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## **Addressing the Educational Crisis in Cameroon: Policy Syndromes, Arguments, Views, Theory and Agenda**

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**Abstract**

This study pursues two main objectives. Firstly, we sought to unravel the key factors at the origin of the educational crisis in Cameroon. Second, we sought to identify the major causes of the mismatch between educational attainment and the job market. The study reveals the educational sector and educational management constitute the major causes of the educational crisis in Cameroon. Moreover, in order to address the crisis, we propose a novel theoretical model “The *Education and Job Mismatch Crisis Hypothesis*”, wherein educational crisis is a function of employment, ability to grow and remuneration. Contingent on the findings of this study, we recommend that the Cameroon government should aggregate various existing educational ministries into a single ministry of education. Besides, the unique ministerial department should envisage the creation of separate directorates in charge of the English and French sub-systems of education that coexist in Cameroon.

*Keywords:* Educational crisis, Educational system, Educational management, Job-mismatch, EJMC hypothesis, Process tracing.

## 1. Introduction

The importance of quality education in the development process of nation-states cannot be overemphasized. Several academics have established that educational attainment through human capital acquisition is crucial for sustainable development (Adejumo et al., 2021; Ferrer-Estévez and Chalmeta, 2021; Petrov, 2017). The contribution of education to the socioeconomic development of a country depends essentially on the educational system put in place by the state (Heleta and Bagus, 2021). In recent years, the prominence of education has been further emphasised in the sustainable development goals (SDGs) of the United Nations, adopted in 2015 by world leaders to guide the global development agenda for the 2015-2030 horizon. Specifically, SDG-4 accentuates the need for inclusive and equitable quality education for all (United Nations, 2015). Moreover, SDG-4 stresses the promotion of lifelong learning opportunities for all humans irrespective of their gender, age, socio-cultural and ethnic alignment. Quality education as enshrined in the SDGs implies that all citizens' complete primary and secondary school and equally have easy access to a quality higher education by 2030. These learning opportunities at all levels notably primary, secondary (general and technical), and tertiary as well as professional/vocational training, are imperative in ensuring the acquisition of skills and knowledge necessary for citizens' emancipation and socioeconomic and professional insertion into the different socio-politico-economic domains of the society.

Nevertheless, it is impossible to talk about quality education without making reference to the job market. This explains why quality education and decent work remain core targets of the SDGs (SDG-4 and SDG-5). Although much progress has been made towards the attainment of these objectives, especially across developed economies, several developing countries remain lagging behind. The attainment of inclusive quality education entails huge financial requirements that constitute a major problem for developing countries which are often characterised by endemic poverty and armed conflicts (Anderson and Avegno, 2021; Achuo et al., 2021; Jennum et al., 2021). Although the primary school enrolment rate in developing countries has reached about 91% (United Nations, 2015), the paucity of enrolment rates in secondary and tertiary sectors in these countries remains worrisome.

Indeed, when citizens or households forgo today's consumption and invest in education, there is always an intertemporal expectation of returns. It is within this premise that the pioneering economic scholars of human capital theories like Shultz (1961) and Becker (1994) consider

human capital formation as being similar to physical capital formation since both forms of capital earn rewards. However, access to education is not a free economic launch since it requires time and capital to wallow through the academic ladder. When such time is accorded by scholars and the required capital provided by parents, these economic agents expect returns through employment or gaining access to decent work in the nearest intertemporal future. Nevertheless, when such aboriginal expectations stay too long or fail to materialize, it will result in an educational crisis since these economic agents will tend to ask questions about the quality of investment (human capital formation) they have risked capital into. Many countries in the world especially developing regions like sub-Saharan Africa (SSA) face the problem of matching education and employment. Most often, the educated populace rarely find jobs and even when the jobs are available, the reward for labour is generally low relative to developed countries. This has led to several social crises in most developing countries in SSA.

While several developing countries like Cameroon had long encouraged the general education system (which emphasises the acquisition of knowledge) over technical education (which emphasises the application of acquired skills in solving concrete societal problems), the gradual trend of events in a contemporary world requiring great technical know-how has unveiled the unmatched importance of technical and vocational education (Iqbal et al., 2020; Forster et al., 2016; Tripney and Hombrados, 2013; Asongu and Tchamyu, 2019; Tchamyu et al., 2019) in order to curb the education-job mismatch. Unsurprisingly, Cameroon stands out as one of the countries wherein, the mismatch between education and employment is recurrently glaring and has created a lot of inescapable crises. The Growth and Employment Strategy Paper (GESP) published by the Cameroon government in 2010 identifies employment as one of the major challenges of the country and envisaged reducing the rate of unemployment from 76 percent of the workforce to 50 percent by 2020 through the creation of thousands of formal jobs (CMR, 2010). This objective however remains a nightmare in Cameroon as regards the problems of employability, and growing rates of underemployment, especially among women (Etomes, 2021; Kouam and Asongu, 2022).

