

# ZAMBIAN TEACHERS' PERCEPTIONS ABOUT SCHOOLS' PREPAREDNESS TO INTEGRATE ENTREPRENEURSHIP EDUCATION INTO THE 2023 CURRICULUM

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## ABSTRACT

*In 2023, the Government of the Republic of Zambia (GRZ) revised its curriculum framework to, among other things, promote entrepreneurship education by integrating it into other subjects at primary and secondary levels. This study sought to determine Zambian teachers' perceptions about the preparedness of schools to implement the integration of entrepreneurship education as stipulated in Zambia's new curriculum of 2023. The following questions drove the study: a) How familiar are teachers with the concept of entrepreneurship education? b) To what extent are schools prepared for the integration of entrepreneurship education into the curriculum? c) What suggestions do teachers have for effective integration of entrepreneurship into the curriculum? The study was based on a mixed-method design using electronic questionnaires, focus groups, and lesson observations. The population sample was 115 teachers of various teaching subjects, with a wide range of years of teaching experience. The data collected were from both male and female teachers. The findings of this study seem to suggest that schools and teachers were not quite ready because of issues relating to teaching-learning materials, facilities, teachers' content knowledge in Entrepreneurship, pedagogical knowledge, and the entrepreneurship ecosystem in Zambia. Despite these challenges, teachers welcomed the new emphasis placed on entrepreneurship education and it was in that spirit that they made the suggestions presented in this paper.*

**Keywords:** Curriculum, Entrepreneurship Education, Pedagogy, Student-Centered Methods, Entrepreneurship Education Ecosystem, Entrepreneurial Mindset.

## INTRODUCTION

In recent years, most nations regardless of their level of economic development have placed increasingly significant emphasis on entrepreneurship education (Aliedan et al, 2025; Maheshwari et al., 2023; Padi et al, 2021). The rationale for this phenomenon is “that strengthening entrepreneurial activities and providing entrepreneurship education may promote innovative projects, wealth creation, increased competition, industrialization, employment creation, and economic growth” (Zhu et al, 2022, p1.).

In 2023, the Government of the Republic of Zambia introduced a new curriculum framework which among other things seeks to integrate entrepreneurship education (EE) into the curriculum. According to the 2023 Zambia Education Curriculum Framework: “Entrepreneurship Education shall be integrated in the carrier subjects while learning institutions are encouraged to ensure that they practically incorporate it into relevant learning

activities” (Ministry of Education, 2023 p. 6). Table 1 is an example of how entrepreneurship is expected to be integrated into a mathematics course.

In implementing the 2023 Zambia Education Curriculum Framework, teachers are encouraged to adopt participatory methods of teaching. For instance, the syllabus for ordinary level mathematics suggests the following methods: Demonstration, Problem-solving, Collaborative Learning, Technology Integration, Practice and Feedback, Real World Application, Differentiated Instruction (Curriculum Development, 2024). The syllabus also lists the following competences that must be achieved by pupils: Analytical Thinking, Collaboration, Communication, Creativity and Innovation, Critical Thinking, Digital Literacy, Emotional Intelligence, Entrepreneurship, Environmental Sustainability, Financial Literacy, and Problem-Solving.

<b>Table 1</b> <b>DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS</b>				
	<b>Survey Respondents</b>		<b>Focus Group Participants</b>	
<b>Demographic Variable</b>	<b>(n=105)</b>	<b>Percentage (%)</b>	<b>(n=10)</b>	<b>Percentage (%)</b>
<b>Gender</b>				
Male	59	56.20%	4	40%
Female	46	43.80%	6	60%
<b>Experience Range</b>				
Less than 2 years	5	4.80%	N/A	N/A
2-3 years	6	5.70%	N/A	N/A
4-5 years	4	3.80%	N/A	N/A
5+ years	90	85.70%	N/A	N/A
<b>Professional Qualifications</b>				
Certificate	2	1.9%	N/A	N/A
Diploma	9	8.70%	N/A	N/A
First Degree	70	67.30%	N/A	N/A
Master's Degree and Higher	22	22.10%	N/A	N/A
<b>Teaching Subjects</b>	Mathematics, Physics, Computer Studies, English Language, Religious Studies, Biology, Chemistry, Civic Education, Literature, Home Economics, Accounts, Geography, History, Entrepreneurship, Commerce, Art, Food & Nutrition,		Mathematics, Home Economics, Travel & Tourism, Food and Nutrition, Accounts, Commerce, Physical Education, ICT	

Elsewhere in the world, research in the integration of entrepreneurship education into the curriculum has revealed some challenges. For instance, a study by Mahmud et al (2022) found that teachers faced problems relating to “knowledge, teaching style, time constraint, attitude and in-service training”. This study investigates the preparedness of Zambian schools, from teachers’ perspectives, to incorporate entrepreneurship education into the subjects that they teach.

## LITERATURE REVIEW

### Rationale for EE Promotion

In global economic discourse, the role played by entrepreneurship towards addressing unemployment and fostering economic growth has gained substantial prominence (Zarkua, Benesova & Krivko, 2025). In Zambia, the promotion of youth employment remains critical looking at the high unemployed youth coupled with persistent structural economic challenges which creates a critical need for the promotion of Entrepreneurship (Yangailo, 2024). Entrepreneurship Education (EE) has become visible as a vital subject helping in equipping young people with competences, skills and mindsets necessary for innovation, economic participation and self-employment (Libingi & Bbenkele, 2024).

Research has shown that EE contributes to competitiveness of firms in societies (Ghorfi & Hatimi, 2022). According to some scholars (such as Santana-Vega & Gonzales-Morales, 2020; Vera et al, 2024; and Zhu et al, 2022), EE can be an effective tool in combating youth unemployment and mitigating the impact of economic crisis as it has been viewed to teach learners how to turn ideas into action through skills imparted in them such as collaboration and initiative, problem solving and critical thinking which could also improve their success in employment. This orientation towards Entrepreneurship goes beyond what is taught at school level, through empowering learners to be adaptive, proactive and individuals who are opportunity focused on their future careers (Nabi et al, 2017).

