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# Towards An Entrepreneurship And Stem Education Primary School Curriculum In Zimbabwe: A Case Study Of Bumburwi Of Gweru District.

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#### ABSTRACT

The study sought to establish the setting up of an entrepreneurial skills base in Zimbabwe 's new education curriculum and how this new curriculum relates to STEM concept. Related literature exhibited that entrepreneurship skill development at early stages of learning contribute immensely to economic development of a country. These research findings appear to answer Zimbabwe's economic challenges hence the need to check on the existence of entrepreneurship skills in the new curriculum. Both qualitative and simple descriptive statistics approaches were used to analyse data. The research revealed that there are entrepreneurship skills inherent in the new curriculum that do need advancement. The curriculum implementers were not ready in any way as they lacked the basic skills in entrepreneurship development. It was recommended that; the curriculum development unit include the areas on entrepreneurship left out and that entrepreneurship was to be linked with STEM aspects to spearhead economic development.

**KEY TERMS:** Entrepreneurship, STEM and curriculum.

#### **INTRODUCTION**

Since the downturn of the economy in Zimbabwe in 2008 most companies in the major cities have closed shop. Our education system which was tailored to produce employment seeking graduates has been rendered irrelevant. In the United States of America and many other countries in the Asian continent entrepreneurship education has helped in driving the economy. Three quarters of American businesses are operated by self employed individuals. These entrepreneurs are contributing to more than half of America's Gross Domestic Product (US Department of Labor, 2002). In countries like Japan entrepreneurship education has been linked to the Science, Technology, Engineering and Mathematics (STEM) programme. In Japan and China entrepreneurship education begin at elementary school. This has led to tremendous improvement in the economics of these countries. Near home in Namibia entrepreneurship education has also begun in the elementary school and spans the entire education system. Zimbabwe has come up with a new curriculum in the primary and secondary school systems. The new school curriculum stems from the recommendations made in the Presidential Commission Report on Education and Training of 1999. Among the findings of the commission was that the education system did not extol the virtues of self-reliance and entrepreneurship and did not aggressively promote the teaching of Science, Mathematics, Technology, Vocational and Technical subjects and local languages. It recommended the upholding of STEM and entrepreneurship. The new education curriculum, it is hoped will provide today's generation with competencies that is, knowledge, skills and attitudes that will drive the country's socioeconomic growth. What the education system in Zimbabwe ought to be addressing is now the creation of entrepreneurs who will be geared to create employment thereby serving scores of unemployed graduates. What this means is to have part of the new curriculum be aspects of



entrepreneurship. No researches that the researcher knows have been undertaken on how the new curriculum addresses entrepreneurship and its link to STEM. This study was aimed at establishing how far the Zimbabwean Primary school curriculum was addressing entrepreneurship issues.

# STATEMENT OF THE PROBLEM

The new curriculum is supposed to address areas of STEM and entrepreneurship. No study has been undertaken on the extent to which the new primary school curriculum is addressing entrepreneurial aspects and how these are linked to the STEM aspects. The major question of the study is therefore "To what extent is entrepreneurship addressed in the new STEM primary school curriculum in Zimbabwe?

# **Research sub-problems**

The main research question was addressed by the following sub-research questions:

- 1. To what extent is the primary school curriculum content addressing entrepreneurship issues?
- 2. How are the methodologies employed in delivering the primary school curriculum suitable for imparting entrepreneurship issues?
- 3. How is assessment employed for the primary school curriculum suitable for the assessment of entrepreneurship skills?
- 4. To what extent are there links between the STEM and entrepreneurship issues? And
- 5. What aspects do teachers envisage ought to be included in the primary school curriculum to fully address entrepreneurship skills development?

# Purpose of the study

The study aimed at establishing aspects of entrepreneurship that are included in the new STEM Zimbabwean primary school curriculum.

# Significance of the study

The study intended to make the curriculum development personnel realise the entrepreneurship issues not included in the curriculum so that corrective action is undertaken. The study was intended to make teachers aware of the content, methodology and ways of assessment that could enable them to effectively drive home entrepreneurial aspects of the curriculum. Heads of schools equipped with knowledge of how to impart entrepreneurial skills could be armed to supervise teachers to the enhancement of the inculcation of entrepreneurial skills. The school children could end up successful entrepreneurs.

# Delimitations of the study

The study was delimited to teacher's perceptions and curriculum documents and their sufficiency with regards to entrepreneurial skills development. The study was undertaken in Bumburwi cluster of the Gweru District in the Midlands Province in Zimbabwe.