Given that the educational sector provides input to various socioeconomic sectors, the educational crisis, therefore, has repercussions in various sectors of society. Thus, crises have been recurrent among the employed, for example, the Syndicate of Cameroon Medical Doctors have announced numerous strike actions in recent years (16 may 2017, 16 August

2022 among others) demanding better working conditions (Africanews, 2017; Reuters, 2017; JDC, 2022). Equally, the situation is not different in the teaching profession, as the call for better working conditions through strike actions (21 February 2022 for secondary schools teachers, January 2021 and June 2022 for university lecturers) remains evident (Africanews, 2022; UWN, 2022; Arreyb, 2021; BBC News, 2021). For the unemployed, though the rate of graduation from universities and professional schools has been relatively high, the response in terms of absorption into the job market remains relatively low causing most educated Cameroonian youths to engage in risky informal jobs like bike-riding (OKADA as it is commonly called).

This has made indigenes to start doubting the benefit of education, which currently serves as a demoralizing instrument for youths or parents as economic agents to engage in the journey of education. Recently, PhD holders who can be considered as those that brave the odds of the academic ladder could be seen striking and requesting employment from the government (CRTV, 2020; JDC, 2020). Such actions have made many stakeholders question the cause of such dilemmatic conditions and consequently, calls have been multiplied for the state to revise its education system. Though considerable efforts have been made by the government to revise the educational system such as the promotion of vocational training and the introduction of the competence-based approach to teaching (CMR, 2010; Endeley, 2014; MINEPAT, 2020), the solution is still farfetched. However, the inability of educated individuals to get a job or horizontal skill mismatch can be blamed on the type of educational system and management (Stijepi, 2021; Shi and Wang, 2022; Collins, 1974).

Notwithstanding, some scholars opine that irrespective of the educational system and management practiced, the mismatch between education and employment is contingent on the type of education (general, technical or vocational training) pursued by the populace at all levels of education (Iqbal et al., 2020; Forster et al., 2016). For instance, Che (2007) reveals that most secondary schools in Cameroon are general education oriented with relatively few technical and vocational institutions. Further, the enrolment rate is relatively high in general education schools, compared to technical and vocational training institutions. While parents tend to blame the education system put in place, their intertemporal choices can be termed problematic. Government policies when it comes to higher education are equally questionable. Looking at the current eleven (11) state universities in the country today, there is none that is technical or vocational education oriented. Most graduates in Cameroon are

believed to be grounded in theories with very limited practical or technical know-how (Etomes, 2021). One will be forced to rhetorically ask if the educational system is just fighting to educate or educating to meet the desires of the job market.

Although education is believed to be the backbone for any development endeavour of every society (Aloysius, 2010), this field of research in the context of developing countries like Cameroon seems to have been abandoned by scholars. Very few studies have been conducted with regard to the nexus between educational attainment and the job market. While some extant studies have probed into the effects of education on labour force participation (Totouom et al., 2018; Etomes, 2021), education and poverty alleviation (Aloysius, 2010), education and wage differentials (Baye et al., 2016; Wirba et al., 2021), studies focussing on the role of the educational system and management in meeting the needs of the job market remain sparse. Moreover, despite the outbreak of the prevailing crisis in the country with predominantly educational and political origins (Eposi and Ewange, 2021), recent studies (World Bank, 2021; Agwanda et al., 2020; Okereke, 2018) seem to focus solely on the political aspects of the crisis, thus undermining the importance of education in finding lasting solutions to any socio-political impasse.

Following the persistent educational crisis with regard to educational attainment and employability in Cameroon, a number of measures have been adopted by the Cameroon government in view of addressing education-related issues over the past decade. For instance, in 2010, the Cameroon government launched the recruitment of 25000 young Cameroonian graduates into public service (GPL, 2012; Cameroon Post, 2011; Cameroon tribune, 2011). Although this move contributed to reducing unemployment among university graduates in the country, the ever-growing rates of youth unemployment in the country suggest that the recruitment of 25000 Cameroonians was largely insufficient. Recently, following the outbreak of the socio-political crisis in the English-speaking regions of Cameroon, which originated from the lawyers' and teachers' strike actions in 2016 (Eposi and Ewange, 2021), several actions have been taken by the Cameroon government to address education and job-mismatch issues. For example, in 2017, the government launched the recruitment of 1000 bilingual secondary school teachers as a solution to some of the demands of the striking teachers of the English sub-system of education (Cameroon Tribune, 2021; CRTV, 2018).