### Global Trends

Research has shown that early intervention and exposure to EE enhances skills such as opportunity recognition, creativity, risk-management and creativity (Otache et al., 2024). With this exposure to EE, primary and secondary students gain confidence and leadership skills as they learn through real-life experiences as seen in Finland's "Me s My City" program with sixth graders (Lähdemäki, 2016). The "School entrepreneurship Initiative" in Ghana proposes that mentorship and entrepreneurship need to be introduced to learners early for them to develop the passion for entrepreneurship (Biney, 2025).

Other examples of world trends include:

1. Junior Achievement in the United States: "The main purpose of this program is to stimulate youths' economic potential and assure their success in the modern global economy" (Lin, 2024: 1468).
2. Entrepreneurship Development program in China: "While encouraging employment- oriented entrepreneurship, China attaches great importance to the development of high- tech innovation and entrepreneurship and knowledge entrepreneurship in light of the background of innovation-driven economic growth" (Xu & Xu, 2021:18).
3. Synergistic Entrepreneurial Ecosystem in Malaysia: "Strategies include strengthening entrepreneurship teaching, learning, and research support systems, producing students who can create jobs, and increasing the number of educators with expertise in entrepreneurship. Key initiatives involve student entrepreneurial activities, social entrepreneurship in curricula, student incubators, and industry practitioner involvement in teaching" (Zhiyi et al, 2024:448)
4. The "EntreComp" Framework in European Union (EU) Countries: "EntreComp represents a collaborative effort by the Joint Research Centre of the European Commission and the Directorate-General for Employment, Social Affairs, and Inclusion to promote a shared understanding of entrepreneurial requirements. It identifies the key components of entrepreneurship as a competence, describes these components to establish a shared conceptual model, and outlines learning outcomes that suggest what

European citizens should know, understand, and be able to do at varying levels of entrepreneurial proficiency” (Banha et al., 2025:7).

5. Experiential Learning of EE in Kenya: “... the Kenyan government is taking proactive measures to reshape the curriculum by introducing experiential learning methodologies, including the competency-based curriculum (CBC), internships, startup incubators, and mentorship programs” (Owuondo, 2023;117).

## Entrepreneurship Education in Zambia

According to the 2023 Zambia Education Curriculum Framework, “Entrepreneurship Education is aimed at empowering learners with knowledge, skills and positive attitudes that will help them to identify business opportunities, create jobs by starting their own businesses for self-employment” (Ministry of Education, 2023, p.6).

Zambia is not alone in this endeavor. Other countries have also incorporated EE in their curriculum through integration, while others are offering it as a standalone subject, in collaboration with other extracurricular structures (Reppa and Chaidas, 2025).

## Defining EE

Entrepreneurship education refers to education for entrepreneurial attitudes and skills. It consists of “any pedagogical program or process of education for entrepreneurial attitudes and skills” (Amofah s Saladrighes, 2022, p.5). This definition extends the meaning of the term EE beyond a learning experience that teaches how to start a growth-oriented business enterprise.

Rather, as Bayram and Aslan (2024) pointed out:

The entrepreneurial skills targeted by entrepreneurship education include “analytical, creative and innovative thinking, idea generation, research, planning, problem-solving, decision making, risk-taking, collaboration, communication, persuasion, tolerance of ambiguity, opportunity and value creation, financial and digital knowledge, proactivity, responsibility, leadership, and success motive” p. 41. Looking at EE in this way shows that the knowledge, skills, and attitudes acquired through EE (e.g. creativity, critical thinking, communication, and problem-solving) are useful for learners regardless of whether they have intentions to venture into business enterprises. Furthermore, entrepreneurial attitudes and skills overlap with employability skills that are highly sought after by employers (Omar et al, 2023; Paredes & Buenaventura, 2024).

## Signature Pedagogies for EE and Implications for Teacher Education

According to the literature, pedagogical approaches that promote acquisition of entrepreneurial skills are those that “foster self-directed learning, teamwork, inquiry-based learning, experiential approaches, collaborative problem-solving, communicative approaches, and transformational logic” (Kafka & Papageorgiou, 2024 page 60). For this reason, educators are encouraged to shift from teacher-centered to student-centered methods (Bell & Bell, 2020; Rodrigues, 2023; Saygin et al, 2024; Tan et al, 2024).

Although this shift from teacher-centered to learner-centered approaches is critical for the teaching of EE, “many entrepreneurship educators have received only limited educational and pedagogic training, leaving educators to find their own way in pedagogic practice” (Bell s Bell, 2020). To mitigate this limitation, studies have suggested that EE must be integrated

into teacher training (Akintola et al., 2025; Oladele et al., 2025; Urban, 2010). Furthermore, teacher education should develop teachers that do not only have content knowledge and pedagogical knowledge, but teachers who are entrepreneurial to make them effective role models.

As Saygin et al (2024) pointed out:

Entrepreneurial teachers play significant roles in influencing students' creativity (C) and entrepreneurial intentions (EIs). Research has demonstrated that teachers' behaviors, particularly in creativity nurturing (CN), can have a substantial impact on students' entrepreneurial mindset (EM) and intentions. Teachers' conceptions of C and their perceptions of creative students can affect how they support and cultivate entrepreneurial skills in the classroom. p.2.

## METHODOLOGY

The study sought to determine secondary school teachers' perceptions about the preparedness of schools to implement the integration of entrepreneurship education as stipulated in the 2023 Zambia Education Curriculum Framework. The following questions drove the study:

1. How familiar are teachers with the concept of entrepreneurship education?
2. To what extent are schools prepared for the integration of entrepreneurship education into the curriculum?
3. What suggestions do teachers have for effective integration of entrepreneurship into the curriculum?

### Data Collection

Data were collected using convergent parallel design, also known as the mixed-method design. This single-phase approach was used to collect both quantitative data (through a survey with a questionnaire), and qualitative data through focus group discussions (FDGs) and lesson observations in order to ascertain teachers' perceptions about schools' preparedness to integrate entrepreneurship into the curriculum.

