

Integration of vocational and academic education in Uganda's secondary schools

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Abstract

This paper sought to explore the integration of VE in the secondary school curriculum as a means of transforming communities in Uganda by determining the vocational subjects taught at the secondary education level; to establish factors that influence students' choice of vocational subjects; and to highlight the challenges to the integration of vocational and academic subjects. A cross sectional survey research design guided the collection of both quantitative and qualitative data from teachers, students and parents and data was analysed using descriptive statistics and content analysis. It was established that out of the ten approved vocation subjects, only five are commonly offered. Secondly, students selected subjects basing on expediency other than on the vocational utility of the subjects. Lastly, poor attitudes of parents and students towards VE and limited resources are the key challenges to effective integration of academic and vocational subjects. The paper concludes that integration of vocational and academic subjects is not likely to transform communities. In this regard, the relevant authorities should re-examine the set strategies and use appropriate tools at their disposal to ensure that the integration yields the intended results.

Key words: vocational education, formal education, integration of academic, vocational and community transformation

Introduction

The idea that education and training is a dependable means for transforming communities out of poverty and deprivation is often taken for granted. Communities generally associate lack of or low education with poverty much as it is not clear whether it is lack of education that causes poverty or poverty that causes lack of education. What is clear, however, is that the uneducated and less educated constitute the majority in the ranks of the poor. The human capital theory has been used as one of the key explanations for the relationship between education and social-economic

progress. Accordingly Kefere & Rena (2007) underscore the role of education and training in enriching people's lives, broadening of people's choices and enabling every citizen, every child, every woman and every man to reach her/his full potential in society. As the experience of many countries has shown, however, the link between education, training and community transformation is not straight forward (World Bank, 2010a).

Human capital is the stock of productive skills and technical knowledge embodied in country's population. According to this framework, a well-educated, innovative and skilled population is the foundation as well as the goal of development (Tjahyono, 2012). Human capital is both the goal and the engine of progress since 40 to 60 per cent of growth rates in per capita GDP can be attributed to investment in human resource and the increased productivity thereof. This implies that sustainable community transformation cannot occur in the absence of human resource since no country can achieve sustainable progress without substantial investment in education and training. Several studies suggest significant returns to basic education, research, training, learning-by-doing and capacity building (Rena 2000).

In Uganda's second national participatory poverty assessment study (UPPAP2, 2001-2002), low education and illiteracy were cited as overall effects, causes and characteristics of poverty. By contrast high level of education was construed as an attribute of the well-to-do. Much of the data so collection show that community members considered post primary education and training as a means of transforming them out of poverty. Communities are convinced that education, especially post-primary education, enables one to compete favorably for employment and high-income jobs that can enable a graduate to help the parents in old age. The communities perceived the benefits in terms of certificates gained, nature of employment, income acquired, practical value added or skills acquired and ability to employ oneself (Deepening the Understanding of Poverty, 2002).

Indeed evidence shows that post-primary education contributes significantly to community transformation in terms of economic, social and cultural development and progress. Parents send their children to school for the expected economic benefits as well as the social and cultural gains of schooling (MoES, 2014). Thus, the community has faith in skills training and workforce development as the key to transforming people's lives. Vocational Education (VE) in particular has been emphasized as the gateway to training people in community transforming skills in agriculture, commerce, hygiene, science, ICT and manufacturing (Atchoarena & Delluc, 2011). Indeed, VE is an integral component of

lifelong learning that has a crucial role to play as an effective tool to realize the objectives of culture of peace, environmentally sound sustainable development and social cohesion (Jjuuko, 2010). This paper therefore, sought to explore the integration of VE in the teaching and learning at secondary school level as a means of transforming communities out of poverty.

Kingombe (2012) construe VE as a means for acquisition of human capital in terms of knowledge, skills and values that increase opportunities for productive work, sustainable livelihoods, personal empowerment and socio-economic development in knowledge economies and the rapidly changing work environment. One of the most important features of VE is its orientation towards work. Its delivery systems are considered well placed to train the skilled and entrepreneurial workforce needed to create wealth so as to help poor countries get out of poverty. Secondly, VE can be delivered at different levels of sophistication, which means that schools can respond to different training needs of learners from different socio-economic and academic backgrounds. Finally, since VE prepares people for sustainable livelihoods, the youth, the poor, and the vulnerable members of society can benefit from it (African Union, 2007).