# Limitations of the study

The study was a case study so generalisation to other clusters is not possible.

# **REVIEW OF RELATED LITERATURE**

The review of related literature will explore the conceptual framework of terms such as entrepreneurship and STEM. It will also explore the theoretical framework underpinning the study and this will be followed by empirical literature review.

# CONCEPTUAL FRAMEWORK

Entrepreneurship, according to Rwigema (2004, p.5) is a process of conceptualising, organising, launching and through innovation nurturing a business opportunity into a potentially high growth venture.

Nieman, Hough and Nieuwenhuizen (2008, p.9) view entrepreneurship as "the emergence and growth of new business". This is a process that causes changes in the economic system through innovations of individuals who respond to opportunities in the markets.

Udu and Amadi (2013) Cite Osisioma (2008) defining entrepreneurship as a combination of initiative, innovation and calculated risk taking associated with identifying market opportunities, mobilising resources and managing them efficiently in the generation of productive, viable and socially responsible enterprise.

Adu and Amadi (2013) also cite Adnidu and Olannye (2006) as referring to entrepreneurship as creating and building something of value from practically nothing, creating and distributing of something of value to individuals, groups, organisations and societies resulting in growth of an enterprise which satisfies the expectations of stakeholders whose roles sustain the business.

The above definitions of entrepreneurship attest to the idea that entrepreneurship should end in someone having the ability to set up an enterprise that becomes successful. Theorising cannot enable one to put into practice what is learnt. It therefore, is not sufficient.

# THEORETICAL FRAMEWORK

The study was premised on the theories of experiential learning put forward by Kolb (1984) and Dewey (1997). These theories are founded in experiential learning which forms the base in teaching entrepreneurship. Kolb (1984) looks at learning as a process whereby knowledge is created through transformation of experience. Dewey (1997) contends that experiential learning involves the teacher playing a facilitative and guide role. This implies the teacher is a partner in the learning process, guiding students to independently discover meaning within the area. This also implies learners progress fast through doing the work not through mechanical drill and prefabricated material.

Experiential learning would be ideal in teaching and learning of entrepreneurship where learners have to be given room to generate business ideas, incubate these ideas and develop them into business in a conducive environment. What is required is the use of relevant teaching methods and mentorship by people who have hands-on-experience as pointed out by Co, Groenewald, Mitchell, Nayabage, Vanzyr and Visser (2007) that the new entrepreneurs can learn from others who have gone this route.

# **EMPIRICAL LITERATURE REVIEW**

Garazi and Jose Antonio (undated) points out that the content for the entrepreneurship course should entail entrepreneurship skill development, self knowledge, personal development leadership, risk taking, communication and negotiation, idea generation and development of intra entrepreneurship or entrepreneurship. Entrepreneurship courses should offer business models and customer management. Other knowledge needed are courses such as finance, laws, economics, statistics, customer service and sales and skills related to management skills like leadership, team management and communication. Murinda and Gasva (2013) have topics to be taught to the Post Graduate in Education in the Entrepreneurship module PGED 215 as; Conceptualising Entrepreneurship, Theories of Entrepreneurship, Entrepreneurial characteristics for business success, vocational and Technical Education and Entrepreneurship, Entrepreneurial Business ulea generation, Entrepreneurship strategy formulation, marketing in Entrepreneurship, selling in Entrepreneurship, Financial accounting in Entrepreneurship, Entrepreneurial Business management and engendering Entrepreneurship in education.

In an attempt to encourage young students to enter into business provision of start-up there is need to provide start-up facilities, offer incentives such as start-up grants, establishment of business incubating centres, networks of angel investors, venture capitalists and equity funds (ERIA and OECD, 2014). There is need to provide formal school programmes, non-formal education programmes, internships and small business counselling.

At policy level policy is to emphasise curriculum and teacher/trainer training. Policy is also supposed to support resources such as allocation of financial resources to support the implementation of policies on entrepreneurship learning. Entrepreneurship is also encouraged through business and academic collaboration. Business could support in terms of state of the art equipment and business managers teaching at universities, piloting and development of the curriculum, business sector cooperating in students' projects and host items and university staff placements.

Udu and Amadi (2003) point out the following challenges in entrepreneurship education instructional facilities and infrastructures, a dearth of qualified and experienced teachers and support staff. Most teachers were found to lack requisite knowledge, skills and pedagogy.