### Sampling

Data were collected from 115 teachers of whom 55% were male and 45% were female. Simple random sampling was used to collect data through a survey sent electronically to ensure that a diverse group of teachers were included in the study. Convenience sampling, "the data collection process from a research population that is effortlessly reachable to the researcher" (Golzar et al, 2022:73), was used for focus group discussions because the rationale was to triangulate the data collected through the survey. Two focus group meetings were conducted involving 10 teachers of different subjects. Furthermore, two (2) lesson observations involving two (2) selected teachers of different subject groups from different schools using purposive sampling were conducted. Purposive sampling is the deliberate choice of a participant due to the qualities the participant possesses (Etikan et al, 2006). The number of lesson observations was small because the idea was to triangulate the survey findings and to have a deeper understanding of the teaching approaches used to support entrepreneurship education. According to Campbell et al (2020), "In a qualitative study, a

relatively small and purposively selected sample may be employed with the aim of increasing the depth (as opposed to breadth) of understanding” (p. 653).

### **Data Analysis**

The data collected were analyzed independently from which a comparison to ascertain whether the findings from the survey, focus group discussion and the lesson observations were correlating with each other (Creswell & Creswell, 2017). Focus group discussions were audio recorded and then transcribed and then coded to create themes (Attride-Sturling, 2001).

### **Findings**

#### **Demographic Characteristics of Respondents and Focus Group Participants**

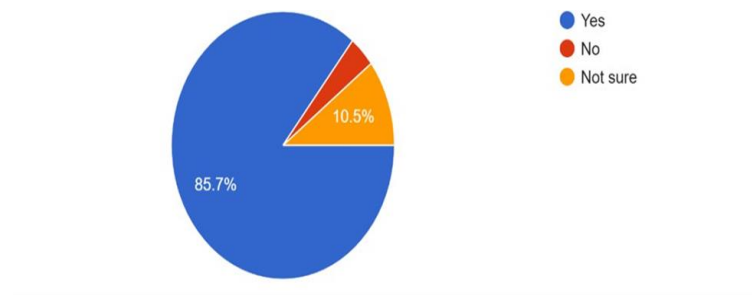
Overall, 115 teachers either responded to the survey or attended group discussions. 55% of the teachers in this study were male and 45% were female. Most of the participants (60%) had served for 5 or more years at the time of the study. In terms of professional qualifications, teachers with first degree represented 70% of the sample. The second largest category comprised teachers with master's degree or higher, which was 22%. Teachers with diplomas were the next category, comprising 6% of the sample. Certificate holders comprised 2% of the sample. There were 20 different teaching subjects represented in the sample. About 77% of the teachers in the sample have a pupil: teacher ratio of over 50:1. Considering that convenience selection was used in the study, these statistics mean that notwithstanding the disparities in gender, length of service, or professional qualifications observed in the data, the study collected views of teachers across the spectrum.

#### **Familiarity with Entrepreneurship Education (EE)**

Data for this question were collected through a survey and focus group discussions.

#### **Google Survey**

In the Google survey, when teachers were asked whether they were familiar with EE, the responses were as shown in Figure 1. About 86% of the respondents reported that they were familiar with the concept and the rest were either not familiar or not sure.



**FIGURE 1**  
**TEACHERS' FAMILIARITY WITH THE CONCEPT OF ENTREPRENEURSHIP**  
**EDUCATION**

### Focus Group Discussions

To confirm teachers' familiarity with the concept of EE, teachers in focus group discussions were asked to define it. In defining entrepreneurship education, eight out of ten teachers in the focus group discussions associated entrepreneurship education with business skills.

For instance:

"...the type of education in which we I think we ahhh what can I say...ahhh we involve the learners ahhh...in the type of businesses they want to do as soon as they are done with school or as they fail to progress with school. Teacher 6 FG1..

"... helping in terms of ehhe business wise, dealing about finances and how to capitalize, capital...the income and how to do the expenditures. Teacher 5 FG1.

Of the remaining two teachers, one teacher stated that EE is about teaching various skills that are needed to engage in entrepreneurship. The other teacher stated that entrepreneurship education is about acquisition of knowledge and skills for taking risks to start a business venture. These two definitions are closer to Cui & Bell's (2022) view that EE is "useful and effective on students' learning outcome including knowledge, skills, perceptions, attitudes, characteristics and psychological capital related to entrepreneurship, and even on graduates' self-employment and job creation" (p.66).

### Preparedness of Schools for Integration of EE

Data for this question were collected through a survey, focus group discussions, and lesson observations. The theme of teacher preparedness had the following 5 sub-themes:

1. Professional Development
2. Teacher Confidence
3. Pedagogy

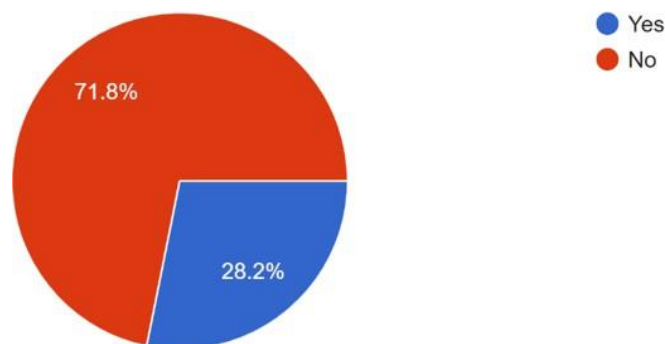
4. Institutional Support
5. Challenges

The survey collected data relating to professional development, teacher confidence, pedagogy, institutional support, challenges, and strategies for addressing challenges. Focus group discussions and classroom observations were conducted to triangulate the data collected in the survey.

### Professional Development

As Figure 2 shows, 72% of the 107 teachers that responded to the survey reported that they did not receive professional development to prepare them for integration of EE into the curriculum. 28% said that they received some formal training for it. Below are the verbatim quotes from survey respondents emphasizing the need for teacher preparation for EE integration.