Broadly viewed, VE covers all formal and informal instructions for learners in secondary and post-secondary schools and out of school learners, which prepares individuals for initial entrance into and advancement in an occupation or group related occupations. While the current study focuses on VE at the secondary education level, individual skills acquired can translate into skills necessary to uplift communities (Famiwole & Okeke, 2013). In this way, VE has important implications for poverty reduction in a developing context. While it is acknowledged that skills alone cannot generate formal employment, without skills, the capacity for individual and societal development is considerably stunted (Akoojee, 2007). Thus, the importance of VE in developing skills for community and societal transformation cannot be underestimated.

In Uganda, VE dates way back in the 1920s following the Phelps Stokes Commission criticism of missionary education for being too academic and theoretical. Efforts were then made by the colonial government to enforce teaching of VE subjects in secondary schools (Ssekamwa, 2000). In 1940s, Second World War camps were converted into skills training centers to mobilize and equip war veterans and children with skills for survival (Sempijja, 2003). By the late 1950s, the Artisan Training Organization had been formed to assess the competences of trainees. By 1970, a modern Vocational Training Institute had been established to increase production of craftsmen to meet the country's industrial demands. In 1977, the

infamous Namutamba Project was implemented in Namutamba Teacher Training College to train teachers in vocational training skills. The history of VE in Uganda thus, demonstrates the commitment made by successive governments in to establish and strengthen VE in the country (Ssekamwa, 2000).

The effort thus highlighted was however undermined by the political instability that befell the country from 1979 up to 1990. In 1989, after the Bush war, the NRM government instituted and tasked the Education Policy Review Commission to review the country's education policy. This initiative resulted into the Government White Paper of 1992, the blue print for Uganda's current Education Policy. The White Paper stressed the teaching of vocational education subjects in Ugandan secondary schools. Besides, the Poverty Eradication Plans (2004-08) called for appropriate balance at the Post-Primary Education level of academic and vocational education. In addition, the Education Sector Plan envisaged VE as an alternative to academic education in the last two years of the secondary level (OECD, 2008).

Since the mid-2000s, the traditional drivers of government interest in VE have been reinforced by the growing importance of skills for economic competitiveness, concerns over the ability of the education system to supply the skills demanded by the privatized and diversified economy (GoU, 2004; World Bank, 2010a), the growing social demand for post-primary education, the discovery of oil in the country, and the mass demonstrations in urban areas largely swelled by unemployed youth. These forces have nudged government into prioritizing VE in the current education reform trajectory. Consequently, the secondary education curriculum has been reviewed several times to make it more responsive to labor market demands. Over 50 secondary schools have been re-oriented to VE wherein vocational and academic subjects are emphasized in equal measure to produce a more productive and balanced secondary school graduate. Among the vocational subjects taught are: tailoring, carpentry, construction, brick laying, music, agriculture, technical drawing and crafts, business studies, among others (Education Abstract, 2009).

A number of studies have been done on vocational education in Africa. In a parliamentary briefing paper about projecting Ghana into the real middle income economy Dzeto (2015) gave a situation analysis of vocational education and training in Ghana highlighting its potential and challenges. Famiwole, Remigiu (2013) appraised the adoption of basic technical vocational education and training concepts in Schools and Colleges in Ekiti State, Nigeria. Ayonmike, Chinyere, Okwelle, Chijioke and Chukwumaijem (2013) analyzed the quality of TVET programs In

Nigeria. In Uganda, Jjuuko (2013) gives an erudite expose of the persistent illusions of TVET and the challenges that undermine its supposed comeback on Uganda's post-primary education agenda. In his master thesis, Jjuuko (2010) examined the potential of Vocational Education and Training (TVET) to train young people with incomplete schooling in Uganda. Bananuka & Katahoire (2007) in a paper presented at the Association for the Development of Education in Africa focused on mapping non-formal education at post-primary education level in Uganda. Illuminating as they truly are, these studies focused exclusively on TVET as offered in specialized institutions and not the kind offered in Uganda's secondary schools where academic and VE are concurrently offered.

According to MoES (2014), the two broad goals of vocational education in Uganda are: a) to stimulate intellectual and technical growth of students in order to make them productive members of the community. b) To produce craftsmen, technicians and other skilled man power to meet the demands of the industrial sector. Vocational education is also expected to promote job creation competencies rather than job seeking as the subsector continues to strengthen practical skills acquisition and application that translate into the nation's sustainable development (MoES, 2014). This is in tandem with Dzeto (2015), who takes VE as a cog in the wheel of personal growth and a major tool for social transformation and national progress. Government too recognizes that the employability Uganda's school leavers is hampered by lack of basic technical and vocational skills. The shortage of agricultural extension officers, electricians, artisans, carpenters, creative artists, and mechanics in a country whose post-primary education enrolment levels have been rising dramatically for more than a decade is extremely disturbing (MoES, 2014, 2013).

