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ARTICLE

The vocationalization policy in Zambia's secondary education sector: A critical analysis	31
Paul Kakupa	

Full Length Research Paper

The vocationalization policy in Zambia's secondary education sector: A critical analysis

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The purpose of this study was to critically examine the feasibility and implementation of the recently introduced vocational career pathway in Zambia's secondary education system. The study involved a review of literature from both Zambia and other countries that have vocationalized their secondary education systems. The analysis has shown that the implementation of the vocational track in Zambia's secondary schools is likely to be difficult. While this reform is meant to equip students with practical economic skills, evidence from the surveyed literature does not build a strong case for its implementation —partly due to its huge cost. The study ends by arguing for a possible reversal of the policy until such a time when the country has adequate resources to implement it. It further urges the government to consider pursuing a partial-vocationalization policy, whereby a few vocational subjects are taught within the existing academic track and made compulsory to all students.

Key words: Secondary education, vocationalization policy, vocational skills, youth unemployment.

INTRODUCTION

The relevance of Zambia's education system has been a subject of debate since the 1970s, when the first educational reforms were initiated. The education sector, as a whole, has been criticized as not being responsive to societal needs. For example, it has been observed that the current school curriculum at both primary and secondary levels is too academic and does not provide adequate knowledge and skills necessary for social and economic development (International Youth Foundation, 2014). The curriculum is therefore, seen as orienting learners toward white-collar jobs which are however, very scarce in Zambia.

Historically, throughout the colonial period, vocational skills training was undervalued and relegated to Africans, while academic education was a preserve for the whites

(MoESVTEE, 2015). At Zambia's independence in 1964, vocational training was widely despised and underdeveloped. To date, academic education is preferred to the vocational education, which is still considered a gateway to low status menial jobs.

The Zambian education system has been churning out thousands of primary and secondary school leavers with white-collar job aspirations (Banda, 2007). More than 50,000 pupils complete secondary school every year. Of these, about 30,000 pass the school certificate examination; an entry into higher education. Nevertheless, the higher education institutions have a combined absorption capacity of about 10,000, and hence, only a quarter of those who obtain secondary school certificates, proceed to tertiary level (Hampway

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and Mweemba, 2012).

The rest go into job-hunting without adequate basic or technical skills. However, due to the mismatch between secondary education and the existing labor needs, only very few school leavers secure employment (International Youth Foundation, 2014). The education system is therefore, indirectly contributing to escalating levels of unemployment, and at the same time, failing to address the widening socio-economic inequalities.

Brief country background

Zambia is a landlocked country located in the southern part of Africa. It is surrounded by eight neighbors: Botswana, Zimbabwe, Malawi, Namibia, Angola, Tanzania, Mozambique and Democratic Republic of Congo. It is one of the countries in the Sub-Saharan region. Zambia has ten provinces with Lusaka as the national capital. Covering an area of 752,612, the country is one of the largest in the world. However, the overall population of people, as captured by the most recent population census of 2010, is slightly over 13 million (CSO, 2010). The country is predominantly rural with only forty percent of the people living in urban areas.

Zambia's economy is largely dependent on copper exports, accounting for 70% of all export earnings (Simpasa et al., 2003). However, there are strong government commitments toward diversification of the economy through investment in agriculture, tourism, gemstone mining and manufacturing industries. Despite being endowed with rich natural resources, 60% of the population lives below the poverty line, and 42% live in extreme poverty (World Bank, 2014).

In terms of education, Zambia provides academic education from primary through secondary to tertiary levels. Primary education runs from the first to the seventh grade. Secondary education is divided into junior secondary (eighth and ninth grades) and senior secondary (tenth to twelfth grades). In 2014, the government introduced early childhood education in selected public primary schools. This new addition to the school structure is being implemented in a phased approach, owing to resource constraints. Throughout Zambia's history, preschool education had been provided by private schools, and was only accessed by children whose parents had the capacity to pay for it.

At the higher education level, by 2012 Zambia had three publicly funded universities, fourteen publicly funded teacher education colleges, 48 publicly funded technical colleges, 32 privately funded universities and colleges and 239 technical and vocational institutions (Hampwaye and Mweemba, 2012). Recently, the government upgraded three public teachers' colleges to university status - bringing the total number of public universities to six. Transition from secondary level to tertiary institutions is determined by performance on the

twelfth-grade school certificate examinations. Compared to private institutions, public higher learning institutions are highly competitive, and very few people manage to secure an admission.