1. Before implantation, the Government should consider training all the teacher Educators EET. The Government should emphasize on the competence-based method of delivery prepare standardized teaching material across the curriculum. Teacher 1S
2. Teachers need orientation on methods of integrating entrepreneurship into the curriculum and its importance to our future generation. Teacher 2S
3. The school should start by training teachers in order for them to be able to handle entrepreneur courses to the learners. Teacher 3S
4. I suggest that for successful implementation, orientation for teachers is key. Teacher 4S



**FIGURE 2**  
**PERCENTAGE OF TEACHERS THAT RECEIVED TRAINING ON INTEGRATION OF ENTREPRENEURSHIP EDUCATION**

The focus group discussions confirmed the survey finding reporting that training was conducted to prepare teachers for the integration of EE into the curriculum. However, according to the teachers, the training was inadequate. The following were some of the verbatim comments from teachers:

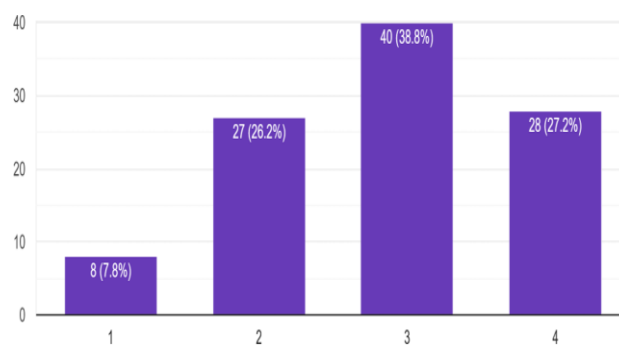


1. It wasn't enough mmmm. 3 days' workshop then go and implement it wasn't enough. We needed enough training in this new curriculum. Teacher 2 FGD 1
2. As for me what I attended was too theoretical rather than practical mmm so the practical aspect was not there. In short it was more of ahhh reading and reading as opposed to showing how it was supposed to be done. So that is where the challenge is I think more training is needed for us to be there. Teacher 7 FGD 1
3. It was dashed, hurried in a nature and it was not something that a teacher could apply, acquire and apply. Why am I saying so? It's because ahhh the pedagogical skills that the teachers needed to acquire before they could go to class were not well structured and imparted to them. The people who were put in charge to disseminate the new competence-based curriculum did not do a good job. Basically, on a percentage of 100 I can only rate them 10%, 50% is still wallowing up there. Teacher 1 FGD2

### Teacher confidence

Less than 40% of the teachers felt very confident in integrating EE into their subjects. 8% reported that they were not confident probably because 72% of the teachers did not receive professional development to prepare them for integration of EE into the curriculum in figure 3.

In the words of one of the teachers surveyed: There's a need to motivate (energize) the teachers. This implies cultivating a positive mind in teachers. The information to be delivered is already in them. It's just about pressing the take off button. Teacher 10 S.



**FIGURE 3**  
**LEVEL OF TEACHER CONFIDENCE IN INTEGRATION OF EE**

The focus group discussions confirmed the survey findings by revealing that whereas some teachers had a positive attitude towards EE, there were some that were not enthusiastic about the idea. Below are some verbatim comments from the discussions:

1. We are positive towards that we know what positive contributions these learners can bring to the Country. Now, the biggest problem that we are having is the requirements. Once those requirements are available to us, are made available, that one can be done. Teacher 3 FGD2
2. It is encouraging in a way that pupils are eager to learn the skills. So when you see the response, when I see the response from the pupils it is really encouraging and making me to feel to go forward to impart that knowledge in them. Teacher 3 FGD1
3. For that one okay to be honest, in the beginning because from the workshop, in the first place, I was as confused as everyone because I did not really get the concept. I didn't understand most of the things so, after going through some notes, at least I started getting one or two things. But at the time that we started

teaching, to be honest with you, in the first week it was a little bit difficult because looking at the information we were given, the content itself was a little bit confusing coz I didn't understand. Teacher 2 FGD2

4. Now when you say the learners should have the skill, we are saying that it should be indoors, outdoor, virtual, videos, all those things should be, we don't have. Even just power we don't have so how am I going to put the projector, how am I going to use videos if at my institution, the school has no power not even solar not even one? So it's a 50/50 situation but we will try. Teacher 2 FGD1

The issue of teacher self-confidence needs attention. Research (Li, 2023; Mu et al, 2024; Pikić et al, 2025) has shown the importance of teachers' self-efficacy, which refers to the belief that a teacher has in his/her ability to achieve desired curriculum outcomes. Without high levels of self- confidence in their ability to integrate EE into their teaching, teachers are not likely to do their best in overcoming the challenges of doing something new.

## Pedagogy

Teachers reported several teaching methods used in their various subjects which included mathematics, religious studies, English, physics, computer studies, etc. The most popular approach as shown in Table 2 is the demonstration method at 71% and the least popular is the apprenticeship methodology at 11%. During lesson observations, nearly all the approaches listed were evident. The ones that did not occur during lesson observations were apprenticeship and the blended method.

<b>S/N</b>	<b>Teaching Method</b>	<b>% of teachers using the method</b>
1	Experiential Method	43%
2	Lecture Method	45%
3	Participatory method	71%
4	Demonstration method	61%
5	Project Method	24%
6	Assignment Method	42%
7	Guided Discovery method	38%
8	Apprenticeship Method	11%
6	Blended learning method	16%
10	Excursion method	18%

In the survey, teachers identified some ways for enhancing the teaching of entrepreneurship. Here are examples of verbatim quotes from their submissions:

1. Entrepreneurship Expertise: Invite guest speakers, entrepreneurs, and industry experts to share their experiences and insights. Mentorship Programs: Establish mentorship programs that connect students with experienced entrepreneurs and business leaders. Teacher 11 S
2. Competitions and Challenges: Organize entrepreneurship competitions, hackathons, and challenges to encourage student participation and innovation. 2. Real-World Projects: Encourage students to work on real-world projects that address social, environmental, or economic issues. 3. Recognition and Rewards: Recognize and reward students for their entrepreneurial achievements and progress. Teacher 15 S
3. Traditional methods of lectures are not so effective in bringing out the desired results. If learners are to acquire the skills, allowing them to learn by doing is ideal, however this is hampered by huge numbers in classes and a shortage of teachers. Hence if numbers of teachers are increased, we can have manageable classes where competence-based lessons will be conducted, unlike the current situation where one class hassle a minimum of 105 learners. Teacher 20 S

In the focus group discussions, four instructional approaches were identified, namely:

1. Discussion
2. Demonstration
3. Research (discovery method)
4. Group work

Below are some verbatim comments from focus group discussions:

1. Group work, ahhh group work helps them to know that having a partner in business is important. They need to try to know that even as they trust someone mmm even those groups there should to be a leader who is acting like the CEO of the group so that they know that in any group they are put in the leader should know that the CEO presides. Teacher 5 FGD1
2. Basically what is there is we are looking at mmm developing the skills of the learners being able to be at the forefront of the learning process so that you as a teacher you are not the driver of the learning process, let them discover things on their owns so that even when you talk of entrepreneurship, you want them to be able to experience it so that when it comes to the theory part, it's just an addition from the teacher to supplement on what they have found out on their own. Teacher 1 FGD2

The question of effective pedagogical approaches to EE has received much attention in the literature (Adedeji et al, 2020; Eunah et al, 2025; Lourenço & Jones, 2006; Mwasalwiba, 2010), often breaking down EE teaching approaches into two categories: Traditional Approached (i.e. teacher centered methods such as lectures) and Innovative Approaches (i.e. student-centered methods such as role play). Lourenço and Jones (2006) summarize literature findings relating to EE pedagogy Table 3.

Except for the lecture method that needs to be de-emphasized (because it is ranked as the second most popular method in this study instead of being ranked low), all the teaching methods found in this study are consistent with the literature. This means that the teachers that participated in this study are generally practicing pedagogical approaches that promote entrepreneurial skills acquisition. Additional practices that should be encouraged among the teachers that were surveyed in the study include problem-based learning, role-play, simulation, case studies, and reflection.

<b>Table 3</b> <b>ENTERPRISING APPROACHES TO E.E.</b>	
<b>Pedagogy</b>	<b>Resources</b>
Multiple/holistic approach: learn by doing, learn from mistakes, learn from stakeholders' feedback and interaction, learn to deal with pressure, ambiguity and complexity, learn to find problems as well as design solutions, learn from discovery, learn from formal and informal environment and learn from multi-disciplinary perspective.	(Gibb 1987; Hills 1988; Gibb 1993; Hynes 1996; Henderson and Robertson 1999; Ibrahaim and Soufani 2002; Ladzani and Vuuren 2002)
Problem-base learning: to deal with complexity, ambiguity and multi-functional roles.	(Sexton and Bowman 1984; Gibb 1987; McMullan and Long 1987; Ulrich and Cole 1987; Sexton and Bowman-Upton 1988; Plaschka and Welsch 1990; Gibb 1993)
Learn through apprenticeship	(Aronsson 2004; Gendron 2004)
Action learning and experiential learning	(Ulrich and Cole 1987; Haines Jr. 1988; Nelson 1992; Low et al. 1994; Porter 1994; Feldman 1995; Leitch and Harrison 1999; Hindle 2002; Gendron 2004; Taylor et al. 2004; Ulijn et al. 2004)
Competition	(Li et al. 2003)
Role-play, scenario, simulation and games	(Haines Jr. 1988; Clouse 1990; Stumpf et al. 1991; Low et al. 1994; Mitchell and Chesteen 1995; Winch and McDonald 1999;

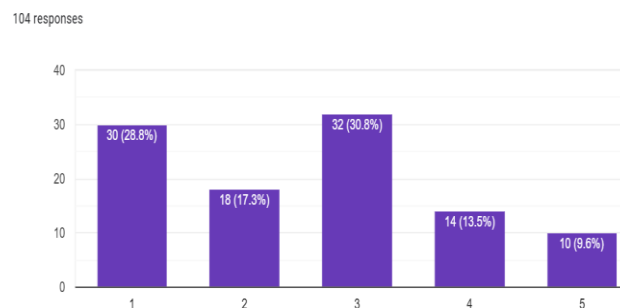
	Fiet 2000a; 2000b; Hindle 2002; Schwartz and Teach 2002; Theroux and Kilbane 2004; Ulijn et al. 2004)
Visioning, creativity and opportunity identification activities.	(Harris et al. 2000b; Rae and Carswell 2000; Rae 2003; Detienne and Chandler 2004; Gendron 2004)
Learn from reflection or critical incidents	(Cope and Watts 2000; Rae and Carswell 2000; Cope 2003)
Multi-media case studies	(Robertson and Collins 2003; Theroux and Kilbane 2004)
Problem-base and/or goal orientated activities and, activity that leads to reflection, presentation and discussion.	(Sexton and Bowman-Upton 1988; Garavan and O'Connell 1994b; 1994a; Cope and Watts 2000; Lawless et al. 2000; Cope 2003; Rae 2003; Robertson and Collins 2003; Gendron 2004)

From Lourenço and Jones's (2006) Figure 4: Enterprising approaches to entrepreneurship education.

### Institutional Support

Teachers in the survey reported a need for more institutional support. Examples of support include the following areas as quoted directly from their submissions:

1. Teachers need more financial as well as material support if this curriculum is to succeed. Teacher 5 S
2. More information about entrepreneurship needs to be given and how to go about it. Teacher 6 S
3. Infrastructure and learning materials. Providing necessary materials such as digital tools and set up business clubs for example that will help learners and teachers practice what they plan to do. Teacher 7 S
4. Partnership with industries and entrepreneurs to get connected with local businessmen who can also assist in teaching the students. Teacher 8 S
5. Dedicated Entrepreneurship Space: Create a dedicated space for entrepreneurship activities, such as incubators, accelerators, or makerspaces. 2. Technology and Equipment: Provide access to necessary technology, equipment, and software to support entrepreneurial projects. Teacher 12 S
6. By promoting production units whereby learners are actively involved in crop production, animal/ poultry rearing, gardening etc.) by choosing career pathways which are compatible with entrepreneurship such as Agricultural science, Business studies, etc. iii) by having viable tuck shops in schools iv) by holding career days at least once per year where successful businesspersons are invited to talk to the learners. Teacher 16 S



**FIGURE 4**  
**LEVELS OF CURRENT INSTITUTIONAL SUPPORT ON A SCALE OF 1-5, THE HIGHEST BEING 5**

Concerning institutional support, focus group discussions confirmed the lack of teaching-learning materials. Sometimes, teachers ask pupils to provide their own materials. Below are some verbatim comments relating to institutional support.