Additionally, the recruitment of 2000 lecturers (holders of PhD degrees) into state universities was launched by the government in November 2018<sup>1</sup> (JDC, 2018).

Despite the implementation of these measures, the education and job market crisis continues to persist in Cameroon. The current study, therefore, questions the efficacy of the aforementioned government measures in addressing the educational crisis plaguing the country. Furthermore, despite the persistence of the educational crisis across developing countries in general and Cameroon in particular, contemporary literature addressing the growing educational issues remains sparse or almost inexistent. The present study, therefore, fills an important gap in the literature as it probes into the educational crisis and proposes practical measures to be adopted by policymakers in addressing educational issues within the framework of developing countries like Cameroon.

In this light, this hypothetical commentary pursues two main objectives. First, we seek to unravel the key factors at the origin of the educational crisis in Cameroon. Second, we also seek to identify the major causes of the mismatch between educational attainment and the job market. Consequently, this study proposes a theoretical model that can be used as a time equation model to resolve the diverse crises plaguing the educational sector and job market in Cameroon. The model presents an intertemporal self-adjustment mechanism aimed at targeting scholars' related upheavals. In addition, the proposed theoretical model cannot just be employed in Cameroon but can resolve educational-related woes in most developing countries. We identify a theoretical framework wherein educational crisis is explained by the system of education, the speciality of stake holders, government actions, among others.

## **2. Evolution of the educational system and management in Cameroon**

Since the attainment of political independence by Cameroon in the early 1960s from France (former East Cameroon in 1960) and Britain (former West Cameroon in 1961) and the eventual reunification of both States in October 1961, the country has operated two sub-systems of education (French and English) as inherited from their respective colonial masters (Dze-Ngwa, 2015; Njeuma et al., 1999; Shu, 1982). These distinct educational systems coexist at all levels of study. The remarkable differences in both educational systems range from the number of years of schooling to certification.

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<sup>1</sup>The process was however supposed to run for three years with the respective intake of 1000, 500 and 500 candidates between 2019 and 2021 financial years.

For instance, regarding the years of schooling at the primary level of education, while the English sub-system of education (ESE) acknowledged seven (07) years, the French sub-system (FSE) acknowledged six (06) years before certification that enables the transition from primary to secondary school. As regards certification, disparities are observed at the secondary level, where students acquire two certificates before graduating into university for the English sub-system, unlike the French sub-system which requires the acquisition of three certificates<sup>2</sup>. Disparities in terms of certification are equally noticeable in the higher education sector (Eta et al., 2018).

These disparities constitute major challenges to educational stakeholders in Cameroon, who have over the years adopted policies in view of mitigating these educational hurdles. However, the disparities in years of primary education in both systems were redressed in the early 2000s following the harmonisation of the duration of primary education to six (06) years. Nevertheless, given that the current duration of six years corresponds to the initial duration of the French sub-system of education, proponents of the English educational heritage believe that this was an attempt by the government to abolish the peculiarity of English ideals (Okereke, 2018). This has thus been a major concern to teachers' trade unions of English extraction in Cameroon. Besides, it is believed that stakeholders in the English sub-system agreed to this harmonisation of the schooling years in primary school in view of imminent harmonisation at the secondary level as regards certification. Two decades later, this has not been the case, as these disparities continue to persist, and are believed to constitute one of the major concerns of the teachers' strike that broke out in November 2016 (Eposi and Ewange, 2021; Fallwickl et al., 2021).

Beside the concerns raised with regard to the evolution of the educational system, educational management in Cameroon has undergone numerous changes since the early 1960s. For instance, while the design and implementation of policies relating to the Cameroonian educational system was under the management of a single authority (Ministry of national education) between 1957 and 1984 (Ndjomo, 2022), educational management has been placed under the tutelage of several ministerial departments since 2004. Following the cabinet reshuffle of March 2004, the ministry of national education which was charged with

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<sup>2</sup> The ESE is sanctioned with one intermediary and terminal certification. Thus, the ESE awards successful candidates with the Ordinary Level (O/L) and Advanced Level (A/L) certificates, undertaken by 5<sup>th</sup> (form five) and 7<sup>th</sup> (upper sixth) year students. Conversely, the FSE is sanctioned by two intermediate certificates and one Terminal certification. While form four (4<sup>th</sup> year) and lower sixth (6<sup>th</sup> year) students respectively obtain the CAP (*certificate d'aptitude professionnelle*) and 'Probatoire' certificates, upper sixth (7<sup>th</sup> or final year) students are awarded the 'Bacalaureat' certificate.



the management of the educational system from primary to secondary education, was segmented into three ministries notably; the ministry of basic education (MINEDUB), the ministry of secondary education (MINESEC). Besides the MINEDUB and MINESEC that only came into existence in 2004, the Ministry of Higher Education (MINESUP) has been in existence since 1984 (Ndjomo, 2022).