Apart from the formal education system, Zambia has a non-formal system, specifically designed to serve the out-of-school populations. It also extends to orphans, street children, people with disabilities and those in geographical places that have no access to formal schools. This type of education is mainly transmitted through interactive radio instruction programs.

The school-leaver problem

Zambia's education system follows a 7-5-4 pyramidal structure, in which primary education constitutes the first seven years, followed by five years of secondary education. The top tier forms the four-year university education (though this is longer for engineering and medical fields). College education on the other hand, takes between one to three years to complete. Between the first grade and tertiary education, there are three promotional examinations (taken at the seventh, ninth and twelfth grades).

Due to limited school places, the education system uses a *push-out* technique to automatically eject learners in a way that ensures that only a few reach the top of the pyramid. At the seventh and ninth grades, a cut-off point system is set to determine who moves to the next level. Learners are ranked in order of their performance on their respective promotional examinations, and the number of available school places is determined. The selection is based on both the predetermined cut-off points and the number of school places available. Those who remain unselected after the target number of school places has been reached, automatically get 'thrown out'; regardless of whether they passed or failed the examination. Sadly, owing to the 'bookish' school curriculum (Serpell, 1993), the majority of those who are pushed out go into society without any practical economic skills.

To illustrate the magnitude of this problem, the number of *push-outs* after the ninth grade examinations in 2005 was 63,777; in 2010, 110,495 and in 2015, 158,383. At the seventh grade level, in 2005, 99,495 were pushed out; in 2010, 104,916 and in 2015, 10,325. At the ninth grade level, of the 157,383 pupils that sat for the ninth grade examination in 2007, only 66,877 got selected to proceed to the tenth grade. The remaining 90,506 were 'thrown out' into society without practical skills necessary for survival.

The aggregate number of all push-outs from 2005 to 2015 at the seventh and ninth grades is a staggering 2,069,836. Of the 5,560,585 who sat for the two examinations during the period in question, only 3,490,749 passed (Ministry of Education, Science, Vocational Training and Early Education, 2015). This

means that about 37% dropped out. This sad state-of-affairs led to the Zambian education system being equated “to a train which travels on a single track bound for one destination, but which ejects most of its passengers without stopping at several points along the route” (Ministry of Education, 1976).

Education and the unemployment situation

While most of the available job opportunities in the informal and non-formal sectors require some form of practical skills, the secondary school system has focused on providing a non-practical academic education. On top of that, it is teaching pupils to always look forward to 'office' jobs, yet such opportunities are very limited (International Youth Foundation, 2014).

Despite not providing skills, the system further encourages rural-urban drift in search of employment. It has made society to believe that the end goal of schooling is finding a job away from one's community. Therefore, scores of rural dwellers, mostly youths, leave their villages for urban areas, where they end up joining the urban unemployment statistics.

The Zambian urban towns and streets are filled with thousands of jobless and highly discontented school leavers with no survival skills. According to the World Bank (2013) in 2013, 17% of the youths in Zambia were neither working nor studying. Out of the country's total population of 14 million, 74% are under the age of 30. Of this number, 28% are aged between 15 and 29 years. Unemployment between the age group of 20 to 24 is estimated to be five times more than for older adults (Zambia Institute for Policy Analysis and Research, 2013). The high youth unemployment coupled with a flawed school curriculum is a serious time bomb. In this era of rising delinquency and militancy activities, this state of affairs should be of worry to the policymakers.

While youth employment, or lack of it, might be perceived to be a function of broad government policies outside the education sector, education and skills training are very essential, if not pre-requisite, elements to employment creation. Creating any skilled workforce begins with increasing access to quality education with a curriculum that offers practical and highly applicable skills. However, an effective curriculum is one that is aligned with the prevailing labor needs. Research evidence shows that Zambia has several job and business opportunities in the construction, agriculture, tourism, manufacturing and mining industries, yet much of the education provided has continued to be predominantly academic, and of little relevance to the industrial workplace (International Youth Foundation, 2014).