1. For now I cannot lie, we 've been, most the things that we have been doing we have been just engaging the learners to bring few things from their homes mmm and then you do the actual work coz when you look at, when you try to apply for funds you will be told we do not have so how do you do it? The best way is to ask the learners themselves mmm. Teacher 2 FGD2
2. I think as at the moment I would say the institution, I'll put it as we don't have the things. We don't mean they are not in support because they are not providing these things. So, if I say we have using like check emails what but otherwise the institution is not providing the materials, Teacher 6 FGD1
3. Adding on teacher c, there is no materials as for me every time when I teach, I need to search there's no such. Teacher 5 FGD1
4. Like teacher 5 has said we have no materials. We often tell learners to come with their own materials for us to do the work because there's no materials. If they are there, they are just a few. Teacher 3 FGD1

## Challenges

Teachers identified several challenges which can be clustered as:

1. Lack of clarity on how to integrate EE
2. Inadequate teaching materials
3. High student-teacher ratio
4. Inadequate physical infrastructure
5. Inadequate equipment
6. Inadequate funding
7. bureaucracy; and
8. Human resources/staffing

Below are some verbatim quotes from teachers.

1. In a nutshell it's simply the integration of entrepreneurship in CBC and its implementation that's where the challenge is. One side it is asking you to make sure that the environment is ripe enough for you to carry out the activities. On the other side there are no resources. So, there's need to harmonise the two so that activities can be carried out...in a nutshell. Teacher 1 FGD2
2. Yes, actually the challenges are there...one of the challenges I'd call it material challenges. The material challenges at the moment it's like no one knows exactly which material the correct material is to use in presentation or in teaching this entrepreneurship. Are we still to use the old materials that we were using? On the other side you find they say no, you cannot use this material we need to new material which directly tells the learner to do a research. There's no point where we were told to say actually in doing the research the learners can even be availed with these books, with the other materials that we have always been using. And those are the ones that are available. At the moment there's no material that we have received. We are just checking online, we check online there's this, next time you find something else contradicting what you got yesterday comes like that. So it is up to the teacher now to sieve and see to say which one should I use among these different materials that I'm directed to use. So there there's no direct..ahh there's no direct information coming, telling us to say this is what you need to teach, which is bringing confusion. You find for the same subject, same topic, the other one is using different materials, the other one is using the different materials in a different way opposing what the other person is doing. So, it has given a bit of challenge in that way, but we are sitting as departments with all, with our teachers and then harmonise in our department to say which one do we go for? So, those are some of the challenges Teacher 3 FGD2

3. We have more than what we are supposed to have...let's say ahhh look at it in this way. Maybe in a class you have about 90 plus...mmmm how do you impart or how do they acquire knowledge or maybe skills? It's very difficult and then when you also look at the facilities which are there, room isn't enough, the equipment are not there so it's very difficult. We were supposed to have maybe less than 30 at least. Teacher 2 FGD2
4. Now, when we talk of the funding that comes, we don't have an account where such coffers can come from. Which means it will not be any different from the Business studies that we were teaching previously because it was purely theory. It means it will still remain theory. So children will be leaving schools unless otherwise will be leaving schools as raw as they are. They may have that theory but the practical part is not there. So those are some...i think that's another challenge in addition 2 what teacher 2 had said. Teacher 3 FGD2
5. Even human resource...we need human resource because some other subjects are suffering. They don't have enough manpower, they are just 2, 1 in the department it's not enough looking at the number of learners in class...pupil ratio. Teacher 2: FGD1
6. Teachers need more financial as well as material support if this curriculum is to succeed. Teacher 40S
7. Government should upgrade school infrastructure with equipped facilities to allow effective practical lessons. Teacher 43S
8. ... there's also another problem ahhh which I can describe as bureaucracy bureaucratic ahhh problem where this time around we are talking on hands-on, we don't want to be producing learners who are just ahh rich in theory, but they should also be rich in skills and practice. Now here is a situation where, ahh a teacher wants to take these children out to go and see how these business entrepreneurial activities are conducted in different places, but you find where we are told to say 1, it's not budgeted for, 2 we are not allowed to take them out. For example, we may not we may want to go to maybe an entrepreneurial activity which is in Lusaka. We want them to go and see this is how this is being done for example at the stock exchange, when we are talking of the stock exchange, how are shares really being sold how are they traded ahhh on the stock exchange. Now, here is the situation where we are told no, you have to write the letter to the PTA Chairperson, the PTA Chairperson now to reason with that...it has become a bit... a problem. Teacher 3 FGD2.

### Suggestions for Addressing the Challenges

In the survey and during focus group discussions, teachers made several suggestions about what needs to be done to make the EE program successful. Below are suggestions quoted verbatim from their comments.

1. Clear Policy Guidelines: there should be straight forward guidance from the policy makers where we are given which direction we are supposed to go. Because as at now, it's like we are operating without a direction because our direction lies in written information when we are told this is what you are supposed to follow, don't go beyond this, be within this, then we know this is our lane and we are supposed to begin from here and to end at this point. But at the moment, such is missing in the way we are implementing the CBC. Teacher 3 FGD2
2. Reduction in Number of Subjects: the number subjects that learners are asked to take are too many, they need to be reduced. Reason being, it's important to identify the potential of a learner according to their would-be career. Once that is identified, then it's better to align them accordingly so that you don't waste much of the time taking them into doing so many subjects which they may not need at some point. Of course, there those general subjects like mathematics, English which are standard, but the others where they can specialise at an earlier stage, the better. We'll have a team of ahhh or learners who become specialists at an early age Teacher 1 FGD2.
3. More Human Resources: ... we need human resource because some other subjects are suffering. They don't have enough manpower, they are just 2, 1 in the department it's not enough looking at the number of learners in class pupil ratio. Teacher 2 FGD1.
4. Good Supply of Teaching-Learning Materials: ... the most important thing I'd say is the issue of materials to use mmm being the equipment, the texts books so I think if the government can come in and help in providing the relevant materials to use. Teacher 6 FGD 1.
5. Resources should be provided to support entrepreneurship for learners to have hands-on experience in entrepreneurship. For instance, those setting aside money for entrepreneurial projects within the school where learners can have a chance to practice their skills and give service to the community. Like those with skills in carpentry, materials should be given to make products that the community can buy. Teacher 16 S.