Although the segregation of educational management into various ministerial departments can be viewed as a good strategy in facilitating the design of educational policies and the attainment of educational objectives, these ministerial departments rather constitute speed brakes in the Cameroonian context. Given that the educational sector is among the most corrupt sectors in the country (Fallwicklet al., 2021; Ngwang, 2021), this therefore casts doubts on the efficiency of various ministerial departments in effectively managing the educational sector and implementing educational policies. Moreover, given that the educational policies implemented in one educational ministry (such as primary) have repercussions in the other ministries, it is important for various ministerial departments to work in synergy in order to adopt harmonised decisions regarding educational policies. Surprisingly, various ministerial departments seem to be dissociated from each other, with the exception of the basic and secondary education ministries that often concert and sign joint circulars especially with regard to the adoption of academic calendars at the start of every school year (MINEDUB, 2021; MINESEC, 2022).

Thus, besides the weaknesses of the Cameroonian educational system, educational management constitutes a major concern to educational stakeholders in Cameroon. Consequently, the Cameroonian educational system and management is in dire need of serious educational reforms in order to curb the current and imminent educational crisis in the country.

### **3. Methodology**

Consistent with Asongu and Usman (2020), this research employs the method of process tracing which is a worthwhile instrument in qualitative studies, not least, because according to the narrative, tracing a process represents a tool with which researchers are provided with insights into fundamental and deepened analysis of a contemporary or actual event or scenario such as the extant educational crisis in Cameroon. Moreover, as posited by Collier (2011), the methodological approach is employed to understand the principal changes and causes of

contemporary phenomena, which is also in line with the elements of motivation provided in the introduction on the problem statement being examined by the present study.

Process tracing in the present exposition is facilitated by the underpinnings of the ‘job search theory’ (McMahon, 1987), which are relevant in understanding apparent mismatches between education and employment opportunities in Cameroon. In essence, this study traces the origins of the education mismatch and utilizes secondary data or information to understand the policy syndromes as well as provide solutions to the corresponding policy syndromes that policy makers can leverage upon to address the underlying mismatches. This narrative which is consistent with Beach (2017) entails the exploitation of secondary data in order to better understand the recurrent educational crisis in the country. Such secondary data entails, *inter alia*, books, articles, statistics and official websites. The information that is obtained from attendant sources thus aids the study to understand the policy syndromes, views, arguments, theoretical insights as well as proposes solutions to address the attendant concerns.

#### **4. Theoretical Framework**

The considered theoretical framework being proposed fundamentally builds on the intuition that irrespective of discipline, students fundamentally go to school with the ultimate goal of being employed once they have the relevant certificates upon graduation. Consistent with the extant literature on the subject, some of the expected benefits include: initial earnings, job security and growth in earnings (McMahon, 1987; Ama, 2008; Asongu *et al.*, 2021).

The theoretical proposition is also in accordance with the job search theory (McMahon, 1987), especially as it relates to graduate students looking for jobs in the labour market after graduation, with expectations of a wage or salary that engenders higher living standards compared to the corresponding living standards experienced by the students while still in school. Focusing on the corresponding theory, the anticipation of students on the future salary or wage can engender a selection of one of the following two options, get employed or stay unemployed. Moreover, self-employment is a substitute for the former option. These theoretical underpinnings within the remit of the ‘job search theory’ are consistent with extant literature on the nexus between education and employment opportunities (Psacharopoulos, 1982; McMahon, 1987; Teichler, 2000; Ama, 2008; Asongu *et al.*, 2019; Adejumo *et al.*, 2021).

#### 4.1. Modelling of Educational Crisis in Cameroon

In order to capture the multidimensional educational crisis experienced in Cameroon, we propose the following theoretical model:

$$\text{Educational Crisis} = f(ES, EM) \quad (1)$$

Where  $ES$  denotes the educational system and  $EM$  represents educational management.

Given the coexistence of the French and English sub-systems of education in Cameroon, therefore,  $ES$  can be expressed as follows:

$$ES = f(ESE, FSE) \quad (2)$$

Where  $ESE$  denotes the English sub-system of education and  $FSE$  signifies the French sub-system of education.