European Commission Enterprise and Industrial Directorate-General (2008) states that in Ireland the traditional examinations are replaced by an enterprise project in the social sector, such as organising an event for charity, that is offering value to the community. The students organise and manage the whole event. Students are given three months to:

- Identify a charity they wish to support.
- Generate and select an idea for a charity event,
- Secure a suitable venue,
- Get sponsors for the event,
- Develop and implement a marketing strategy,
- Sell tickets for the event and
- Organise every element of the operations.

European Commission Enterprise and Industrial Directorate-General (2008) recommend the following strategies to be used in training entrepreneurship; using experience-based teaching methods, the traditional educational methods like lectures do not correlate well with the development of entrepreneurial thinking, use of interactive learning approaches where a teacher becomes more of a moderator than a lecturer, multi-disciplinary collaboration and getting entrepreneurs come to give short presentations to students for personal testimonials or guest lecturers.

Debb (2015) proved that entrepreneurship education could successfully be started in a kindergarten class. Deeb (2015) had kindergarten pupils starting a new business venture successfully and maintaining it.

Dolasia (2008) introduced successfully entrepreneurship lessons at Edna Maguire Elementary school in Mill Valley. This was introduced through experiential learning.

Regarding the New Curriculum Framework Mapfumo (2015) point out under emerging issues from the consultation process some issues as; the promotion of enterprise development and the promotion of teaching of sciences, mathematics, technology, technical/ vocational subjects and ICT among others. The New curriculum was crafted bearing in mind that education was fundamental to personal and national development. The curriculum was to aim at development of highly skilled and innovative workforce which was critical for social, cultural and economic growth.

The Preamble to this document states that the new education system was to provide today's generation with competencies (knowledge, skills and attitudes) that would drive the country's socio-economic growth. To this end The Zimbabwe Ministry of Primary and Secondary Education Junior Science and Technology syllabus (Grade 3-7) (2015) has as some of its aims as; demonstration of innate talent that lead to originality and innovativeness and exploration of opportunities that promote a sense of self- reliance, enterprising and community development. Some of the objectives stemming from these aims are; designing and modifying technological devices using local and other materials, investigating how people, environment and economic issues influence and are influenced by science and technology, demonstrating enterprise skills that are relevant to the market recognising constraints of time, cost and accessibility of resources and demonstrating an appreciation of the role of designers, craftsmen, scientists and technologists in industry and society's sustainable resource management. The above aims and objectives highlight the need for STEM to be linked to entrepreneurship education. Generation Institute (2017) reveals the following strength of entrepreneurship education; enhancement of academic performance, school attendance and educational performance, enhancement of problem solving and decision making abilities, enhancement of interpersonal relationships and team work, money management and public speaking skills, job readiness and enhancement of social psychological development. Lackeus (2015) identifies three categories of entrepreneurship education namely teaching "about" entrepreneurship which is content-laden and theoretical aimed at giving a general understanding of the phenomenon, teaching "for" entrepreneurship which is occupationally oriented aiming at giving budding entrepreneurs the requisite knowledge and skills and teaching "through" entrepreneurship which is a process based and often experiential approach where students go through an actual entrepreneurial process. The teaching through approach can be relevant to all students and on all levels of education unlike the about and for approaches that are relevant for secondary school and tertiary level students Lackeus (2015). The above advantages are linked to the last approach. If the last approach detailed above is followed entrepreneurship may likely lead to economic development as what happened in countries like Brazil, India, Indonesia and Mexico (Olutuase, 2004).

Shizha and Kariwo (2011) contend that though education was to be the engine of development Science and Technology education was linked to development in many African countries. In Zimbabwe however, upholding Science and Technology might not lead to economic development because of following a linear economic development theory of Rostow (Shizha and Kariwo, 2011). Shizha and Kariwo (2011) argue for the adoption of the poverty alleviation or reduction economic development theory that suit the context of Zimbabwe. An appropriate model would be the structural economic transformation theories specifically the Gries- Naude' structural change model. This model of the process of structural change is facilitated by high ability entrepreneurs and it leads to firms adopting more complex production methods and producing more complex and specialised intermediate inputs (Naude, 2013).

The above literature review on entrepreneurship and economic development reflect that Science and Technology education to achieve it results ought to be linked to entrepreneurship if it is to lead to sustainable economic growth that Zimbabwe so cherishes. This study was targeted at establishing how the new Zimbabwean primary school curriculum linked the STEM component to entrepreneurship.