6. Emphasis on Key Areas of EE: 1. Infrastructure: Dedicated spaces, technology, and tools. 2. Teacher Support: Professional development, mentorship, and collaboration. 3. Curriculum: Entrepreneurship frameworks, interdisciplinary approaches, and project-based learning. 4. Partnerships: Industry partnerships, community involvement, and networking events. 5. Assessment: Competency-based assessments, portfolio-based evaluations, and feedback mechanisms. Teacher 15 S.
7. Introduction of EE in Early Grades: Incorporate it in the early grade and at each grade and level. Teacher 18 S.

### Making Schools Teach EE by Example:

1. The school should start providing products to the community to inspire learners on the values of entrepreneurship. Teacher 1G S
2. By promoting production units whereby learners are actively involved in crop production, animal/ poultry rearing, gardening e.t.c. Teacher 33 S
3. Incorporation EE in Teacher Education: Preparations must start by integrating entrepreneurship into teacher education. Teacher 20 S

### EE a Stand-alone Subject in Addition to Integration:

Integration is difficult to implement. Because ... sometimes we take it as an option where they say it is an integration. It means it becomes an option to say. Some teachers will not be implementing that for the sake of wanting to cover the syllabus. They'll say that it's just something which is integrated we may not even be ah be required to test our learners on this. You know mostly our teaching is passing based on where you want to make a learner pass to the next level. Now if it was deliberately meant as a subject and made compulsory because it will have to be. it is supposed to be implemented in all subjects, then it was going to be better and effectively given to learners. **Teacher 3 FGD2.**

1. Mentorship Programs: Establish mentorship programs that connect students with experienced entrepreneurs and business leaders. Teacher 50 S
2. Student Engagement and Motivation: 1. Competitions and Challenges: Organize entrepreneurship competitions, hackathons, and challenges to encourage student participation and innovation. Real-World Projects: Encourage students to work on real-world projects that address social, environmental, or economic issues. 3. Recognition and Rewards: Recognize and reward students for their entrepreneurial achievements and progress. Teacher 55 S
3. Career Pathways: by choosing career pathways which are compatible with entrepreneurship such as Agricultural science, Business studies, etc. Teacher 33 S
4. Making EE More Practical: Concepts like creating a business plan, marketing plan and using these actual documents to start a small business in order to make the subject practical and less theoretical Teacher 44 S.

## DISCUSSION

The findings of this study indicate that teachers generally welcome the emphasis placed on entrepreneurship education. They understand its importance. However, they see some challenges which need to be addressed for the integration of entrepreneurship education to be successful. Several challenges were identified, including the following:

1. Inadequate guidance on how to integrate EE
2. Inadequate teaching materials
3. High student-teacher ratio
4. Inadequate physical infrastructure
5. Inadequate equipment

6. Inadequate funding; and
7. Bureaucracy.

Teachers' call for guidance on how to integrate EE into the curriculum seems to be partly related to their inadequate understanding of the meaning and pedagogical implications of EE. Most of the teachers in the study understood entrepreneurship education simply as the acquisition of business skills. Of course, acquisition of business skills that would enable students to start business enterprises aligns closely with the Zambian government's rationale for introducing EE (Ministry of Education, 2023). However, entrepreneurship education is broader than the acquisition of business skills or financial knowledge.

As Bayram and Aslan (2024) pointed out:

Entrepreneurship education is the development of personal characteristics, attitudes and skills that underpin entrepreneurial thinking and behaviour. The entrepreneurial skills targeted by entrepreneurship education include "analytical, creative and innovative thinking, idea generation, research, planning, problem-solving, decision making, risk-taking, collaboration, communication, persuasion, tolerance of ambiguity, opportunity and value creation, financial and digital knowledge, proactivity, responsibility, leadership, and success motive" p. 41.

Teachers need to be guided that the skills underpinning entrepreneurship such as problem-solving, collaboration, creative and innovative thinking (to name a few) can be incorporated into the pedagogy of every subject through, inter alia, the following teaching approaches associated with STEM pedagogy and the pedagogy for 21st Century skills: Inquiry-based learning, experiential learning, problem-based learning, project-based learning, and challenge-based learning (Bray et al, 2023 ; Guo et al, 2020; Kafka, & Papageorgiou, 2024 ; Mukuni, 2023). According to the findings of this study, some of these student-centered methods of teaching such as the discovery method, experiential learning, and project-based learning are already being practiced by teachers although they might not be aware that these teaching approaches promote acquisition of entrepreneurial competencies. The 2023 Zambia Education Curriculum Framework encourages teachers to adopt participatory methods of teaching such as Demonstration, Problem-solving, Collaborative Learning, Technology Integration, Practice and Feedback, Real World Application, and Differentiated Instruction (Curriculum Development, 2024). Studies have shown the relationship between participatory teaching methods and the development of an entrepreneurial mindset (Adeoye et al, 2024; Bray et al, 2023; Kafka & Papageorgiou, 2024). Teachers will need to be made aware of the relationship between these teaching methods and EE, in addition to knowing how they can incorporate business related content and class activities in their non- business subjects.

A serious challenge affecting the use of participatory methods of teaching according to this study is the pupil-teacher ratio which is generally high. Most of the teachers in the sample of this study reported to have classes larger than 50, and up to 60 in some instances. Research has shown that large class sizes affect the extent to which a teacher can use participatory teaching methodologies (Antoniou et al, 2024; Herrington, 2024; Vakili et al, 2024). It is good that the

Zambian government is making bold steps towards reducing the pupil-teacher ratio by employing massive numbers of teachers. In 2022, the government deployed 30,466 teachers (Kabir, 2023). It will, however, take time before staffing optimal levels are reached. In the



meantime, schools need to have strategies for coping with overcrowded classrooms for the EE program to be successful.

Another challenge affecting implementation of the EE program is the difficulty that teachers are facing in integrating EE into non-business subjects, which has led some teachers to suggest that to start with, EE should be offered as a standalone subject in addition to having it integrated into other subjects.

