, and we concluded with this record. Using the guidelines of PRISMS, the unit of analysis in this study was empirical studies, not review articles. The independent extraction of data by two authors (A.F and B.M) was made intentionally to achieve the acceptable inter-rater reliability suggested by literatures. The second and third authors had to visually inspect the coding and agreement between coders to ensure accuracy in data extraction, while in the case of disagreement, correction was done in reference to the original material.

All the data included in this study were extracted from the section of results of the reviewed documents to avoid the influence of additional interpretation placed in the conclusion or discussion on our results. To summarize, the following data were extracted and exported in excel format for analysis: (a) year of publication; (b) authors of the studies; (c) subject areas; (d) document types; (e) country or territory; (f) source type; (g) main results; (h) study designs; (i) sample; and (j) variable names and measures. Figure 1 indicates the procedures followed in this systematic literature review.

4 Findings/Results

4.1 Studies included in this thus systematic review

Out of 30 studies included in this study (See the highlights in Fig. 1), 80% of them were published research articles, while 20% were comprised of published books and book chapters. Country wise, the United States had the most documents reviewed (6), followed by South Africa and United Kingdom with four documents, Botswana, Brazil and Canada with three documents, and China, Denmark and Germany had two documents each. All the documents reviewed were recently published (2014–2022) in journal from social sciences (31%), business, management and accounting (24.1%), economics, econometrics and finance (12.1%), mathematics (5.2%), decision sciences (3.4%), health professions (3.4%), pharmacology, toxicology, and pharmaceuticals (3.4%), psychology (3.4%), agriculture and biological science (1.7%), arts and humanities (1.7%), and others (10.3%).

4.2 Integration and the teaching of entrepreneurship in regular schools

We are living in a society in which most of the professions need an innovative and risk-taking employee [19]. Entrepreneurship skills and creativity are important for youths' cognitive and social development, because they are imperative and interrelated competencies expected from any learning process and career development [10]. In this case, entrepreneurship in different countries and schools is treated in two different ways, 1 as a stand-alone subject (independent course taught in most cases to students whose major is business, and 2 as an integrated subject in other subjects like