Nevertheless, the unemployment situation cannot be solely blamed on curriculum-mismatch; there is another dimension to it. As observed earlier, the school system

has been producing wrong attitudes in learners by offering false hopes of finding jobs in the formal sector. In a survey, the International Youth Foundation (2014) found over-expectations as one of the major barriers to youth employment in Zambia. The survey revealed that most of the youths expected their entry-level jobs to provide a big salary, company vehicle and prestige (*Ibid*). With these expectations, the vocational jobs, which are usually low paying, continue to be despised in spite of their potential for job and wealth creation.

In the year 2013, the new Patriotic Front (PF) government which took over power from the Movement for Multi-party Democracy (MMD) in 2011, made policy pronouncements regarding the need to overhaul the entire education system. For the first time in the history of the country, a vocational career-pathway was to be created and implemented between the eighth and twelfth grades. Modeled along the German philosophy, which gives equal relevance to both academic and skills education, the dual career pathway was meant to eliminate the *push-out* system by absorbing all the *push-outs* at the seventh and ninth grade exit points (MoESVTEE, 2015).

Problem statement

While the recently declared vocational career pathway is progressive and a giant step in imparting youths with skills for self-reliance, its successful implementation remains uncertain. It is not clear how such a huge reform program will be realized amid limited infrastructure and critical teacher shortages. Evidence has it that the unit cost of providing vocational education is much higher than that of general education provision (*Ibid*). This study therefore, set out to unpack the mystery which surrounds the implementation of the vocationalization policy in the Zambian secondary school system.

Purpose of the paper

The purpose of this study was to critically examine the implementation of the vocational career track recently introduced in Zambia's secondary education sector.

Questions

This study addresses the following specific questions:

- (1) What was the main motive behind the vocationalization policy in Zambia's secondary education sector?
- (2) How feasible and effective is this policy?
- (3) What factors could hinder its successful implementation?

Conceptual framework

While vocationalization might be defined differently, it can generally be understood to mean the inclusion of vocational or practical subjects into the school curriculum. It is actually synonymous with diversification (Psacharopoulos, 1985). When a curriculum is diversified, it is broadened to include as many practical subjects as possible that equip learners with practical skills necessary for survival. Vocationalization can take many forms such as the inclusion of a few practical subjects in the broad academic curriculum. However, in this paper, I specifically address the 'parallel' approach in which academic and vocational tracks occur side by side.

Lauglo et al. (2012) distinguish between vocationalization and vocational education and training; with the former taken to mean addition of a few practical subjects to the general curriculum, and the latter as a situation in which the vocational subjects form the major component of the curriculum. I do not intend to make this distinction in this paper. Instead, the study consistently uses the term vocationalization to generally refer to the introduction of a separate (vocational) career pathway in secondary schools.

Vocationalization is commonly believed to be a solution to the mismatch between education and the labor market demands. In the context of skills development, vocationalization might include subjects such as computer studies, agriculture, metal work, wood work, entrepreneurship, critical thinking, social skills and any other skills necessary for survival (Lauglo et al., 2012). When learners are exposed to this type of education or training, they get equipped with useful economic skills. In developing countries like Zambia, where a lot of pupils drop out at various terminal points, vocationalization might just hold a solution to the problem of the unskilled 'drop out' and 'job seeker'. However, successful implementation of any vocationalization effort will require careful planning, sufficient resources and capacity.

METHODOLOGY

This was an ex-post analysis of the secondary education vocationalization policy in Zambia. The study employed document analysis strategy involving a scrutiny of both secondary and primary data sources. The author first identified and analyzed a number of published articles, books, book chapters, magazines, policy memos and leaflets on vocationalization efforts in African secondary schools.

Particular attention was further, narrowed down to literature from Botswana and Kenya for two main reasons: firstly, these two countries provided a better opportunity for comparison of practices and policy contexts with Zambia since they both are located in the Sub-Saharan region (to which Zambia is part). Secondly, these countries have a very long history of vocationalization, which can be traced far back to the 1980s. (Lauglo et al., 2012). It was hoped that the two countries would provide a great wealth of lessons and experiences which this analysis could profit from.

In addition, literature from Germany, a country whose vocational

system Zambia has adopted, was critically reviewed to understand how the vocational policy was being implemented, as well as the reasons for its relative success there. Other policy and research documents from Zambia were also examined to gain more understanding on the conception, rationale, adoption and the implementation of the vocational policy in the secondary education sector.