Likewise, given the segregation of educational management into various ministerial departments of education, we endeavour to capture the role of educational management ( $EM$ ) by expressing  $EM$  as a function of the different ministerial departments as follows:

$$EM = f(MINEDUB, MINESEC, MINESUP, MINEFOP) \quad (3)$$

Where  $MINEDUB$  represents the Ministry of Basic Education,  $MINESEC$  the Ministry of Secondary Education,  $MINESUP$  the Ministry of Higher Education, and  $MINEFOP$  the Ministry of Employment and Vocational Training.

Based on the developments in equations 2 and 3, the educational crisis ( $EC$ ) expressed in equation 1 can be rewritten as follows:

$$EC = f(ESE, FSE, MINEDUB, MINESEC, MINESUP, MINEFOP) \quad (4)$$

However, in order to capture the nexus between educational attainment and job mismatch in Cameroon, it is necessary to develop a model taking into consideration the educational crisis and the job market. Consequently, this study proposes a theoretical basis for modelling the educational crisis and job market scenarios.

#### 4.2 The Education and Job Mismatch Crisis (EJMC) Hypothesis

In order to find sustainable solutions to the educational crisis across most developing countries in general and Cameroon in particular, it is necessary to understand the interrelatedness between educational attainment and educational productivity. To achieve

this, we develop the education and job mismatch crisis (EJMC) hypothesis which seeks to explain why though human capital development is relatively low in developing countries like Cameroon; the few educated individuals are unable to secure sustainable decent jobs. Moreover, the fortunate employed scholars are less remunerated, thereby leading to numerous crises. Consequently, the EJMC model is presented and developed in autarchy scenarios wherein we consider sector by sector. It is worth noting that in this model, we consider education as that sector of activity that can “feed itself” and “feed other sectors of the economy”. Education feeds itself through the provision of employment within the educational system, and equally feeds other sectors through the provision of skilled labour. Therefore, the inability of the educational sector to use its own output and the inability for it to produce the required output needed by other sectors are the key fundamental sources of educational crisis. In this light, the theoretical paradigm is presented in terms of two hypotheses that are the: (i) Self-mismatch hypothesis and (ii) Other sectorial mismatch hypothesis.

#### **4.2.1 The self-mismatch hypothesis**

This hypothesis is based on the assumption that, the education sector is self-sustained and can employ all those scholars who wish to train other scholars. The crisis situation surfaces when trained educators are unable to find jobs and/or unable to have decent jobs as the case maybe. In the paragraphs that follow, we develop a mathematical matrix (baseline model) to present different factors that contribute to these crises and how they can help to resolve them.

$$EC = f(EES, AGC, REA) \quad (5)$$

Model 5 presents the educational crisis (EC) in function of being able to be employed in the educational sector (ESS), the Ability to grow a career (AGC) within the educational sector and the remuneration based on educational attainment (REA). The model indicates that, the inability of the educational system to train man power and absorb them can lead to crises. This is due to the fact that, scholars who acquire skills to work in the educational sectors (primary, secondary or higher) and are unable to have jobs will be unemployed and this will generally lead to a crisis situation (unemployment-driven crises).

The inability to grow after gaining employment within the educational sector can degenerate into crisis in the sense that, though the prime objective of any employed individual is to grow (Healy et al., 2022), such interest is limited within the educational sectors by many factors.

Among the limiting factors, nepotism, segregation of educational ministries, corruption and favouritism (Fallwickl et al., 2021) among others are visible. Prominent among these factors, the segregation of educational ministries has been a key problem limiting growth in developing countries in general and Cameroon in particular, due to complications arising from education planning and coordination. Fallwicklet al. (2021) contend that improvements in the educational system can propel the socioeconomic growth of the country. Moreover, within the Cameroonian context, where we have five ministries in charge of education, a PhD holder working in other ministries apart from the higher education sector may not be able to advance his or her career to senior lecturer or professorial rank, even if he or she does research and publishes in reputable outlets. This is because the promotion procedure requires a permanent contract in a higher education institution, either private or public. This has been a key crisis factor in recent years in Cameroon, leading to perpetual requests for change of ministries. Poor remuneration is equally a fundamental crisis promoting factor within the education sector (BBC News, 2021). Sectorial outcry has been common in terms of pay packages when comparisons are made with other sectors, for individuals with similar qualifications but having great pay disparity (Africanews, 2017; JDC, 2022).