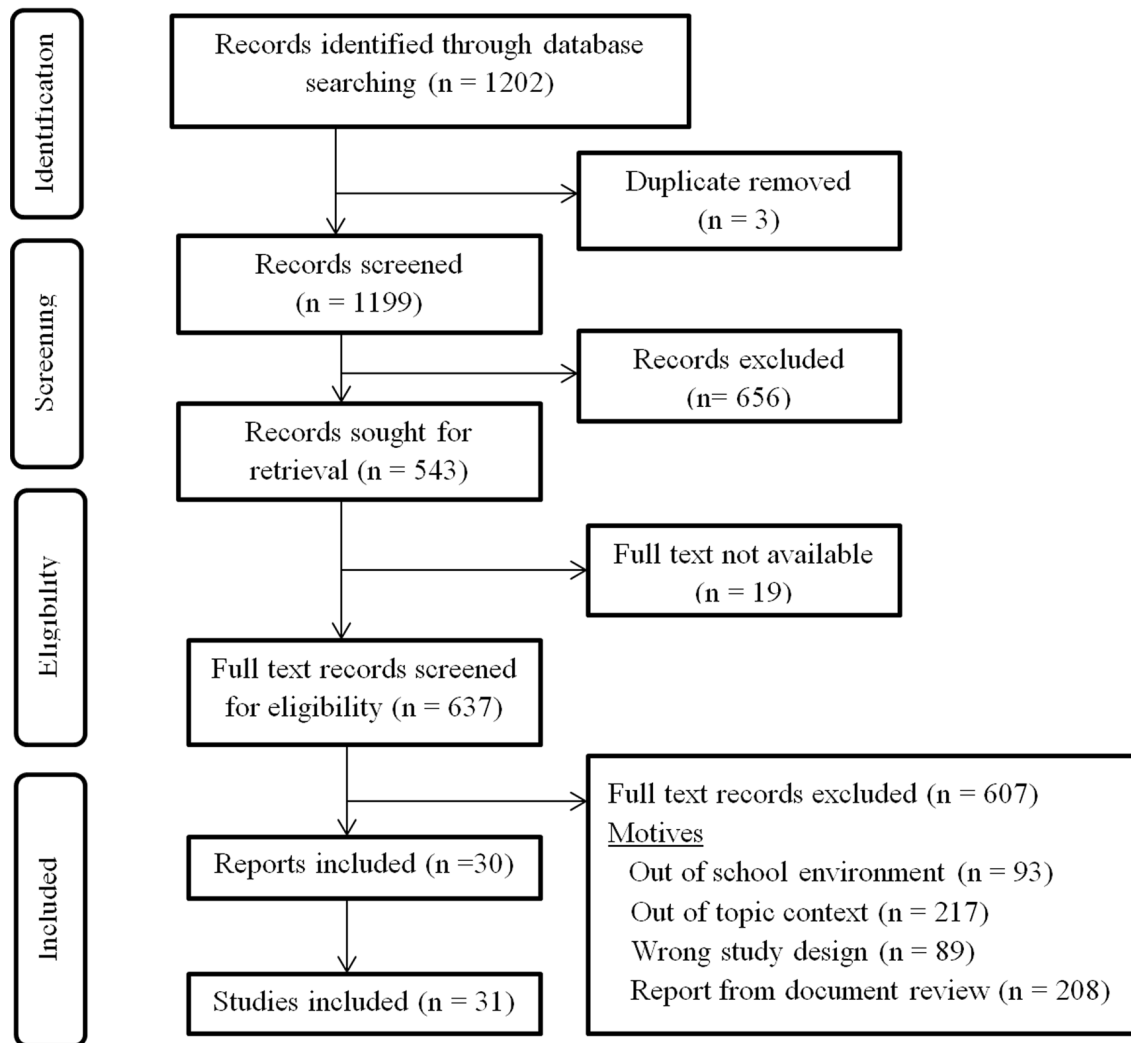


Fig. 1 PRISMA framework of systematic review process

engineering, pharmacy, and law [44, 53]. It is very important to explore the later for entrepreneurship is necessary for future oriented professions highly require entrepreneurship skills [28].

In Tanzania, the status of entrepreneurship education in schools is not explicit (Adisel et al. [1]). A survey which was done to entrepreneurship educators and those who graduated from middle schools indicated that entrepreneurship modules are included (integrated) into the development studies (DS) course. Several educational institutions have introduced entrepreneurship as an independent (stand-alone) course, especially at the bachelor level (undergraduate level of university education), courses which reflect entrepreneurship in their titles. On the other hand, other institutions are in the process of introducing entrepreneurship at both levels; undergraduate and graduate levels [21]. Approaches through which these courses are taught greatly matter toward a successful teaching. Studies have suggested that by encouraging students to engage in innovative activities, their creative thinking improves, helping to envision their future [17, 39]. A lesson can be taken from a number of pharmaceutical schools in the United States, where entrepreneurship courses is integrated in their curricular as part of MBA, Pharmacy degree or entrepreneurship certificates [2].

Perhaps South Africa can also be used as a point of reference; although their current employment rate is far lower than that of Tanzania (efforts are yet to yield results). In South African secondary school level, entrepreneurship is taught as an independent subject (i.e., in Economics and Management Science majors), and/or embedded as part of other subjects' content or syllabus (i.e., Technology, Social Sciences and Life Orientation) [12]. Technology education for example, was introduced in 2005 as part of South Africa's curriculum, and is considered as potential contributor in addressing high rate of unemployment [17]. Apart from South Africa, there are other African countries (i.e., Kenya and Nigeria) that have

also integrated entrepreneurship education in Technology, Mathematics, and Vocational subjects [61]. A number of countries in the continent and outside Africa continue to realize the potentialities of entrepreneurship which is held in other subjects like Mathematics and Technology [13, 49, 54].

Notwithstanding, other studies continue to indicate areas of weakness within the South African entrepreneurship teaching and learning system, as there is no explicit content of entrepreneurship, especially in the technology subject [21]. In the Revised National Curriculum Statement by the Department of Education in South Africa, it is explicitly stated that one of the developmental outcomes for learners is the ability to explore and develop entrepreneurship opportunities. Learners are expected to be taught with a pedagogy which will enable them to gain knowledge, skills, confidence and competencies, which will equip them with abilities to explore entrepreneurship initiatives for the South African economy. In countries like Kenya, technology offers only subject-specific knowledge and other skills which are expected to contribute to entrepreneurial learning [35]. Although entrepreneurship can be taught at different levels of school, the conceptualization of the term plays a significant role [22, 32, 36, 47].