In addition to the argument raised by teachers who said that it is difficult to integrate EE into non-business subjects, there are several benefits of having EE as a standalone subject in addition to integrating it into other subjects, including the following:

1. Intention is explicit
2. EE specialists will provide entrepreneurship technical content to pupils and provide support to non-EE specialist teachers
3. Core entrepreneurial values are installed in pupils by subject specialists
4. A standalone EE subject shows how EE links to business education such as accounting and general business studies
5. A standalone subject will promote pupils' zeal to study it as a career option after high school
6. As a standalone subject, the teachers may easily collaborate with other departments, and help integrate EE into other subjects
7. As a standalone subject, it is more likely to be given the same status as other compulsory subjects like English Language and therefore attract investment in infrastructure, professional development, and teaching/learning resources.

Integration of EE has several benefits too, including promotion of interdisciplinary learning, enhanced interdisciplinary collaboration, efficient coordination of EE resources, and helping learners to see how different parts of the curriculum contribute to the bigger picture of developing entrepreneurship skills.

Although countries that have embedded EE in all subjects and pedagogy (such as Finland) have reported a positive result (Urban, 2010), the argument for having EE as a standalone subject deserves consideration. Unlike Zambia, Finland has developed an EE ecosystem over the years which has created an enabling environment for successful integration of EE into all subjects, as Möttönen & Tunkkari-Eskelinen (2020) reported:

At the beginning of the 21st century, entrepreneurship education became part of Finnish business and educational policies. Several actors have joined the network of entrepreneurship education. The state government has supported the development of teacher entrepreneurial training and the diversification of student entrepreneurship studies across the country. There are many organisations in Finland that support and implement entrepreneurial education, such as the YES Network and Junior Achievement Finland. p. 67

The concept of 'entrepreneurial ecosystem' refers to systems consisting of interdependent actors and factors that support entrepreneurial activities to create economic and social value (Balawi & Ayoub, 2022; Rinkinen et al, 2024). Until Zambia builds a viable ecosystem for EE, it would be advisable to start with a two-pronged approach in which EE is taught as a standalone subject and as an integral component of the other subjects.

The challenge of integrating EE into all subjects mentioned by teachers in this study seems to be a manifestation of the inadequacy, inter alia, of the orientation given to teachers. This study found that 72% of teachers that participated in the survey did not participate in the EE preparatory workshops, and those that attended the workshop reported that they did not benefit much from the workshop.

To ensure success of the EE program, professional development for serving teachers and entrepreneurship education and training for pre-service teachers is very important. As Urban (2010) observed: "... often teachers know what one should implement but do not know how. This poses challenges for teachers' basic and in-service training, suggesting additional focus on the pedagogy of entrepreneurship education should be provided" (p 51). Provision of pedagogy and EE content education will boost teacher's self-efficacy, which research has shown to be crucial to the success of curriculum implementation (Li, 2023; Mu et al, 2024; Pikić et al, 2025).

Self-efficacy will also be enhanced by the provision of teaching-learning materials and other resources that teachers in this study reported to be problematic. The Government of Zambia's vision of integrating EE into the curriculum is not without precedent in the world. The nations with the best education systems such as Finland have reaped some benefits from integrating EE into the curriculum (Urban, 2010). However, for the benefits of integrating EE into the curriculum to be repeated, it will be helpful to pay attention to the voices of teachers that participated in this study.

## Recommendations

Based on the findings of this study, the following recommendations are made for the consideration of leaders at the ministry and in schools.

### Ministry of Education

The Government of the Republic of Zambia through the Ministry of Education should:

1. Improve the provision of teaching and learning resources to enhance the teaching of entrepreneurship.
2. Invest in infrastructure development in schools as some schools, especially in rural areas, lack proper infrastructure for entrepreneurship education.
3. Invest in digitalization of all the schools including those in rural areas to enhance research work among teachers and students.
4. Introduce entrepreneurship education as a standalone subject in addition to integrating it into the curriculum.
5. Carry out in-depth orientation for teachers aimed at imparting entrepreneurial competences on how to deliver entrepreneurship education.
6. Provide more Continuing Professional Development (CPDs) for teachers to learn more about entrepreneurship education.
7. Require colleges of education to promote learner centered teaching methods such as inquiry-based learning, and project-based learning to be core teaching methods to help develop an entrepreneurial mindset.
8. Conduct regular inspections to evaluate how the integration of EE is going in schools.
9. Continue reducing classroom overcrowding through massive recruitment of teachers.
10. Conduct a similar study nationwide to ascertain the perception of teachers (in all parts of the country) over the integration of EE into all subjects and to see how prepared schools are in implementing this strategy.

### Schools

Schools should foster a culture of entrepreneurship through:

1. Opening school business enterprises that will offer pupils an opportunity for experiential learning.
2. Identifying and collaborating with local businesspersons who will coach and mentor pupils throughout the stages of entrepreneurship development.

3. Encouraging interdisciplinary collaboration among teachers, including joint planning of units of instruction, co-teaching, joint assessment of entrepreneurship projects, etc.
4. Promoting field visits to successful entrepreneurs.
5. Establishing Entrepreneurship Fairs in the same way that they hold Junior Engineering Technical Society (JETS) expos.
6. Promoting entrepreneurship as a career option.
7. Implementing in every school a community project which promotes service learning, which is an important strategy for developing problem-solving skills and thinking outside the box.

## CONCLUSION

As can be seen from the literature cited in this study, many countries in the world have placed great emphasis on entrepreneurship education to “promote innovative projects, wealth creation, increased competition, industrialization, employment creation, and economic growth” (Zhu et al, 2022, p1., op. cit.). Zambia likewise has revised its curriculum framework to, among other things, promote entrepreneurship education by incorporating it into other subjects. The overall objective of this study was to determine Zambian teachers’ perceptions about schools’ preparedness to integrate entrepreneurship education into the 2023 curriculum. The conclusion from the findings is that not all schools are ready to integrate EE into the curriculum. More preparatory work needs to be done, and the study identifies some of the actions that need to be taken to enable the ministry to achieve the intended goal regarding integration of EE into the curriculum.

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