#### **4.2.2 Other sectorial mismatch hypothesis.**

This hypothesis explains how the educational sector's excess capacity can be absorbed by other economic sectors. The condition holds that for the other economic sectors to absorb excess capacity from the educational sector, such excess capacity must meet the needs of the different sectors. The crisis situation arises when educated persons are unable to find jobs and or meet the requirements of the job markets different from the educational sector. The proposed baseline model for this hypothesis can be presented as follows.

$$EC = f(EOS, AGC, REA) \quad (6)$$

Where, EOS denotes employment in other sectors, while all the other variables are defined as above. This model (eq. 6) is similar to that of the self-mismatch hypothesis (eq. 5), but differs only in terms of gaining employment in the other sectors. It highlights the importance of the educational sector in the development of human capital necessary for the sustainable development of other segments of society.

## 5. Synthetic Appraisal of Proposed EJMC Model

The EJMC model proposes a bi-hypothetical framework. The theory makes an endeavour to examine human capital development and possible crisis that can crop up. The theoretical model is based on the assumptions that:

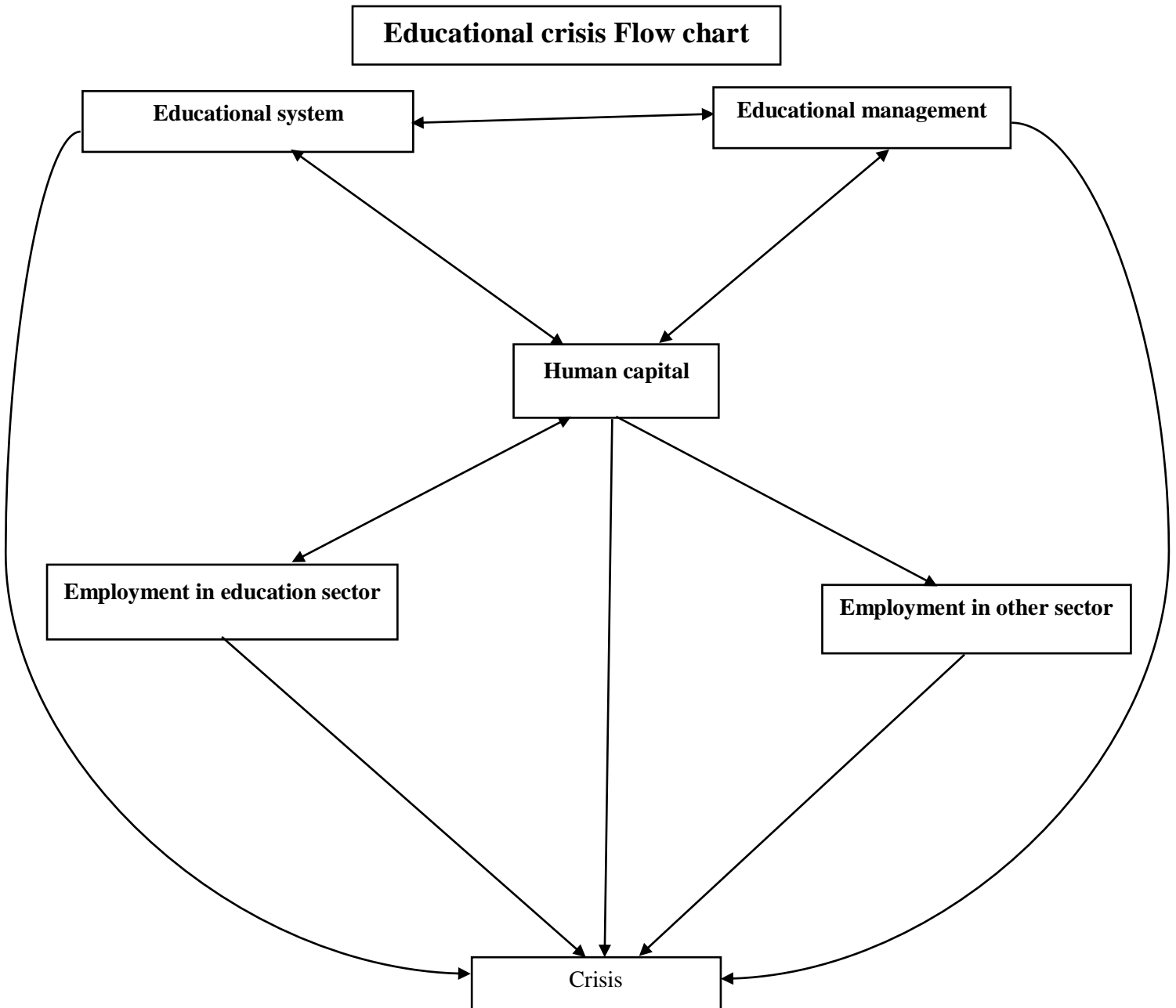
- Human capital is trained to meet the demands of the job market.
- Employment is strictly based on educational attainment at various levels.
- There is no international mobility of skilled labour that is all human capital trained is aimed at satisfying the domestic market, and the domestic market does not depend on external skilled labour.