Bennell (1996) in Dzeto (2015) thus, highlights a multitude of challenges vocational education faces in Africa that include: low public image, supply-driven training mode adopted by schools that leaves graduates with limited options as communities show limited interest in such graduates because of their inability to address community immediate needs, schools focus more on liberal studies and natural sciences than they do on vocational subjects that results in producing graduates rather than skilled manpower. Furthermore, the quality of staff, training equipment and facilities and their adequacy remains a serious challenge. In Uganda, VE service delivery is yet to be fully reformed to widen access and improve quality (Jjuuko, 2010, 2013; MoES, 2014; Maiga, 2012 & Alam, 2007) in Dzeto, 2015; Lugujjo, 2003). Jjuuko (2010) thus counsels that the hype and naïve assumptions of the potential of VE without commensurate

policy reform and real national commitment that persist in Sub-Saharan Africa and elsewhere are not likely to produce tangible results soon.

As the education policy pendulum swings towards vocational subjects in Uganda however, the researchers' monitored experience and anecdotal evidence indicates that the integration of VE into mainstream secondary education may be fraught with several challenges that undermine its ability to transform communities. In the first place, the criteria for choosing subjects offered by a typical secondary school seem to be unclear. Secondly, vocational subjects appear to be relegated to the electives category while academic subjects are given first priority. Thirdly, the teaching and learning of vocational subjects is facing pedagogic and resource challenges. Such issues if confirmed would definitely undermine the VE and its potential to promote community transformation in the country. In this study, the researchers examined the integration of vocational and academic subjects in Uganda's secondary schools.

The study was guided by three research questions:

1. What are the common vocational subjects taught at the secondary education level in Central Uganda?
2. What factors do influence students' choice of vocational subjects in the selected secondary schools and learners in Central Uganda?
3. What challenges do face the integration of vocational and academic subjects in the selected secondary schools in Central Uganda?

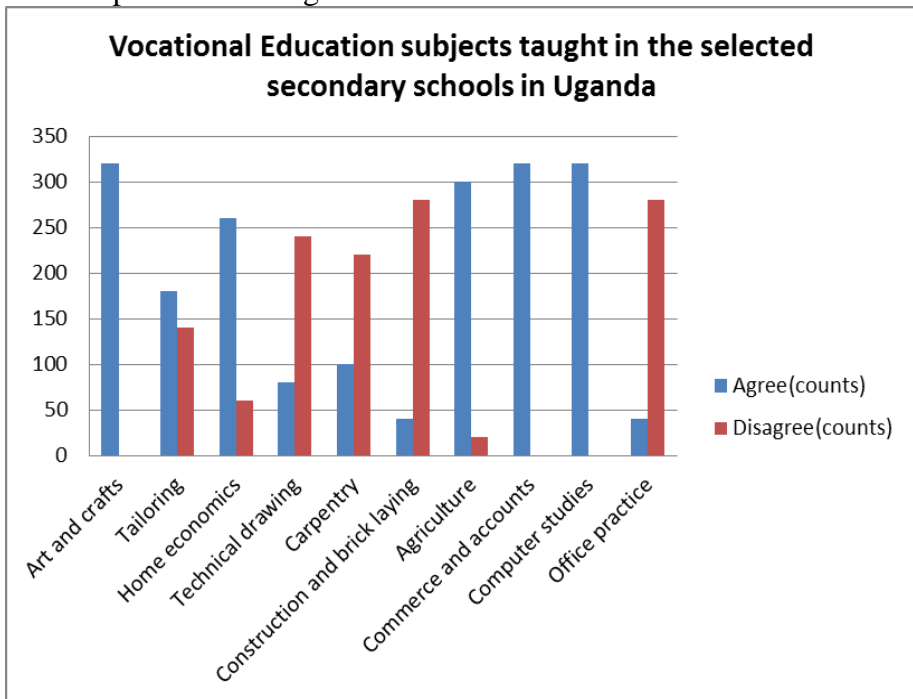
Methodology

The study was a descriptive cross-sectional survey intended to collect sizable data at one point in time. Both quantitative and qualitative methods of data collection were used with the help of semi-structured questionnaire, key informant interview and Focus Group Discussions (FGDs). The study was conducted in 16 schools, purposively selected from the four regions of Uganda. Four schools, two public and two private were selected on the understanding that they offered both vocational and academic subjects in equal measure. The expected number of respondents was 352 comprising 32 VE teachers, two from each school and 320 students, 20 from each school. Teachers were purposively selected while students were selected randomly from senior three classes. Selection of teachers and students from each school allowed for the triangulation of data, establishing consistence or inconsistency of findings in order to