#### METHODOLGY

# Research Design

This study used the qualitative paradigm. This approach is sometimes referred to as the subjective approach (Cohen and Manion, 1994). Neuman (1997) refer to it as the interpretive paradigm. The paradigm posits that social reality is obtained from peoples' definition of social reality. The approach view human beings as active subjects with feelings, meanings and intentions and an awareness of being (Wamahui and Karugu, 1995).

# **Population, Sampling and Sampling Procedures**

The teachers in the cluster number one hundred and thirty. Purposive sampling was employed to pick on the sample. Only those teachers who volunteered to participate were picked. The sample consisted eventually of twenty-three teachers.

# Instruments and Data collection Procedures

The instruments used for the study included an open ended questionnaire (Quester-view) and a document analysis schedule. The quester-view comprised three sections. The first section comprised biographical data of the informants.

The second section comprised information on the definition of entrepreneurship and its inclusion in the new curriculum including in STEM issues while the third section looked at methodology used and how assessment is done. The document analysis schedule had three entrepreneurship content, methodology parts namely the the appropriate for entrepreneurship and assessment of entrepreneurship. The quester-views were given to teachers personally by the researcher and they were collected after filling. The researcher first established those willing to take part on the research. The document analysis was done after obtaining information that was gathered through quester-views and was done against the standards on the document analysis schedule.

# Data analysis procedures

The open-ended questions comprising the quester-view were analysed question by question. Those with similar theme were grouped together. The procedures of analysing qualitative data recommended by Merriam (2009) were used.

# FINDINGS AND DISCUSSION

# Biographical Data

Table 1 shows the biographical data of the informants

Table 1. Execution and 0/ of his graphical Data (N-22)

		equencies		biographical	Data (N-2	5)		
Frequency %	Gender							
		Male	Female					
		4	19					
2 Ages in years	18-	21-30yrs	31-	41-50yrs	51-60yrs	61 + yrs		
	20yrs	5	40yrs	L.	<sup>2</sup>	, i i i i i i i i i i i i i i i i i i i		
	0	0	7	4	10	1		
3 Teaching	1-10yrs	11-20yrs	21-	31-40yrs	41-50yrs			
experience	5	5	30yrs	L.	<sup>2</sup>			
-	3	7	8	6	0			
4 Qualifications	PTL	РТН	T3	CE	DIPLOMA	DEGREE		
professional	0	0	0	7	8	8		
5 Academic	Std 6	JC	0'L	A'L	Degree			
Qualifications	0	0	18	2	3			
6 Length of training	1wk	2wks	4wks	5wks	Nil			
in the new	3	6	3	3	8			
curriculum								
7 Status	Teacher	Senior	T.I.C	Dep/Head	Head	NIL		
		Teacher						
	1	19	0	0	1	2		
8 Grade Taught	Grade 1	Grade 2	Grade	Grade 4	Grade 5	Grade 6	Grade	Nil
			3				7	
	6	0	1	0	1	7	3	7

Table 1 reveal that all the respondents were over forty years, with teaching experience of 20 years and above. Such mature experienced professionals can easily understand educational change if properly inducted on the change. Secondly, such, can productively interpret the school curriculum and present concepts as contained in the policy document.

The data also reveal that training on the new curriculum was of a very limited time and that deficiency can lead to policy adaption rather than adoption thus defeating the whole purpose of curriculum change.

Responses also show that the participants were taught grades still engaged in the old curriculum and these may not be very conversant with the change.

# Findings and discussions on the entrepreneurship content

Informants do not seem aware of the meaning of entrepreneurship. About 4 referred to is at business, 2 referred to it as buying and selling, 5 referred to it as being self reliant, 3 did not provide a definition and only 9 seemed to be aware of the concept and referred to it as starting business, sustaining it and expand it. Below are some meanings of entrepreneurship proferred by some participants:

- ✓ It's about business and money.
- ✓ Self-sustenance
- ✓ Being self-reliant.
- $\checkmark$  Its business.
- ✓ Buying and selling of products.
- $\checkmark$  Is the use of money to start a business and make business deals.
- ✓ It means taking a risk in doing projects for self-reliance or long life.
- ✓ Starting business in order to make profit or earn a living. Being innovative.

The above meanings reflect that most of the participants are not quite aware of what entrepreneurship is. Two participants have the correct definition.

The informants provided topics to be included that were incomplete. The majority had buying and selling 4, only 3 had complete topics like what is entrepreneurship ensuring profitability, business sustenance, business studies, leadership, accountancy, sources of finance and how to start a business, advertising and money. Thirteen (13) were completely lost and referred to topics like rearing animals, using the old curriculum and sewing.