RESULTS AND DISCUSSION

Motive behind vocationalization in Zambia

The evidence gathered seems to point to the need to bridge the gap between academic and skills education as having motivated the curriculum reform (MoESVTEE, 2015). In addition, the new policy aims at reducing 'wastage in secondary schools caused by the *push out* system at the seventh and ninth terminal levels. Therefore, pupils who get pushed out will now have a chance of being diverted into the vocational career path, and will no longer drop out. This, it is hoped, might reduce the urban youth unemployment rate, which currently stands at 45 per cent (CSO, 2010). The Peace and Freedom (PF) party, which won elections in 2011 on a promise of '*More jobs, lower taxes and more money in your pockets*', definitely saw this reform as a way to 'create jobs' by reducing the mismatch between education skills and demands of the job market. In order to fully appreciate the opportunities and challenges that come with vocationalization, the study briefly review the case studies of vocationalization in Kenya and Botswana.

Kenya

Kenya vocationalized its secondary education in 1986 with a view to preparing secondary school leavers for employment (Lauglo et al., 2012). The policy was born out of the government's desire to provide a practical type of education that would prepare learners for a wide variety of job opportunities. This was a robust reform which was extended to all secondary schools countrywide. Regardless of whichever secondary grade level, all pupils were expected to master at least some practical skills necessary for self-reliance. However, the implementation of this ambitious program was met by serious financial constraints. Schools had to rely on parents to provide resources for the construction of industrial workshops and procurement of equipment. The continued resource challenges made the government to revisit the policy in 2002 (Mwiria, 2002).

Botswana

Botswana is credited as having a more successful vocationalized secondary school system than any other

Sub Saharan African country. Like Kenya, it also vocationalized all its secondary schools with a view to providing pupils at various stages of education, with sufficient prevocational skills necessary for a wide range of employment opportunities when they leave school (Lauglo et al., 2012). However, Botswana approached this reform with caution. The policy simply constituted an addition of compulsory vocational subjects to the broad academic curriculum (and not a creation of a whole new parallel track). Despite being Africa's shining example of both political and economic growth and stability, Botswana resisted the temptation to introduce a fully-fledged vocational track (Weeks, 2005). In other words, all pupils continue to study the core academic subjects; except they have an addition of two compulsory practical subjects. This was done tactfully in order to provide pupils with both the academic and non-academic career opportunities.

Parallels with Zambia

The vocationalization policy in Zambia is a bit different. Instead of simply adding a few non-academic subjects to the school curriculum, it aims to run a dual career pathway system. While this is a very sound reform, vocationalizing the German way is not as simple as it appears.

Germany's education system is well resourced; with heavy funding from both the private and public sectors (Federal Ministry of Education and Research, 2003). This does not appear to be the case with Zambia, where even the actual implementation itself is being done in a phased approach, owing to insufficient resources (MoESVTEE, 2015).

In addition, by running two separate tracks, the government seems to only want to address the *push-out* problem, and not youth unemployment in general. The current unemployment situation has not only affected the drop-out population, but is also rife among secondary school and college completers. Therefore, efforts to provide employment skills should target all students. The Botswana system, where vocational subjects are integrated in the academic track and made compulsory to all students, offers a good model for tackling youth unemployment.

The paradox

The vocational pathway in Zambia was mainly a response to the *push-out* system which saw the wastage of tens of thousands of pupils at the seventh and ninth grade exit points. At the same time, the *push-out* system came about as a result of insufficient school places in secondary schools. It therefore, became necessary to push out some pupils. However, the creation of the

vocational track raises questions about where the school places will come from in order to accommodate pupils who were not able to be accommodated before the policy. This appears not to have been given much thought.

Furthermore, by specifically targeting the *push-outs*, this new career track is likely to face a challenge of acceptance. *Push-outs* consist of pupils whose results were not competitive enough to secure them a much-coveted place at the secondary school level. In the public eyes, they are as good as having failed the examination. The connotation of failure is likely to set in and negatively affect this well-intended policy. This puts the new vocational track at risk of being associated with failure to enter the academic pathway. There was need to work out a mechanism that ensures that entry into the vocational track is not associated with failure.

Is vocationalization feasible and effective?

While the effectiveness of practical subjects in securing youth employment in Botswana has not yet been evaluated, indicators point to the fact that the outcome of providing such subjects does not seem to justify the cost (Lauglo et al., 2012).

This observation supports Kelly (1986) and Sifuna (1986) studies which found that vocationalization of either primary or secondary education did not significantly improve the employability of school leavers or drop-outs. This may also apply in Zambia, where most employers still insist on a post-secondary qualification (International Youth Foundation, 2014).

