

Managing the Challenges of Technical Education in the South-West Region of Cameroon: A Case study of selected secondary Schools in Fako and Meme Divisions

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ABSTRACT

A survey has been conducted in selected secondary Schools in Fako and Meme Divisions in the South-West Region of Cameroon to examine how to manage the challenges of technical education. Data are collected from teachers, discipline masters, vice principals, principals and Regional Pedagogic Inspectors for technical education through questionnaire administered using stratified, convenience and random sampling to two hundred and forty (240) respondents randomly sampled from twelve technical secondary schools and the Regional Delegation of Secondary Education for the South-West Region. Four research hypotheses are formulated and tested using Chi-Square statistics. Computer software of Statistical Package for Social Sciences (SPSS version 20) is used to bring out the tables for data presentation. The results reveal among others that effective human resources management have a significant impact on the challenges of technical education in emerging Cameroon. Hence, it recommends among other things that school administrators should undertake courses in human resources management while stakeholders should effectively utilize the resources provided to them for efficient management of technical education in Cameroon.

Keywords: Managing challenges, Technical Education, Emerging Nation

INTRODUCTION

Emerging nation (Cameroon) is a country embarked on a journey to sustainable economic and social development with a strong, diversified and competitive economy (Republic of Cameroon, 2009). The paper further stipulates that, the economy will be characterized by a dominant industrial sector in general, manufacturing sector in particular and effective integration into the global economy. In addition, poverty will be minimal and income per head will be such that the country will be classified as a medium-

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income country. This is the picture painted by the 2009 Growth and Employment Strategy Paper with respect to the Emergence of Cameroon (Republic of Cameroon, 2009). This can be achieved if the elements of economic development are efficiently put in place and implemented. One of these elements of economic development is the technical education sector which has help countries like Japan to recover in less than half a century to overcome the heavy burden of reconstruction after the second world war and went on to become one of the most industrialized nations in the World (Murata and Stern, 1993).

Throughout human history, a generally recognized cardinal aim of education in any organized society has been to prepare each new generation for a productive working life (Combs, 1985). In this educational process, people learn to create new institutions, utilize new technologies, cope with their environment, and alter their patterns of behaviour. Technical Education in a broad sense improves the capabilities of individuals and the capacity of institutions, and becomes a catalyst for the closely interrelated economic, social, cultural, and demographic changes that become defined as national development which then leads to economic growth and consequently emergence (Hallak, 1990).

Precisely how these changes occur is not fully known but it does portray in a number of indicators such as the productive capacity of the citizens and their efficiency in value creation for the country (Akpomie, 2009). However, the evidence is substantial, the reasons are clear that technical education and other forms of education (vocational education, general education, indigenous education) can, in a supporting environment make major contributions to the complex processes of technology transfer, economic productivity, individual earnings, reduction of poverty, development of healthy families, creating and sharing of values, learning the responsibilities of citizenship, and enhancement of the quality of life (Republic of Cameroon, 2009).

Most of these values are hampered by little immediate, short term economic benefits derived from the surrounding environments by most communities' inhabitants in other sectors of education (Che, 2007). Hence, technical education in Fako and Meme Divisions in particular and Cameroon in general hardly serve any purpose beyond that of ceremonial rite of passage. Although the Government has been doing a lot in this sector of education, the challenges of technical education in Cameroon among others include: Inefficient management of human resources, lapses in pedagogic processes of technical education to meet current need of market demand, inadequate infrastructure for adequate training of citizens and insufficient finances to manage technical education efficiently for emerging Cameroon (Atayo, 2000). Thus, this study seeks to investigate whether managing the challenges of human resources, pedagogic processes,

infrastructure and financial resources can help improve technical education toward emerging Cameroon. The following hypotheses are formulated for the study:

- H₀1:** Managing human resources does not have any significant impact on emerging Cameroon.
- H₀2:** Managing pedagogic processes does not have any significant impact on emerging Cameroon.
- H₀3:** Managing infrastructures does not have any significant impact on emerging Cameroon.
- H₀4:** Managing financial resources does not have any significant impact on emerging Cameroon.