validate the results. A self-administered questionnaire was filled by students while the teachers were interviewed. One FGD was conducted in each school. The items in the questionnaire were of binary type and Likert scale. Quantitative data was analysed using descriptive statistics particularly mean and standard deviation. Quantitative data from interviews and FGD was content analysed basing on emergent themes guided by the three objectives. The final results were derived from the collection and subsequent analysis of coded data.

Results

Research Question One sought to determine the nature of vocational subjects taught in the secondary schools that participated in the study. The results are presented in Figure 1.



According to Figure 1, the vocational subjects offered in the sample schools include; Art and crafts, Tailoring, Home economics, technical Drawing, Carpentry, Construction and brick laying, Agriculture, Commerce and Accounts, Computer studies, and Office practice. Such elaborate menu of subjects is clear testimony that in principle, vocational and academic subjects appear on the menu of secondary school programs in Uganda. But having both vocational and academic subjects in the

secondary school curriculum is one thing and according the subjects the same importance is quite another. Table 1 highlights Agriculture, Art & Craft, Computer studies, Commerce, and Accounts as the most frequently offered subjects in schools. Technical drawing, Construction and Bricklaying, Carpentry and Office practice are the least frequently offered subjects in the sample schools. The rest of the subjects fall somewhere in between the most and least frequently offered subjects.

The results indicate that regardless of extensive menu of vocation subjects approved to be taught at the secondary school level, few subjects are actually offered while the rest are not taught at all or are rarely taught. This put into question the effectiveness this integration bearing in mind that its broad goals are to stimulate intellectual and technical growth of students in order to make them productive members of the community and to produce craftsmen, technicians and other skilled man power to meet the demands of the industrial sector (MoES (2014). It also goes against Dzeto (2015), who considers VE as a cog in the wheel of personal growth and a major tool for social transformation and national progress. The under representation of vocational subjects in schools could thus have something to do with the lamentable shortage of agricultural extension officers, electricians, artisans, carpenters, creative artists, and mechanics in the country (MoES, 2013).

This then raises the question of what factors do influence students' selection of vocational subjects to offer. Research question two sought to establish the factors that influence students' choice of vocation subjects at the secondary school level. Response to this question was summarized into three categories of factors namely nature of the subject, availability of resources and relevance to community as depicted in Table 1.

Table 1: Factors that influence students' choice of vocational subjects

<i>factors that influence students' choice of vocational education subjects</i>	<i>Mean of agreement</i>	<i>Mean of disagreement</i>
nature of subject	145	20.5
resource available	87	73
relevant to community development	88	72

The results show that the mean agreement/disagreement for the three factors highlighted in the Table 2 is 145/20.5, 87/73 and 88/72 respectively. Factors related to the nature of the subject scored the highest

mean score of agreements and the lowest mean score of disagreements (142 vs. 20.5). The difference in mean scores between agreements and disagreements for both resource availability and relevance to community related factors is comparable. Further probing in FGDs with students about the nature of subject, revealed that majority of the vocational subjects are optional (electives). As a result, students choose subjects they consider easy to pass and those with the least workload. In addition, peer influence and character of the teacher were also given as reasons for choosing which vocational subject to offer.