The introduction of the vocationalized track should not just be looked at in terms of its desired possible results. Its feasibility in a poor country like Zambia should be given attention as well. While the policy may be working well in Germany, there is no reason to believe it can work the same way in Zambia. There is certainly, a world of difference between the two countries in terms of economic circumstances. Zambia is still struggling to provide access to and improve quality of secondary education (UNICEF, 2016). There was need to first expand and strengthen the existing academic track. Moreover, in the absence of infrastructure expansion, it will not be possible to accommodate all the *push-outs*. Otherwise, the new track will also start another *push-out* system. Since the policy apparently, only directly addresses the push-out problem, the Zambian government should, instead, invest resources in constructing more secondary schools so as to increase school places at the secondary level.

Currently, the country only has 832 secondary schools against 8,804 primary schools (MoGE, 2016). Besides, an investment into a stand-alone vocational track may not be a worthwhile investment as revealed by Psacharopoulos and Loxley (1985) study conducted in

Tanzania and Colombia. The study compared the rates of return that accrued to students from entirely academic secondary curricula with those from moderately vocationalized tracks. Results showed more returns to the academic subjects than the vocational ones. In terms of facilitating employment, it was found that the vocational tracks did not provide any special privileges (*Ibid*).

In addition, Lauglo and Narman (1987) conducted a similar study in Kenya to ascertain the impact of the Industrial Education subjects that had been introduced in the curriculum and taught for about three to five times a week. After tracing the recipients of this education over several periods of time, it was discovered that many were still out of employment. Moreover, participation in Industrial Education subjects did not appear to facilitate employability; neither did it lead to self-employment. In Zambia, where vocational subjects are still being despised, probably there may be need to work on changing mindsets toward vocational programs before providing them to the learners.

Raven (1988) argues that a much more effective route to eradicating youth unemployment is to cultivate self-reliance and self-employment attitudes in pupils. In order to do this, schools need to focus on teaching relevant skills such as creativity, innovativeness, critical thinking, self-motivation and initiative among many others (*Ibid*). In addition, Lauglo et al. (2012) recommend the teaching of cost-effective vocational subjects such as agriculture and business studies. Clearly, these employment-facilitating subjects do not require the creation of a separate career pathway in order to be taught. They can simply be offered within the normal academic track.

As the International Youth Foundation (2014) observes, Zambia is endowed with so many natural resources, some of which have not yet been exploited. The country also has several business and job opportunities in the tourism, agriculture and construction among many other sectors. There is therefore, need to align education with the demands of these sectors. However, the country's secondary education sector may not, currently, be in a position to provide vocational skills in accordance with the proposed framework. Other institutions such as Trades Institutes, which are dotted all over the country and have the resources, could be in a better place to implement such a complex reform.

Factors affecting successful vocationalization

The successful implementation of the vocational career pathway requires a great deal of resources and careful planning. The step taken by Botswana to vocationalize was a result of a comprehensive process of preparation and debates about the cost implications of such a decision. In addition, the government pumped a lot of financial support into the implementation process (Lauglo

et al., 2012).

Groundwork

Adequate preparatory groundwork, taking into account the resources required for implementation, is one of the most important steps to take before making any reform of this magnitude. The experience of Kenya presents a very good example here. After hurriedly vocationalizing secondary education in 1986, the country faced serious resource challenges (Mwiria, 2002). It became very expensive to sustain vocational subjects. As a result, in 2002 the Kenyan government was forced to revisit the policy; consequently dropping two of the vocational subjects which included computer studies. Zambia can learn from this experience about the danger of rushed policy decisions.

Cost

The unit cost of a vocationalised curriculum has been found to be very high compared to the academic subjects. Cummings (1988) who conducted the unit costs associated with the teaching of practical subjects in Kenya estimated that a single practical subject taught to a class of about fifteen to twenty pupils would gobble at least twice as much capital as the academic subjects combined. This estimated cost is likely to triple, with the anticipated thousands of clients that get pushed out of the academic track. These costs are mainly driven by both capital and recurrent costs associated with constructing workshops and procuring equipment. The successful implementation of this policy therefore, calls for heavy investment in the education sector.