4.3 Strategies which are used to integrate entrepreneurship education in mainstream education

Co-curricular activity is a preferred approach of teaching entrepreneurship by education institutions [22, 40]. In Binghamton University School of Pharmacy and Pharmaceutical Science for example, students are introduced to extra activities which are not part of the core curriculum [55, 67]. Based on a popular TV series (Shark Tank), new entrepreneurs pitch out their ideas about a service or product to the business executives and successful entrepreneurs for feedback (Adisel et al. [1]). The activities inspire many students, and promote their confidence in establishing new pharmaceutical services for their future [7, 38]. In other countries, entrepreneurship has been introduced starting from elementary level, and studies indicate that at this level, the number of entrepreneurial project during the school year had a significant impact on students' three attitudes (leadership, creativity, and achievement) [15, 44].

As a system, schools and teachers have a very important role in ensuring and encouraging entrepreneurship (i.e., creativity and innovation) among students of high school [2]. Studies have suggested two ways of integrating entrepreneurship in the curriculum, (i) it can formally be included in the core curricula or (ii) be informally included as a hidden concept of curricula by educators' motivation as well as positive referral [16]. Studies emphasize that hope can be categorized as referral education when the school curricula does not formally include entrepreneurship [67]. In this case, teachers play a significant role, for what they say concerning entrepreneurship is considered as authoritative to the learners, that can either discourage or encourage students' selection of entrepreneurship as a career choice [55].

Although many schools teach entrepreneurship, each provides different preconditions on what and how it aims to develop the subject depending on the context of the school (i.e., geographical location and composition of students). However, based on the fact that male and female have different entrepreneurial abilities, when schools opt to implement entrepreneurship education throughout the entire curriculum, female students tend to adopt the opposite-sex's entrepreneurial abilities [54]. There is also a traditional (broad) perspective of including entrepreneurship in schools, which involves starting businesses in school areas and outside the school under the guidance of the facilitators (educators) [18]. A narrow perspective of incorporating entrepreneurship in school would mean developing entrepreneurial skills among students. Since 2011 Sweden for example, has been using the narrow perspective of teaching entrepreneurship in upper secondary schools. It has included the objective of developing entrepreneurial abilities among students within the high school curriculum [6, 32, 54].

4.4 Challenges faced in integrating entrepreneurship education in regular or general schools

The rise of interest in entrepreneurship education is triggered by the contemporary transformation of our societies, which resulted from the transition from managerial economy (predominantly) to an entrepreneurial economy [7]. However, studies have indicated that such education starts to be taught when it is too late [13]. It is argued that it is too late to develop entrepreneurial mindset at the university or middle-school level, suggesting that pre-school education level is the best to start developing it among children (from Kindergarten to grade 12 [44]. In all the methods, approaches and mechanisms which are used to teach entrepreneurship in school, there are fewer consensus over the best one in stimulating or developing entrepreneurial abilities [36]. In addition, in many countries, there are no guidelines provided by higher authorities for the implementation of any of the approaches [54].

Lack of teaching resources (i.e., books), and large number of students in a single classroom have also been mentioned by several studies as a challenge in teaching and integrating entrepreneurship in the current system of education [21]. In

schools or universities where entrepreneurship is taught as a separate stand-alone course, especially in business schools or departments, such business school needs to provide support to other colleges or schools which include it (integrate or merge) into other courses [40]. However, one of the most challenges of this approach (collaboration and supporting each other between business school and non-business school) is that most of the non-business students do not accept to be taught by business professors [32].

5 Case study: review of a study about New Zealand's approaches

Since 1980s, the government of New Zealand has recognized that entrepreneurial orientation is the predicting factors for job creation, economic growth, technological advancement and international competitiveness. For decades, entrepreneurship has been a measure of economic health in New Zealand, and the establishment of the country's educational system to help New Zealanders develop qualities for entrepreneurship has been prioritized. In 2007, a draft of secondary school curriculum was released by the Ministry of Education (MOE) in New Zealand, aiming at addressing the further development of entrepreneurial talents. The study which is used as a case in this section [30] involved seven secondary schools from North Island of New Zealand. The schools have all been involved entrepreneurship education for more than three years, participating in programs like the 'Young Entrepreneurs Program' (YEP), 'Young Enterprise Scheme' (YES), and 'Biz4Kids'.

5.1 In regards to teachers' competence on entrepreneurship education

The curriculum clearly stated that secondary school teachers would be expected to pursue programs of study (at teachers college) that encouraged innovation and entrepreneurship, as several other empirical studies suggested that teachers need to possess entrepreneurial qualities for them to be able to teach their students, and these qualities can be developed through the education system (pre-service or in-service teachers training). In addition, the government recognized the significant influence of 'culture' in successfully building a community based on a practice and philosophy of entrepreneurship. According to the curriculum draft, educators (secondary school teachers in this case) are the custodians or protectors of community culture, and are tasked with the perpetuation of the community values through education provision.

