The Economic Dynamics and Prospects of Vocational Technical Education at Primary Level in Zimbabwe's primary schools; a case of Agriculture as a Vocational Technical Subject in Hwange Urban Schools, Matabeleland North Region

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Abstract: The study to assess how participants and beneficiaries perceive the effectiveness of the implementation strategies employed by Zimbabwe's Ministry of Primary and Secondary Education on introducing vocational technical education at primary level as enshrined in the Nziramasanga Commission of Inquiry 1999, was carried out in Hwange urban under Hwange district of Matabeleland north province. Central to the study was to establish the extent to which the strategies have been effective in motivating adoption and application of the new curriculum by schools. It is imperative that after gaining independence in 1980, the Government of Zimbabwe expressed deep concern about educating its citizenry particularly equipping youths with lifelong skills to curb the rising incidence of poverty in the country. This therefore meant that the existing school curriculum needed to be realigned to suit the present needs of country's economy. Though a noble idea, the initiative was associated with a plethora of challenges which the designers overlooked hence the reason why schools are so skeptical about the innovation. For purposes of generating data 100 participants comprising school heads, teachers, grade seven pupils and parents were randomly selected from a population of 610 drawn from the ten primary schools. Policy documents and Directors' circulars offered the platform upon which secondary data was scrutinized to evaluate efforts made by the responsible Ministry to implement the recommended new curriculum before checking on the level of preparedness by schools. A questionnaire and interview guides were used to generate the required data from the participants. Data obtained were subjected to descriptive statistics where frequency counts, means and percentages were used for purposes of presenting findings. A Likert scale guided the design of the questions and presentation of the findings. The study established that though it is appreciated that there is great need for vocational technical education in Zimbabwe's primary schools, teamwork by all stakeholders is fundamental if the full benefits of the new system are to be realized.

Keywords: economic dynamics, prospects, vocational technical education, implementation strategies, motivating adoption and application, new curriculum & lifelong skills

I. Background to the study
The Government of Zimbabwe, since its inception on the 18th of April 1980, has expressed deep concern about educating its citizenry and equipping the youths with lifelong skills to curb the rising incidence of poverty in the country. The Government realized that if the former bottleneck education system was not revamped the worsening poverty situation would remain unchecked and escalate hence the future of the entire nation would be doomed. In light of this, the Government therefore introduced a number of programs and measures aimed at transforming the education system. Among the early activities of the Government were the launching of the Universal Basic Education (UBE) Program, facilitated by free primary education and vocationalisation of some secondary and tertiary institutions as enshrined in the Nziramasanga Presidential Commission of Inquiry into Education and Training [CIET] of January 1998 and Mutumbuka's ideology of "education with production" (Mandiudza et al, 2013). The Nziramasanga Commission among other Terms of Reference (TOR) was mandated to inquire into and report upon the inherited education system as to its relevance, quality and orientation in a rapidly changing socio-economic environment, with the immediate concern of equipping learners with the prerequisite skills and the entrepreneurship to run their own businesses after school. The new dispensation thus advocated for a genuine shift from an education that was too academic and examination oriented to one that emphasized experiential learning and development of desirable qualities and competencies in students (Nherera, 1999).

According to Mubika & Bukaliya, (2011) Zimbabwe's education system initially consisted of primary education, secondary education and tertiary education. Before the introduction and incorporation of a two year, early childhood development education program (ECD) in to the formal system primary level was a seven-year cycle, running from Grade one to seven. The curriculum designed by the "Ministry of Education, Sport and Culture's Curriculum Development Unit (CDU)" had bias on academic subjects. Emphasis was on subjects such as: Mathematics; English; Shona and Ndebele (Indigenous languages); and General Paper covering Social Studies, Environmental Science, and Religious Education (largely based on Christianity), with teacher pupil ratio exceeding 1:50 as cited by Gumbo, (1986). According to Nherera, (1999) the highest qualification for a teacher was a diploma or certificate from any nationally recognizable college. Such teachers are currently congested in urban areas where conditions of service are better, hence leaving rural communities and other marginalized areas being manned mostly by untrained temporal teachers. At the end of Grade 7, students are tested in the four examinable academic subjects mainly; Mathematics; English; Shona and or Ndebele (Indigenous languages); and General Paper. The introduction of the new curriculum which makes the teaching and testing of practical subjects compulsory in all primary schools ushers in a radical paradigm shift which needs to be embraced by all stakeholders. For failure or delayed acceptance of the innovation would impede progress and affect the learners' performance particularly those in Grade 7, pioneering and intending to write the practical examinations for the first time.