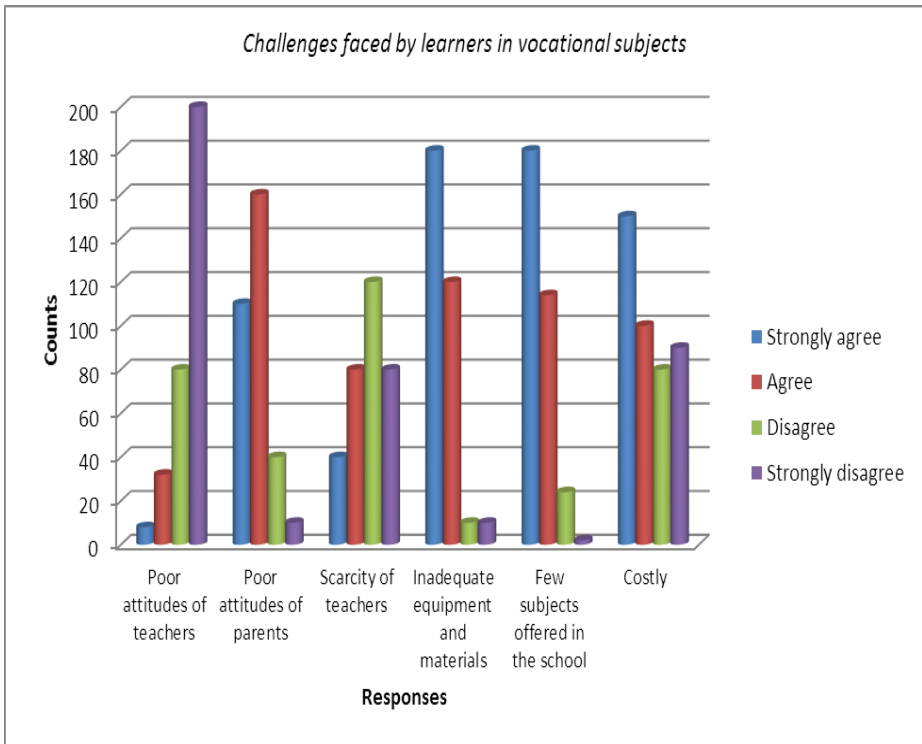
It was established that students chose subjects because they wanted to be in the same class with friends and/or because the teacher was easy going and permissive. Similarly, they would forfeit a potentially useful subject because they wanted to avoid a teacher that is principled and strict regardless of its community transformation value. It was further established that very few students considered the utility of vocational subjects beyond examination requirement. One student during the FGD aptly echoed his peer's views about vocational subjects: *"...school is school and work is work...we shall cross the bridge when we reach it...what matters now is scoring a distinction in all subjects..."* Such mindset militates against the fundamentals and objectives of integrating vocational and academic subjects in the secondary education curriculum. It is also reminiscent of Akoojee's (2007) view that absence of direct linkages to community needs results into serious mismatch between supply and demand for vocational skills. Similarly, Jjuuko (2011) reiterates that the hype and naïve assumptions of the potential of VE without commensurate policy reform and real national commitment persist in Sub-Saharan Africa and elsewhere.

Availability of resources or lack thereof was another factor given for the choice of subjects to offer by schools. The study established that many schools, especially the kind patronized by children from low income families, are resource constrained. This considerably limits the number of vocational subjects that can be offered and specifically explains why Technical Drawing, Construction and Bricklaying, Carpentry and Office Practice were listed as the least offered subjects in the sample schools. One teacher summarized it all: *"All one needs to teach commerce and accounts is a chalkboard, chalk and a duster plus a textbook or two...for woodwork and technical drawing, you need a specialized workshop that we cannot even afford to dream of..."* Another teacher lamented: *....given the nature of the parents we have, you cannot ask them to buy even simple technical drawing or construction equipment for their children needed to offer such subjects...it would be like flogging a dead horse.....* Thus,

regardless of government rhetoric about VE, many schools cannot secure the materials needed to implement effective integration. Colin (1999) in Dzeto (2015) concur that in Africa, most schools lack neither sufficient qualified teaching staff nor sufficient facilities to offer quality VE. This indicates that the problem is not on VE itself but it is on the education environment in which VE is offered (Jjuuko, 2010).

As regards relevance to community, respondents were not completely ignorant of the relevance of vocational subjects as a key consideration. One home economics teacher explained that people know what the country needs is vocational education. During FGD, students too agreed that one is more likely to get a job or start up a business in vocational subjects related fields than in the academic fields. One student remarked “...*I take commerce because I can use the knowledge to start up a retail shop or a barber shop after Senior Four...*” However, most students took vocational subjects as a last resort. Every student we talked to wanted to be a lawyer or a doctor or an engineer or a politician and for that matter, vocational subjects are not anybody’s first priority. Analysis of FGDs raised issues of stigma towards VEs as the key issue that militate against successful integration. In support of this finding, Okinyal (2012) and Amodu (2011) agreed that students and parents perceived and treated VE as an education option for drop-outs and learners with less than average intelligence. Okinyal (2012) added that even government inadvertently accentuates the stereotype by sending conflicting signals to stakeholders such as converting public vocational institutions into public universities. This clearly indicates that while policymakers are convinced that vocational education is a potent tool for generating employment to help the masses escape poverty, the integration of vocation and academic subjects in secondary schools still faces a number of challenges.