5.2 The involvement of other community stakeholders

The involvement of other community stakeholders in providing entrepreneurship education aimed at building an entrepreneurial community. Taking this into regards, it was very necessary to fundamentally alter traditional strategies and teaching methods in a way that entrepreneurship learning takes on new meaning for students and other community stakeholders. Programs such as 'Young Entrepreneurs Program' (YEP), 'Young Enterprise Scheme' (YES), 'Biz4Kids' and others are good examples of programmatic adaptation in New Zealand's secondary schools. Under these entrepreneurship programs, each secondary school (where the project had been initiated) had a clearly defined vision of what entrepreneurship education should be, and the expected outcome (the results it should deliver). School leadership facilitated inclusiveness and formulated a joint strategy which involved all community stakeholders. An incremental implementation process was used, inviting and encouraging participation from all professional teaching staff, key community stakeholders and the students. The assumption was that, the educational achievement of positive outcomes through entrepreneurial teaching cannot be accomplished by a single stakeholder, but a community at large.

5.3 Consideration of diversity among students

Entrepreneurship education in New Zealand was strongly associated with diversity among students who possessed different interest, backgrounds, and qualities. In addition, teaching involved helping students develop the ability to recognize opportunities in uncertain environments. In entrepreneurship, diversities are considered valuable in making a contribution to country's economic growth. Although there is considerable debate over the extent and period to which entrepreneurial qualities can be taught, many would agree that they can be developed at an early age through education. Northland schools for example, operate against a backdrop of small rural communities with fewer job opportunities, relatively high levels of unemployment, and a number of social imbalances, making quality education sometimes an unachievable goal among many families.

In addition, the question of 'relevance' has been a key factor which contributes to high drop-out rates. Most teenagers especially do not see the practical relevance of their learning in a practical context as they believe such education does not secure their future employment. To solve this problem, entrepreneurship education was introduced into secondary schools in Northland. Entrepreneurship education became a relationship building tool, as it strengthens a culture with embedded entrepreneurship values, using various methods to foster closer connection with local businesses, community, social agencies, educational institutions and local government. Within a very short period, entrepreneurship education has demonstrated a number of positive results indicating that community stakeholders can work together for the purpose of achieving better socio-economic outcomes.

5.4 What Tanzania can learn from New Zealand case study

Tanzania can glean valuable insights from New Zealand's case study, particularly in the proactive integration of entrepreneurship education into the secondary school curriculum. New Zealand's commitment to fostering entrepreneurial qualities is evident in the deliberate efforts by the Ministry of Education to align teacher competence with innovation and entrepreneurship, recognizing the pivotal role of educators in perpetuating community values. The emphasis on community involvement, exemplified by programs like the 'Young Entrepreneurs Program' and 'Young Enterprise Scheme', underscores the need for collaborative strategies with all stakeholders, including teachers, community members, and students. Moreover, the recognition of diversity among students and the focus on helping them recognize opportunities in uncertain environments align with the understanding that entrepreneurial qualities can be cultivated early on through education. Tanzania can draw inspiration from New Zealand's success in addressing regional challenges, such as high unemployment and dropout rates, by making entrepreneurship education a tool for relationship building within communities.

6 Discussion and implications for the practice

6.1 Lessons from the global practices in the context of Tanzania

Entrepreneurship skills and creativity are crucial for cognitive and social development, as well as future-oriented professions [37]. Tanzania can recognize the significance of fostering entrepreneurship skills among its youth to prepare them for the changing economic landscape. Entrepreneurship education can be integrated into various subjects like engineering, pharmacy, and law [51]. Tanzania can explore the possibility of integrating entrepreneurship education into a broader range of subjects beyond business-related courses. This approach can help students from diverse backgrounds acquire entrepreneurial skills and mindset [38]. Co-curricular activities, such as entrepreneurial competitions or projects inspired by real-world scenarios, can be an effective method to teach entrepreneurship. Tanzania can consider implementing similar activities to provide practical experiences and promote students' confidence in entrepreneurial endeavors [18].