Below are some excerpts regarding topics to include in entrepreneurship:

Risk taker, leadership, accounting, business, source of finance, government requirements to start a business, buying and selling, money, resource management, vending, education with production, economics of the country, trade relations, business studies, gardening, sowing, building, ICT, farming and selling the products, making instruments (musical) to use at school, energy, electricity and natural resources.

The above topics reflect that the majority of the participants are not aware of issues related to entrepreneurship. They gave topics which are not related to entrepreneurship.

While 16 informants indicated the necessity of including entrepreneurship in STEM they did not point out the reasons. Only 4 provided reasons like that pupils will be able to create their own businesses and employ others. Below are some suggestions on what could be included in STEM curriculum regarding entrepreneurship.

- ✓ By involving pupils ideas into the STEM curriculum.
- ✓ To be included when doing Economic Studies, Business Management and Accounting or Commercial Studies as a subject.
- ✓ Not sure.
- ✓ To be compulsory aspect in the curriculum.
- ✓ By training teachers suitable for imparting that knowledge.
- ✓ Through learning areas like ICT.
- ✓ Through learning areas like ICT and Visual Performing Arts.
- ✓ By including topics on business.

The remarks do not seem to suggest what actually should be included. There is merely a statement on where it could be housed by no mention of how.

With regards how entrepreneurship would be included in STEM most stated it could be included in learning areas like Mathematics, information technology and visual performance some stated it could be taken as a subject on its own 7. Two reflected having economic studies, business management, accounting and commercial studies in the STEM aspects. This does not show how they could be included.

Below are some remarks on aspects of entrepreneurship that could be included in the STEM aspects from the participants:

- ✓ Marketing.
- ✓ Buying and selling of small items.
- ✓ Constructing of objects in science that can be sold.
- ✓ Buying and selling, pricing of goods.
- ✓ Buying and selling, pricing and construction of instruments.
- ✓ Helping learners in building their exit profiles.

- ✓ Buying and selling and crop and animal husbandry.
- ✓ Development of entrepreneurship skills.
- ✓ Providing enough resources in order for the children to be more innovative.
- ✓ Business management, economic issues of the country and income generating projects.
- ✓ Marketing of products.
- ✓ Students should be taught skills for use in employment, work and at home.
- ✓ To make learners take home the products they produce at school.

Much of what is expressed in these remarks really highlights aspects to be included. There are some remarks which show the participants do not have full knowledge of entrepreneurship aspects. The participants were however, supposed to refer to each STEM area and how entrepreneurship could be included.

Regarding the issues of entrepreneurship in the curriculum informants points out that there are issues like wealth and money, buying and selling, starting up a business and in mass display and visual performance arts. Below are some excerpts on the major entrepreneurship areas in the curriculum:

- ✓ In Visual and Performing Arts, ICT and mass display.
- ✓ In the primary school no issues of entrepreneurship in the new curriculum.
- ✓ Buying and selling.
- ✓ We find the in mass display and visual and performing arts.
- ✓ By including topics on business.
- ✓ Learners are taught skills in PE, Visual Arts and Performing Arts.

The teachers do not seem to get the point on issues included but pointed out the areas where it could be included. This does not show their clarity on the issues of entrepreneurship.

# Findings on what is to be included

Regarding what is to be included the informants suggested areas like business transactions, advertising, accounts, construction of machines, production and generally skills like marketing, business management and projects.

Below are some excerpts on how the entrepreneurship issues could be related to STEM aspects:

- $\checkmark$  The ability to construct non improvised machines.
- ✓ They are not related.
- ✓ Shifting from exam oriented environment to practical oriented environment.
- ✓ Business transactions, calculation and advertising of a product.
- ✓ Production involves science using proper technology measurements and these productions need to be marketed to get into business and make profit.
- ✓ Accounts is related to Mathematics in STEM aspects.
- ✓ Most of these items will be linked with Science areas.
- ✓ Money is included in Mathematics.
- ✓ They help the learners acquire the right skills.
- ✓ Children are taught how to acquire the right skills.
- ✓ They could help the learners to acquire and use the skills in future.
- ✓ Constructing objects in science that can be sold.
- ✓ They assist learners in acquiring entrepreneurship skills.

The remarks in the main reflect on understanding of how the entrepreneurship issues could be related to STEM aspects. In some cases there was no explanation of what could be done. The participants remained so general.