Though vocational technical education comes at a handy time to address the challenges associated with the changing socio-economic environment in Zimbabwe, by equipping primary learners with diverse lifelong skills the implementation and management of the program needs serious consultations so that issues to do with gender and disability are factored in. It is assumed that the proportion of female pupils has increased significantly and is almost matching that of its male counterparts (Nziramasanga, 1999). This therefore required policy makers and implementers to take cognizance of additional demands and financial implications the new curriculum would place on schools and parents as proper material resources for the boy and girl child would be a prerequisite. Again students with special needs, those with varying degrees of disability needed special consideration so that they would not find themselves neglected and feel stigmatized from the mainstream able bodied leaners, which is always the case in Zimbabwe. Research shows that even the tertiary system has been failing to cater and provide favorable learning conditions for such students in the similar predicament. Reforms in the education system thus need a holistic approach where inputs from society/ general populace and stakeholders are aggregated to come up with an informed position before implementation.

It is against this backdrop that, though vacationalisation of the Zimbabwean primary curriculum was meant to realign the education system so that it would match the needs of the country's industries, the fears are that the abrupt implementation to resource constrained schools would reverse the gains of the program, as schools will not move fast enough to implement the curriculum. This treatise therefore argues that instead of being the panacea to unemployment predicament facing thousands of Zimbabwe's college and university graduates across communities; vocational technical education system in Zimbabwe is marred with a plethora of challenges due to resource constraints. This has resulted in an impasse, which can only be solved by considering engagement and aggregation of input from all stakeholders. The study examines the paradigm shift being taken by the Zimbabwean education system and the dimension it is pursuing through the introduction of the new curriculum. Although it interrogates the flaws associated with the implementation strategies of the innovation that are coalescing against the objectives of this program, it does not advocate for a total denial of the model by the educators and their schools. Accordingly it values an interdisciplinary perspective that accommodates the perceptions and interests of all stakeholders. The study opines that unless an interface analysis is adopted to bridge the impasse, the goal of sustainable development through the overhauling of the education system will remain elusive. The study was grounded in qualitative methodology where Participatory rural appraisal tools and techniques were extensively used and formed the backdrop of all the data collection.

1.1 Statement of the Problem

Though vocational technical education comes at a time handy to address the challenges associated with the changing socio-economic environment in Zimbabwe, by equipping primary learners with diverse lifelong skills, it is feared that the irrational abrupt strategy employed by the responsible ministry where schools are being coerced to hastily adopt and implement the curriculum would reverse the gains of the program as schools are not yet geared up enough, to embrace the innovation due to a plethora of challenges overlooked by the authorities. Such challenges are a potential disaster in incapacitating active participation by primary education practitioners; a similar case of previous initiatives where some important recommendations which would have changed the state of education for the better never saw the light.

1.2 The study is therefore guided by the following questions;

- How do schools and parents perceive the benefits of vocational technical education at primary level in Zimbabwe?
- What is the relevant support put in place by the government and stakeholders to guide and support the implementation process of the program?

• Are schools/ institutions of learning ready in terms of resources, both human and material to implement vocational technical education at primary level?

1.3 Theoretical Framework

The study though based on the recommendations of the Nziramasanga Commission of inquiry which had thrust on Education and Training to change the curriculum to suit the prevailing socio-economic conditions of the country as cited by (Mandiudza et al, 2013). The focus was on the irrational implementation strategy employed by the current Ministry of Primary and Secondary Education, where schools are being coerced into adopting and implementing the program before putting in place proper structures and mobilizing resources for the curriculum. Lack of proper consultation has once again seen the ministry exercising its dictatorial tendencies of top to down instructional communication, ordering schools to commence teaching and testing vocational subjects before checking on the preparedness of such centers. This therefore is viewed as a recipe for disaster as schools are not capacitated enough to effectively implement vocational technical education or meet the demands of the new curriculum. This leaves the curriculum thus subjected to further evaluation and analysis to establish better implementation strategies to relieve pressure on schools, educators and the learner. The paper therefore attempts to evaluate the socio-economic dynamics of the implementation strategies of technical subjects versus adoption and the ease of application by schools. The information generated would be essential in giving feedback to planners so that they can make informed decisions based on recommendations of the reached conclusions.