The studies have highlighted the effectiveness of an interdisciplinary approach, combining theory and practice, problem-solving, and group work [3, 8, 12]. Tanzania can encourage collaboration between different disciplines, fostering an entrepreneurial mindset that integrates knowledge and skills from various fields. The review suggests that teachers play a significant role in entrepreneurship education. Tanzania can invest in training programs and mentorship opportunities for teachers to enhance their knowledge and teaching abilities in entrepreneurship (Adisel et al. [1]). While the study mentions the importance of preschool education in developing an entrepreneurial mindset, Tanzania can consider introducing entrepreneurship education at an earlier stage, such as primary or secondary schools. Starting early can help to instill entrepreneurial values and skills at a formative stage in students' education [7]. Tanzania can anticipate and address challenges in integrating entrepreneurship education, such as the lack of consensus on the best teaching methods and the absence of guidelines from higher authorities.

6.2 Implications of this study for the practice

In addressing youth unemployment, the study highlights the role of entrepreneurship in reducing youth unemployment. Tanzania can benefit from implementing policies and legal practices that encourage and support young people in establishing and developing businesses. By integrating entrepreneurship into the mainstream secondary education system, young Tanzanians can acquire the necessary skills and mindset to start their own businesses, leading to job

creation and economic growth [9]. Despite having a relatively low unemployment rate compared to the Sub-Saharan average, Tanzania still faces challenges due to the rate of increase in relation to population growth. By integrating entrepreneurship education into middle school and even earlier, Tanzania can foster a culture of entrepreneurship from a young age. This can contribute to sustainable development and poverty reduction by equipping individuals with the skills and knowledge needed to create their own opportunities [13].

Entrepreneurship education should start from kindergarten in Tanzania. By introducing basic entrepreneurial concepts and fostering an entrepreneurial mindset at an early age, children can develop creativity, problem-solving abilities, and an awareness of business opportunities. Starting early can help nurture an entrepreneurial culture and mindset that can benefit the country in the long run [15]. Overall, integrating entrepreneurship education into the mainstream secondary schools in Tanzania can have significant implications for job creation, economic growth, sustainable development, and poverty reduction. By learning from international experiences, overcoming challenges, and starting at an early age, Tanzania can foster a more entrepreneurial society that empowers its youth and contributes to the country's long-term development goals.

7 Conclusion and recommendations

Based on the reviewed studies, it is evident that only a few countries prioritize entrepreneurship education (EE), while many others have yet to recognize its importance as an effective teaching strategy. Explicit policies play a significant role in promoting entrepreneurship, but their implementation is lacking in many countries. Considering the diverse nature of Tanzanian society, it is crucial to note the importance of context, as highlighted in the systematic literature review. To effectively address the varied socio-economic activities in the country, a regional-based entrepreneurship curriculum is recommended. An activity-based approach is also advisable, and the training of trainers should be a key concern for the government and educators. In general, entrepreneurship education is taught at various education levels, with context-based teaching approaches. However, the integration of entrepreneurship into existing curricula of other subjects is a widely employed strategy in many countries. Tanzania needs policies, curriculum development, and political commitment to tackle unemployment through entrepreneurship education.

Grounded in an exhaustive literature review on the integration of entrepreneurship education in middle schools, with a focus on diverse global perspectives, it is discernible that such pedagogy assumes paramount significance in nurturing the requisite innovative and risk-taking attributes vital for prospective vocations. Tanzania's current entrepreneurial education landscape, while exhibiting nuances in its integration within development studies, lacks explicit delineation. Drawing parallels from the multifarious approaches witnessed in nations like the United States, South Africa, Kenya, and Nigeria, it becomes evident that a uniform paradigm is elusive. South Africa's bifurcated model, where entrepreneurship is either an autonomous subject or seamlessly interwoven within diverse disciplines, could offer Tanzania strategic insights. Furthermore, the literature underscores the imperative of not only instating entrepreneurship as an autonomous discipline but also embedding it across diverse academic realms, fostering a synergistic amalgamation of theoretical and practical knowledge. The advocacy for co-curricular activities, exemplified by institutions like Binghamton University School of Pharmacy, underscores the exigency for experiential learning to instill confidence and ignite entrepreneurial acumen. Yet, amid these commendable endeavours, challenges persist, such as the absence of a consensus on optimal implementation timing and pedagogical methodologies. Consequently, it is suggested that Tanzania adopt a nuanced and adaptive approach, assimilating successful global models, fostering interdisciplinary collaboration, and proactively mitigating challenges to invigorate a comprehensive and efficacious entrepreneurship education framework.

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Data availability No new data were created or analysed during this study.

Declarations

Competing interests The authors declare no competing interests.

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