#### Findings on methodology used

The informants could not figure out the methodology that is used. They reflected the methodology is not appropriate. Regarding how entrepreneurship was taught below are some experts are taught;

- ✓ It is right.
- ✓ No it is not taught right.
- ✓ Through teaching on gains from artefacts, performances on different disciplines.

The remarks do not show the participants were aware of the methods used apart from saying it is right or it is not taught right. This might imply they are not aware of the methods that suit entrepreneurship education.

# Findings of assessment employed

The assessment used is continuous assessment. Also summative assessment is used as well. Below are remarks on entrepreneurship is assessed;

- ✓ Profiting learner performance doing practicals and written exercise.
- ✓ Yes it is right.
- ✓ Through written exercises and other activities.
- ✓ Through assessment of production and grading of production.
- ✓ Through continuous assessment and summative assessment.
- ✓ There is need to have projects.
- ✓ Not sure.
- ✓ Continuous assessment.
- ✓ Not aware of these.

The remarks reflect the participants and informants were not clear on the assessment methods used. Some of them said there were not sure or aware of assessment methods used.

# Findings from document analysis

One aspect of entrepreneurship is a cross cutting issue which is financial literacy.

The curriculum encourages the practical aspect for example in mathematics and Science learning area the children are to acquire mathematical and scientific concepts for use as tools in life. The pupils are also expected to use local materials to design and modify simple technological devices. At grade 5 level for the topic work and leisure pupils are supposed to identify ways of creating employment in Zimbabwe. This work is only found at grade 5 level. Assessment involves continous assessment, profiling and practical assignments. Methods used include: Project work, role play, simulation, demonstration and lecture.

Some of the general comments passed by the participants were;

- ✓ There are no resources for the new curriculum the teacher is teaching what she/he knows. There is disorder.
- ✓ In schools entrepreneurship can be easily implemented provided there are resources.
- ✓ Entrepreneurship needs funding.
- ✓ Too much ideas are given to primary schools in a short space of time hence to implement becomes a problem.
- ✓ Entrepreneurship needs to be taught in all grade levels so that pupils develop their talents from beginning.
- ✓ The subject is too demanding to a primary school child.

The above general comments reflected that entrepreneurship would require resources some in the form of funding which presently are not available. Another issue that comes out from the remarks is that the teachers are not aware of what entrepreneurship should entail. They therefore point out it is too demanding for the primary school child.

# DISCUSSION

The findings reflect that the participants and informants aren't equipped with issues regarding Entrepreneurship definitions. Their definitions were not anywhere near the definitions advanced by authorities such as Rwigema (2004), Nieman, Hough and Niewehuizem (2008) and Osisioma (2008). The topics for entrepreneurship are not known. The participants and information advanced topics which are not in line with the topics pointed out by Garazi and Jose Antonio (undated) and Murinda and Gasva (2013).

The findings reflect that the majority of participants could not point out the reasons for including entrepreneurship in STEM. They did not point out how. The how part is important as pointed out by ERIA and OECD (2004).

Regarding issues of included in the curriculum there is just a general mention of areas without pin pointing real issues.

Regarding what to be included in the curriculum with STEM the participants seem to have an idea. The areas revealed are entrepreneurship areas. These areas concur with ideas of Garazi and Jose Antonio (undated) and Murinda and Gasva (2013).

Regarding how entrepreneurship could be included in a STEM curriculum there was mention of the learning areas without expanding on how they could be included. The teachers reflect they are not aware of how STEM ought to be related to entrepreneurship education to lead to sustainable economic development.

# CONCLUSIONS

The following conclusions were drawn from the findings:

- ✓ There is a lot of entrepreneurship information that has been left out in the primary school curriculum.
- ✓ STEM issues need to be linked to entrepreneurship to lead to sustainable economic development in Zimbabwe.
- ✓ The teachers have not adopted assessment that requires pupils to follow the process of entrepreneurship. The curriculum documents have some forms of assessment that promote the above view but the teachers are not aware of that.

# THE WAY FORWARD

The following recommendations have been advanced:

- ✓ The curriculum Development Unit for the Ministry of Primary and Secondary Education ought to include areas of Entrepreneurship that have been left out.
- ✓ Entrepreneurship issues should be linked to STEM aspects so that sustainable economic development is realised.
- ✓ The Ministry of Primary and Secondary Education to staff develop teachers on practical assessment for issues related to entrepreneurship.
- ✓ Further studies could be carried out with expert entrepreneurs.

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