METHOD

This survey was conducted to examine how to manage the challenges of technical education. The researcher used qualitative and quantitative method of data collection. The qualitative data comprise personal interview, focus group discussion and dialogue, quantitative data are made up of responses on the questionnaire or an adopted quantitative presentation in other materials. The population comprises all teachers, discipline masters, vice principals, principals and Regional Pedagogic Inspectors of technical secondary education in South West Region of Cameroon. A case study of selected secondary Schools in Fako and Meme Divisions in the South-West Region of Cameroon was taken.

Qualitative data were obtained from six (6) structured open interview questions administered to the respondents. Qualitative data gave ideas about the people's perception and opinion and allowed the researcher to study how to manage technical education and its challenges in greater details with more depth and insight in the course of interactions and observations during the process of administration of the questionnaire to the respondents. Quantitative data were also employed in this study to measure, describe, investigate the relationship and evaluate the quality of managing technical education and its challenges for emerging Cameroon in Fako and Meme Divisions. Numerical data were obtained from questionnaire to predicts, explain and control those aspects of managing technical education factors which include; human resources, infrastructure, pedagogic processes and financial resources in order to test the hypotheses.

Closed ended questionnaire, which is made up of forty-four (44) items was also used because the participants are literate and therefore could read and respond to the questionnaire items; as closed ended questionnaire can be answered easily and

quickly by the respondents. The questionnaire options took the answer format of Strongly Agreed (SA), Agreed (A), Undecided (U), Disagree (D) and Strongly Disagreed (SD) (Likert, 1932). This five points Likert scale is to measure attitudes and capture more information in order to identify the extent of the respondents' beliefs, attitudes, and feelings towards managing the challenges of technical education in emerging Cameroon.

Convenience sampling technique was used to select the individual schools in each Division taken into consideration the geographical accessibility of the schools and stratified random sampling technique was used to sample the principal as well as the teachers. With this sampling technique, each of the twelve (12) technical schools was considered as a stratum or group. From this group, eighteen (18) respondents were selected by simple random sampling for the number of respondents from each school since all the teachers cannot participate in the study; a representative of the sample population has to be selected. The researchers visited each school on different days and had a brief meeting with the principals of the school and the teachers to complete the questionnaire after a brief explanation to them on the purpose of the research and the necessity of confidentiality of data collected. Statistical Package for Social sciences (SPSS version 20) was used for data analysis and Chi-Square result for the test of hypotheses.

RESULTS AND DISCUSSION

The calculated Chi-Square value of 388.118 and contingency coefficient of 0.787 at 5% significant error (Table 1) led to the rejection of the null hypothesis, which states that managing human resources does not have any significant impact on emerging Cameroon. The findings of this study were in line with Schultz (1963), who identifies people as the source of economic growth in his human capital theory, thus,

“Consider all human abilities to be either innate or acquired, every person is born with a particular set of genes, which determines his innate ability, attributes of acquired population quality, which are valuable and can be augmented by appropriate investment, which will be treated as human capital.”

In addition, Herzberg (1964) two factor theory emphasizes the need for motivation of human in a job place as aspects of managing human resources. Also, Knowles (1978, 1980) Adult Learning theory emphasizes on continuous professional training of staff and taking into consideration the characteristics of staff as adult in educational institutions.

Again, the table shows the calculated Chi-Square value of 503.196 and contingency coefficient of 0.826 at 5% significant error led to the rejection of the null hypothesis that managing pedagogic processes does not have any significant impact on emerging Cameroon. The findings of this study are in agreement with Constructivism theory as it opined that, humans are viewed as goal directed agents who actively seek information in a learning process (Piaget, 1936 and Vygotsky, 1978). This is supported by Rummel (2008) as it was affirmed that Piaget's theory of cognitive development is the major foundation for cognitive constructivism approaches to teaching and learning in most technical educational establishments in Fako and Meme Divisions as the students regularly carry out their practical exercise thereby interacting with their environment for acquisition of knowledge.