II. Research Methodology

The study was carried out to establish the extent to which the implementation strategies of vocational technical education as enshrined in the Nziramasanga Commission of Inquiry 1999, employed by the ministry have been effective in motivating adoption and application by schools and the ease of its incorporation into the school system. The school system encompasses all stake holders such as heads, teachers, pupils, parents, education system and instructional materials. The population of the study comprised of elements drawn from ten (10) primary schools in Hwange urban; Hwange district of Matabeleland north province. Ten school heads, one hundred teachers, four hundred grade seven pupils and one hundred parents constituted the 610 population of the study upon which 100 participants comprising all outlined categories as highlighted above were selected. Policy documents and Directors' circulars offered the platform upon which secondary data was also scrutinized to evaluate efforts made by the responsible Ministry of Primary and Secondary Education to implement the recommended curriculum before checking on the level of preparedness by schools. The population was stratified to ensure homogeneity in terms of the variables under investigation to minimize variability in observed outcomes of interest per stratum as alluded to by (Chimedza, Chipoyera and Mupambireyi, 2004). A questionnaire and interview guides were used to generate the required data from the participants. Data obtained were subjected to descriptive statistics where frequency counts, means and percentages were used for purposes of presenting findings. A Likert scale guided the design of the questions and presentation of the findings.

III. Results and Discussions

Table 3.1: Preferred support from government and stakeholders

Nature of support	Number of respondents	%
In-service training for teachers	10	33
Land & proper infrastructure	8	27
Tools & equipment	7	23
Loans & credit lines	5	17
Total	30	100

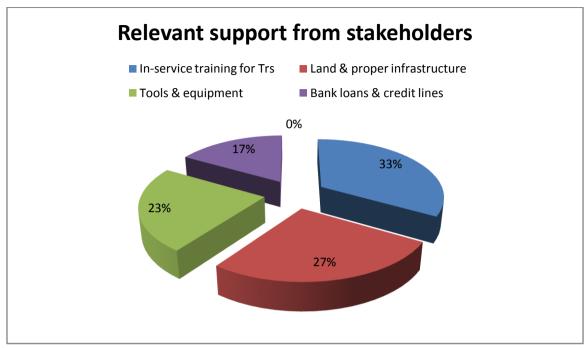


Figure 3.1: relevant support expected from stakeholders

All the 30 participants randomly drawn from the sampled 100 members agreed that the integration of vocational technical education as enshrined in the Nziramasanga Commission of Inquiry of 1999, was a noble idea which needed immediate adoption as long as government and stakeholders avail support deemed necessary as depicted in figure 3.1 and table 3.1 above. Thirty-three percent of the participants indicated that in-service training for teachers was critical as majority of the primary educators lacked the prerequisite skills in teaching practical subjects, which used to be a preserve for secondary and tertiary institutions. Twenty-seven percent however pointed out that land & proper infrastructure were a critical variable which needed concerted effort from all stakeholders as all frontiers of production were centered on it as the major determinant. The general observation was that all learning centers visited during the fieldwork had no access to land and infrastructure for effective execution of the new curriculum by schools. Twenty-three percent of the participants cited scarcity of tools & equipment as the major hindrance for adoption of the innovation particularly by resource constrained schools. Unavailability of loans & credit lines, coupled by the prevailing dire liquidity crisis facing the nation has also been cited as a stumbling block for the ministry's initiative.

Table 3.2: Challenges affecting adoption of vocational technical education

Schools	Identified challenge	Number of	%
		respondents	
Sampled	Inadequate and poor teacher training on voc-tech subjects	52	52
schools 1-	Inadequate tools and equipment at school	17	17
10	Limited and unreliable power supply (electricity) at schools	5	5
	Limited support by government and stakeholders	7	7
	Inadequate funding/prohibitive capital investment and operational	6	6
	cost		
	Unavailability of land for experiments and practical demonstrations	9	9
	Bureaucratic bottlenecks/rigid organizational structures for innovative	4	4
	change		
Total		100	100