An analysis of Zambia's budget allocation to the education sector as a percentage of the total national budget in the past five years shows a downward trend (Figure 1). There seems to be a declining public investment in the sector. Unfortunately, this is happening at a time when the secondary education sector is expected to implement the new vocational track. The low funding to the education sector could, partly, be explained by the economic turbulences the country has faced since 2015 arising from the huge fiscal deficit, electricity shortages, poor performance of the mining sector, and the near depletion of the international (foreign) reserves. By the last quarter of 2016, the country's external debt stood at US\$6.7 Billion (35% of GDP), while domestic debt was US\$2.6 Billion (12% of GDP) (National Assembly of Zambia, 2017).

A study by The Organisation for Economic Co-operation and Development (OECD) (2014) among the sixteen OECD countries that offered vocational secondary education revealed that their average per pupil expenditure was US\$ 970 more than the academic

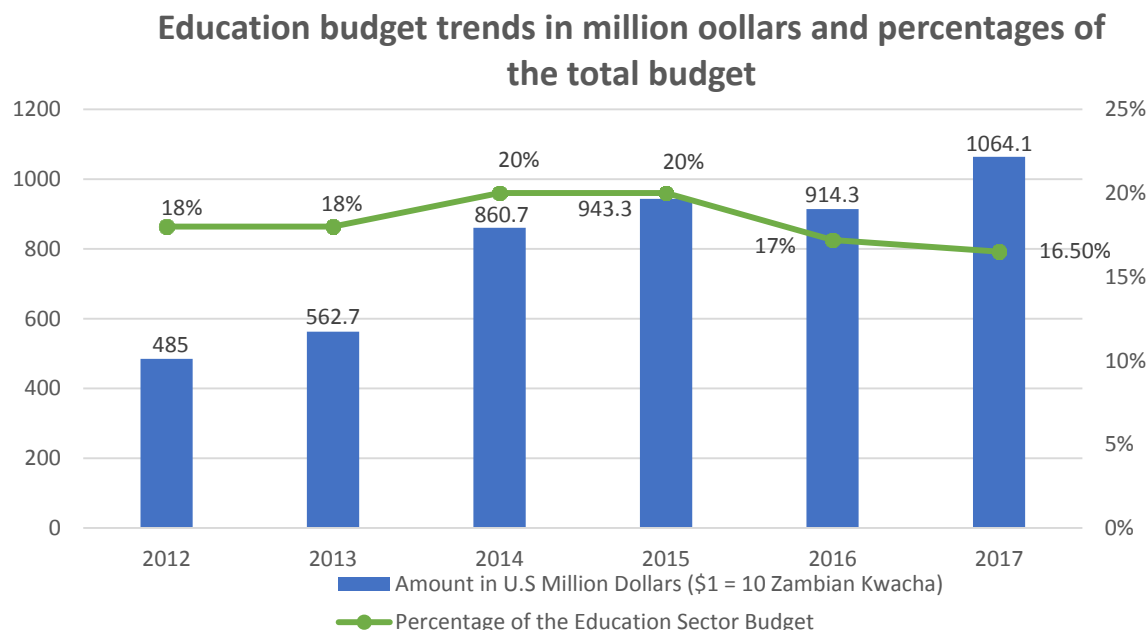


Figure 1. Showing education budget trends from 2012 to 2017 (Source: National Budget Speeches from 2012 to 2017).

programs. Particularly, Germany, Netherlands and Switzerland, spent US\$ 4, 567, US\$ 3, 393 and US\$ 8, 726 more for each student enrolled in the vocational programs than in the academic ones (*Ibid*). A similar study in Botswana reports that compared to the English subject, Fashion and Fabrics costs about four times more, in terms of classrooms, equipment, materials and salaries (Weeks, 2005). On average, a class of 20 Fashion and Fabrics students cost P 6, 781.16 (1US\$ = 10 Pula). This was in sharp contrast with English and Mathematics classes which cost P 1, 677.60 and P 1, 870.52 responsibly despite having 40 students each (*Ibid*).

Resources

Thus far, it has become clear that vocational programs are very resource-intensive, and their relative success depends on the amount of investment countries are willing to put in their education systems. The successful story of Botswana can be attributed to the fact that the country has heavily invested in its education system. The country has one of the best organized and well equipped school facilities in Sub-Saharan Africa. The teaching of practical subjects has also been so prioritized that almost all junior and senior secondary schools in the country have computer laboratories and fully furnished workshops for Home Economics, Design and Technology and Arts subjects (Lauglo et al., 2012). School facilities of this kind do not exist in Zambia, where 85% of the

schools do not even have a single computer, and over 60 percent still do not have access to electricity (Musonda and Kaaba, 2010).