Research question three sought to elicit challenges to integration of vocational and academic subjects in secondary schools. The results are illustrated in Figure 2



The challenges highlighted in Figure 2 can be categorized into attitudinal and resource challenges. With respect to attitudinal challenges, the mean score for poor attitude of teacher was 142.50 and 17.50 disagreement and agreement respectively. This means that teachers’ attitude towards the integration of vocational subjects is overwhelmingly positive implying that this is not a serious challenge. The few teachers who voiced negative attitude explained that while vocational subjects are not the problem as such, the less than conducive environment in which the subjects are taught is the key reason for their poor attitude. Majority of the teachers that reported a positive attitude highlighted job creation and the practicality of these subjects as the key reasons for their positive attitude.

Furthermore, the mean score for poor attitude of parents was 135 and 25 agreement and disagreement respectively. This means that parents’ attitude towards vocational subjects is overwhelmingly negative, which is a serious challenge. Majority of parents consider vocational subjects as inferior education meant for manual work, or education for the academically weak learners or education for the low status people. Given that parents not only pay fees for their children’s education but they as well wield massive influence over their children, it is very likely that the same parents can influence the children’s attitude and perception of vocational education.

This largely explains why students hardly consider vocational subjects as useful beyond examination requirements.

Further challenges established include shortage of competent teachers with mean score agreement of 60 and 100 disagreement, inadequate equipment and materials at a mean agreement of 150 and disagreement of 10, limited number of vocational subjects offered in school at 147 agreement and 13 disagreement, and the high cost of vocational subjects at 125 agreement and 85 disagreement. The results mean that while shortage of competent teachers is hardly a challenge, inadequate material and equipment, limited number of vocational subjects offered, and the high cost of teaching vocational subjects were reported as very serious challenges to the integration of vocational subjects in secondary schools.

Conclusions

Basing on the findings, the study concludes that: Vocational subjects taught include Art and crafts, Tailoring, Home economics, Technical Drawing, Carpentry, Construction and brick laying, Agriculture, Commerce, Accounts, Computer studies, and Office practice. Nevertheless, the most commonly taught vocational subjects in the selected secondary schools were Art and Craft, Home economics, Agriculture, Tailoring, Commerce, Accounts and Computer studies.

The major factor influencing students' choice of VE subjects in secondary schools of Uganda is the nature of the VE subject. When selecting which vocational subject to offer, very few students consider the utility of subjects beyond examination requirement. They instead select subjects they consider easy to pass or with the least workload, or a subject offered by friends or one whose teacher is easy going and permissive, regardless of the subject's community transformation value in the world after school.

The key challenges to integration of academic and vocational subjects in the secondary education curriculum were largely attitudinal and resource based. While teachers' attitude towards the integration of vocational subjects was overwhelmingly positive, they highlighted the less than conducive environment in which the subjects are taught as a key challenge that influence their attitude towards VE. However, parents' and students' attitude towards vocational subjects was overwhelmingly poor. Shortage of competent teachers, inadequate teaching-learning materials, and the high cost of teaching vocational subjects were also given as major challenges.

Recommendations

In keeping with the foregoing conclusions, the study recommends: The number of vocational subjects offered need to be revised in accordance to the evolving community transformation needs. Subjects considered relevant should be emphasized while those that have outlived their community transformation usefulness should be dropped. Besides, there is need for regular monitoring of teaching and learning of VE in secondary schools. Relevant regulatory authorities need to develop strong mechanisms to supervise the teaching and learning of vocational education in the country.

There is need for the relevant authorities to organize a protracted sensitization campaigns for the general public on the value of VE as a viable and high priority part of secondary education. This is likely to fast-track attitudinal change and elicit positive commitment from parents and student towards VE. In this regard, parents and students will cease to take vocational subjects as a distant cousin of academic subjects.

Teachers' positive attitude towards VE needs to be reinforced by facilitating them with adequate instructional materials and conducive teaching-learning environment as key motivators. Schools need to invest greatly in their VE capacity-building initiatives for the teachers to keeping them abreast of new development in technical education methodologies. Besides, instructional resources and infrastructural facilities should be made available in schools to optimize teacher and student performance.

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