On establishing challenges affecting adoption of vocational technical education by primary learning centers in Zimbabwe it was unanimously agreed that the quality of teachers in the system does not match the current professional needs aspired to drive the new curriculum as their initial training placed excessive emphasis on memorization and working on abstract/theoretical concepts as opposed to experiential learning and development of desirable lifelong skills and competencies in learners. Fifty-two percent of the participants (table 3.2 above) indicated that the current crop of teachers in most schools lacked the proficiency to impart vocational

technical skills in students hence the need for the responsible ministry to put an in-service teacher training program in place. High staff turnover, particularly those with a flare to teach practical subjects was also cited as a drawback as they are marketable and would prefer to seek greener pastures outside the country where remuneration is reasonable. Power outage and unreliable electricity supply was noted to be one of the challenges that had potential to a greater extent of incapacitating schools on implementing the new curriculum. Limited support by government and stakeholders was cited by seven percent of the participants as another hitch thwarting efforts by most schools to adopt and execute vocational technical education. Four percent of the partaking individuals retorted that bureaucratic bottlenecks by government ministries were always detrimental for such initiatives as set goals and targets were not at all times achieved in the anticipated reasonable time frame. It has also been observed that at times the set goals by ministries were not tied to the availability of the requisite resources to achieve them. This therefore calls for systematic planning and mobilization of the much needed resources before embarking upon new programs by governments.

IV. Conclusion

The study established that Vocational and Technical Education has become a vital mode of education delivery from primary to tertiary institutions in Zimbabwe. The prime intention of the government was to come up with an education system that mitigates poverty through enhancement of employment creation as alluded to by Mubika & Bukaliya, (2011). A well designed Technical and Vocational Education will indeed be education for employment through offering skills to learners at a tender age for a wide range of employment opportunities. The new system was to ensure that students graduating at every level would have some scientific and practical knowledge that could be utilized for self-employment, employment, or further skills training as cited by Zimbabwe's Ministry of Education, Sport and Culture, (2001). Nonetheless, the high cost involved in its implementation demands that Government and other stakeholders, in a win-win situation, pull resources together to fund its effective operation to bridge the disconnect between education and employment (Mandiudza et al, 2013). The study established that Vocational and Technical Education policy formulation was a noble and a much waited for idea but its implementation strategy seems to be hurried and highly centralized, not in consultation with stakeholders particularly at grassroots and before checking on resource mobilization and preparedness by learning centers and parents. Dalton, (1988) cited that there is always need to consult and properly educate participants and the intended beneficiaries of a new innovation rather than promptly implement the changes when they are suggested, as in most cases proper implementation strategies are compromised leading to failure of such innovations. Though it is appreciated that there is great need for vocational technical education in Zimbabwe's primary schools, the study established that there is need for teamwork by all stakeholders if the full benefits of the new system are to be realized.

V. Recommendations

Given this scenario, the study advises that Governments should not take for granted that, since their new ideas are such good, they would be widely and rapidly be accepted by schools (Hawes 1979; Mandiudza et al 2013). Policy makers should therefore make sure that there is strict adherence to policy circulars by all stakeholders. All active participants in the new programs need to be financed to capacitate them in the implementation of curriculum reforms. The inspectorate team needs to be highly mobile and visible on the ground as this will give them first hand information on problems being faced by schools and suggest solutions early before the reform is abandoned as noted by Shiundu & Omulando, (1992). Dalton, (1988) cited that there is always need to promptly implement innovations or changes when they are suggested, as once suggested developmental process of change takes long to complete, the success of such change is affected and in most cases no proper implementation strategies are followed.

The need to involve all stakeholders, especially from parents, schools, all relevant ministries, commerce to industry, in the planning process is paramount as this determines to larger extent the success of new programs. In the case of Zimbabwe, this would have avoided the incorporation of irrelevant material and concepts on the new curriculum as subject content to be studied by pupils should not just be imposed on them.

The learner should have been allowed to make choices that suit their physical and mental abilities as it was established that students with varying conditions of disability were not considered like always the case. This presents an element of stigmatization hence such learners would not be receptive to the vocational knowledge as they view it as a preserve of the mainstream able bodied learners.

Proper implementation strategies need to be put in place and strictly followed as vocationalisation of schools cannot be achieved if practical subject are taught like academic subjects as cited by Mandiudza et al, (2013). This could be a direct result of lack of resources, ranging from human, capital/financial and material characterizing the majority of schools, it is therefore imperative that Governments and stakeholders, before adopting any changes, should make sure resources are made available. Though there is a great need to make students learn by doing and introducing them to hands-on activities at tender age, the study established that there

is need for teamwork by all stakeholders to realize the full benefits of vocational technical education in Zimbabwe's primary schools.

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