According to the 2015 Zambia Educational Statistical Bulletin, the ratio of primary schools to secondary schools in Zambia was 1:11 - with the number of incomplete infrastructure (classrooms) standing at 4,976 (MoGE, 2016). Yet, in the same year (2015), only 5.9 per cent of the total education budget was allocated for school infrastructure development (National Assembly of Zambia, 2015).

To date, over 80% of the yearly education budget goes toward personal emoluments - leaving little for the expansion and rehabilitation of educational facilities (UNICEF, 2016). As already shown in Figure 1, the 2017 education budget (like the two previous ones) falls almost four points below the 20 per cent budget target agreed at the Dakar Education Forum. The successful implementation of the vocationalization policy in a resource-deficient context can certainly not be easy. This is a reality Zambia will have to face.

Without adequate resources, the teaching of practical subjects will be as theoretical as the academic subjects. In their current state, secondary schools in Zambia are not ready for full vocationalization. The lack of facilities will negatively affect the quality of education in the vocational track, as rote learning (as opposed to actual performance), is likely to result. There was need to focus attention on improving the academic pathway before introducing another one. The academic track is definitely poised to suffer more neglect, with the arrival of a

resource competitor.

Conclusions

It is clear from this study that the creation of the vocational track in the secondary education of Zambia faces a very difficult implementation process. While the reform is well intended, it needed careful planning. The academic track already had problems of insufficient funding, poor infrastructure, low staffing levels, low access, and generally poor quality of education at all levels. The addition of another career track will likely complicate the already existing problems in the education sector. The quality of education for both tracks will suffer more from the anticipated resource challenges. There was need to first improve the academic track by building more schools to accommodate the rising demand for secondary education.

As noted in the literature reviewed, vocational education appears not to offer sufficient benefits worth spending on, as is usually implied. The evidence does not seem to validate the conventional thinking that practical subjects will automatically facilitate employment. Although some studies, have found skills which focus on personal growth (such as critical thinking and self-motivation) to facilitate self-reliance attitudes, such skills do not necessarily require a separate pathway in order to be taught.

Considering its cost and the current state of Zambia's economy, the vocational pathway will not be easy for secondary schools to implement. Even the few technical secondary schools, where it has been introduced, will definitely require new infrastructure and equipment in order to meet its demands. Without fully investing in new infrastructure, the implementation of the vocationalization policy is more likely to hurt the academic pathway. While the dual-career pathway may be successful in Germany and elsewhere, there is no basis for believing that it will equally be successful in Zambia. The Botswana experience seems to be a success not only because of a good economy, but also because the country has pursued the partial-vocationalization route, which is markedly different from the Zambian approach.

RECOMMENDATIONS

In view of the foregoing discussion, the study makes the following recommendations:

(1) Owing to the looming resource constraints that will accompany the secondary education vocationalization, the government through the Ministry of General Education should consider reversing this policy, and instead, implement it within the current academic track, and make it a requirement that all pupils should take at least one practical subject. Another option could be the

use of Technical Education and Vocational Training (TEVET) institutions which are spread all over the country. These institutions already have the infrastructure and many other resources. However, with this option, additional measures may have to be put in place so as to allow these institutions to admit all kinds of applicants, including those who dropped out of school before attaining any certificate. This measure will help absorb the push-outs without adding pressure on secondary schools.

(2) As a way of encouraging self-reliance in pupils and avoid school leaver unemployment, the government should enrich the secondary school curriculum by including skills education in the already existing subjects. For example, critical thinking could be emphasized in History or Mathematics, and entrepreneurship could be fused in Social Studies.

(3) In order to match education to the labor market needs, there is need to link schools with the private sector, non-governmental organizations and other institutions in the corporate world. These links will not only expose students to the nature of skills needed in the labor market, but also enlighten the private sector employers about the knowledge and skills that students have acquired.

(4) Finally, schools should not be expected to solve every social problem. It is not possible for them to do everything for everyone. Unemployment should be a concern of many parties, not just schools. Schools can impart knowledge and skills, but they will not create employment opportunities or enabling conditions for self-employment. There is need for other institutions and government departments to get involved.


CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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