The table also indicates the Chi-Square value of 484.674 and contingency coefficient of 0.802 at 5% significant level which led to the rejection of the null hypothesis that Managing infrastructure does not have any significant impact on emerging Cameroon. These findings are in agreement with the study of Popoola (1990) who discovers a significant difference in the achievement of two sets of students; the schools with adequate instructional materials performed better than those with inadequate instructional materials. Similarly, Boma (2015) posits that there was a significant relationship between resources management and students' academic performance and these resources management include human, financial and material resources.

In addition, Chi-Square value of 431.258 and contingency coefficient of 0.804 at 5% significant level led to the rejection of the null hypothesis that managing financial resources does not have any significant impact on emerging Cameroon. The findings of this study are in consonant with Afuge (2015) as he opines that economic, financial and social infrastructures positively and significantly affect economic growth in Cameroon and that education and health infrastructures are the main economic growth indicators promoting infrastructure while mobilization of savings and granting of domestic credits are more profound in the class of financial infrastructure that promote economic growth in the country. The importance of managing technical education and the challenges toward emerging Cameroon cannot be over emphasized as there have been substantial evidence based on the finding and what other authors have put forth relating to this study. Hence, effective management of the challenges of technical education can be efficiently achieved for a sustainable economy in Cameroon.

Table 1: Summary Decision Rule for Hypotheses Tests Results

Hypotheses	Degree of freedom	Chi-Square (X^2) value		Decision		Contingency coefficients
		Standard	Calculated			
H_{01}	16	26.296	388.118	Reject $H_{0,1}$	Accept $H_{1,1}$	0.787
H_{02}	16	26.296	503.192	Reject $H_{0,2}$	Accept $H_{1,2}$	0.826
H_{03}	16	26.296	484.674	Reject $H_{0,3}$	Accept $H_{1,3}$	0.802
H_{04}	16	26.296	431.258	Reject $H_{0,4}$	Accept $H_{1,4}$	0.804

Source: Researcher's Questionnaire, SPSS Version 20, July 2017

CONCLUSION AND RECOMMENDATIONS

This study sets out to assess how managing the challenges of technical education impacts on emerging Cameroon, taking a case study of selected secondary schools in Fako and Meme Divisions in South West Region of Cameroon. From the results, it was concluded that “effective Management of the challenges of technical education have significant impact on emerging Cameroon”. The following recommendations emanated from these results:

- i Staff of technical schools should be regularly sent to in service training, such as seminars to enable them to update their knowledge on new skills and techniques for effective transfer of knowledge to learners.
- i Parents should regularly follow up the progress of their children in technical schools and institute discipline in them rather than leaving them to teachers alone to carter for them in school.
- iii As technical education being the backbone of any nation with the urge to emerge, it is imperative for stakeholders to double their efforts in the provision of necessary infrastructure, build up-to-date classrooms, libraries, specialize rooms and provide regular didactic materials to staff for the training of the students.
- iv Stakeholders should provide sufficient funds for the management of technical schools whatever the number of students in the school and the present technical schools should be empowered with the necessary resources to be able to generate their own internal finances for the management of the schools.
- v The State of Cameroon urgently needs the establishment of a full fledge technical education University for continuous training of citizens, knowledge transfer and technology innovations for an emerging nation (Cameroon).
- vi Most school administrators are advised to undertake courses in human resources management so as to efficiently manage staff of technical schools and to effectively use their skilled knowledge for better training of students toward emergence.

This study cannot accurately generalize the results to other nations. A research on a similar study should be furthered on other nations to cover wider aspects, as concerning managing technical education and the challenges toward emerging nations and to uncover a lot of facts on the study with emphasis on these four variables (managing human resources, pedagogic processes, infrastructure and financial resources) and if possible more variables in addition to these should be studied in order to validate the findings of the study.

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