Based on the aforementioned assumptions and model development, the proposed mismatch theory explains that educational attainment or the development of human capital within an economy is done with the prime objective to supply labour to the educational sector and equally to other sectors of the economy. This implies that an educated individual at time  $t$ , can either seek employment in the educational sector or other sectors of the economy. However, if this individual is unable to find a job within the two sectors, he becomes unemployed and may subsequently constitute a nuisance in the job market, hence leading to a crisis scenario. Further, even if an individual gains employment, the urge to grow within the ranks of the job market becomes unavoidable (Healy et al., 2022).

Hence, the inability of the individual to achieve career growth due to limitations such as ministerial segregation, corruption, and nepotism can frustrate these individuals and push them to engage in unpleasant activities such as strikes (Bessa et al., 2021; Poon, 2019). This often degenerates into an educational crisis in most economies. Additionally, in-service training and further education for the employed ought to be backed by a given degree of financial remuneration in any sector that these individuals find themselves. However, when such remuneration fails to be provided for and when the difference is very glaring in terms of pay packages for individuals with similar educational qualifications, then the quest for equality in remuneration rate becomes paramount and hence generating different crisis situations (Russo et al., 2019). This implies that remunerations are equally at the forefront of educational crisis in the world today. Therefore, the ability to be employed, to grow and equally have good remuneration remains the key factors to solve the educational crisis

plaguing various developing countries according to the Education and Job Mismatch Crisis Hypothesis.

Summarily, the scenario leading to the educational crisis can be summarised in the following flowchart.



However, consistent with the above discussions relating to causes of educational crisis and the EJMC hypothesis, the flowchart is self-explanatory. Based on the theoretical development, the following caveats can be highlighted

- The model does not take into consideration unskilled labour since employment is based on educational attainment.
- It does not account for self-employment.
- The model does not consider other exogenous factors that can drive crisis within the educational milieu.

## **6. An argument for harmonising the existing educational systems**

The importance of education to the socio-politico-economic life of every society cannot be overestimated. The ability of a country to cater for the present and future needs of its citizens depends essentially on the educational system and governmental educational policies put in place. However, it becomes difficult to effectively coordinate the educational sector in the context of multiple educational systems and segregated educational ministries in charge of implementing educational policies, especially in a developing country like Cameroon, characterised by several developmental challenges (Achuo et al., 2021). This therefore necessitates the harmonisation of the existing educational system and managerial architecture in Cameroon. The harmonization of the educational system remains a major worry in Cameroon, and is responsible for the problems of equity, egalitarianism and different aftermath mismatch (Ngalim, 2014). Harmonization in the context of Cameroon can be gazed to be multi-faceted. Firstly, Cameroon operates a bicultural system of education and many pundits have tended to posit that it is impossible to harmonize and operate a unique system within the Cameroonian context (Tchombe, 1999; Fonkeng, 2007). However, countries like Canada and Belgium, though having more than one spoken language, operate a harmonized system of education (Fonkeng, 2007).

Secondly, the segregation of ministerial departments within the educational ranks has been observed recently to be at the origin of diverse crises. Though the division of ministries can be judged valuable in terms of specialization, specific task orientation, facilitating the design of educational policies and the attainment of educational objectives, it is believed to have created some problems in recent years in Cameroon. For instance, educational policies implemented in one educational ministry tend to have ramifications in the other ministries. A recent crisis scenario is observed with PhD holders from the ministry of secondary education who are refused recruitment opportunities in the ministry of higher education. Such ramification effect has recently created an outcry when it comes to career advancement,



which is essential in the life of every employed individual (Healy et al., 2022). However, in some countries like the United States, China, France, Britain, Egypt and Ghana with more population than Cameroon, education is managed by a single department of education (USA), Ministry of education (China), Ministry of National education, youth and sport (France) and Department of Education (Britain), and ministry of education (Egypt and Ghana).

Finally, the opportunity to pursue internship which is often seen to be visible only for those pursuing professional education in Cameroon has equally rendered scholars of general education wanting in the job market (Angyie et al., 2022). Recent statistics show that, 70 percent enrolments into the higher education sector pursue general education and only 30 percent trail professional education (Poon et al., 2020, Takam, 2020). The mismatch created is evident and the search for possible solution remains apparent within a harmonised system. This implies that the process of harmonisation should inculcate all the aforementioned dimensions of crisis generation in order to curb the educational crisis.

This study as such proposes the following harmonisation schemes that can apparently address the above identified deficiencies. Just like in economies like Britain, United States, China, France, Egypt and Ghana, it will be vital for the state of Cameroon to reconsider the policy of a single ministry of education and the putting in place of sub directorates in charge of the primary, secondary and higher education. This will encourage career development through further education and equally ease the transition or movement of qualified academicians from the primary to the secondary sector or higher education as the case maybe. This will be owing to the fact that it will lessen administrative bottlenecks and encourage hard work within the education system, given that all sectors are within the canopy of the unique educational ministry. Equally, it will permit the harmonisation of the wages of individuals working either in the primary, secondary or higher education sector. In France for example, since both primary and secondary teachers leave training schools with master's degree equivalence, they tend to have similar pay packages (Cornu, 2015). In this regard, if the educational ministry gives green light for secondary school teachers to further education and obtain PhD degrees, then they should either enjoy all the benefits their peers in higher education are enjoying or be allowed to advance their career in higher education. Such smooth transition is possible if the ministerial departments merge.

With regard to management system, it is important for government to ensure complete decentralisation of the educational management. While the unique educational ministry may

ensure the design and oversight of national education policies, the views and aspirations of the local populace should be taken into consideration. More autonomy must therefore be devolved to the local authorities as enshrined in the country's constitution. The blend of oversight of educational activities by the central government and the execution of educational policies by local authorities will ensure that the French and English ideals of educational management are incorporated. This is consistent with Fallwickl et al. (2021) who contend that the French culture favours a highly centralised education administration, while the English culture encourages a decentralised administrative structure. However, given that educational harmonisation is a long-term process, it will be necessary in the short-run to create two separate directorates respectively in charge of the French and English sub-systems of education within the unique ministry of education.

Addressing the job mismatch identified, it is necessary to extend the practice of internship to general education students especially at the university level, such that, it should not just be an issue of the vocational and professional schools. This will enable general education students pursuing university studies to match theoretical concepts with practice, thereby rendering graduates from both general and professional educational background more job-friendly. The introduction of a common end of course field experience with companies and local community and decentralised units by students from both general and professional education can make them gain first-hand experience of the job market, and build morals of graduates on the reality of the countries job environment.

For instance, the United Kingdom (UK) educational system which is today considered among the best educational systems in the world (TER, 2022) is structured to enable learners gain practical exposure (Sinha, 2022). The global opportunity and quality indices underlie the attractiveness of an educational system. According to Sinha (2022), while the global opportunity index essentially measures the attractiveness of a country's educational system to international investors, the quality index provides a measure of a country's quality of life with regard to job opportunities, physical safety, health and economic security. Moreover, the classification of universities relies on some performance indicators of educational systems encompassing teaching, knowledge transfer, research, and global outlook (THE, 2022).

Hence, in order to boost the Cameroon educational system and render it attractive, it is necessary for the government to increase educational spending especially in the domains of infrastructural development, technology and innovation in the educational sector. High

quality infrastructure and well-equipped modern laboratories constitutes some of the attractive elements of UK's enviable educational system which is a major destination to research enthusiasts around the globe.

Finally, the harmonisation of curriculum for both the French and English sub systems of education within the spheres of a unified ministry, that which will permit easy coordination and follow up from all the educational levels will make the bicultural nature of the educational system more unifying and build a common path for pupils of the nation. Such a harmonised system has yielded substantive fruits in economies like Belgium and Canada (Fonkeng, (2007). However, given that the French and English sub-systems in Cameroon do not only differ in terms of educational administration but also exhibit differences in terms of curricula, languages of instruction, qualification, grading and certification timeframes (Fallwickl et al. (2021), the harmonisation process must therefore take into consideration the convening of practitioners and key experts from both systems of education for prior deliberations. Moreover, expert surveys targeting teachers' syndicates from both educational systems should be conducted by educational authorities in order to address some impending educational woes in the new educational model.

## **7. Conclusion and Policy Implications**

The importance of quality education in the development process of nation-states cannot be overemphasized. In recent years, the prominence of education has been further emphasised in the sustainable development goals (SDGs) of the United Nations. Thus, this study uncovers the underlying causes of the recurrent educational crisis in Cameroon by questioning the efficacy of the educational system and management in meeting the educational needs of Cameroonians and job market exigencies.

The study reveals the educational sector and educational management constitute the major causes of the educational crisis in Cameroon. However, the existence of an educational crisis is established on the basis of extant literature and stylised facts in the Cameroonian context. Moreover, in order to address the crisis, we propose a novel theoretical model "*The Education and Job Mismatch Crisis Hypothesis*", wherein educational crisis is a function of employment, ability to grow and remuneration.

Contingent on the findings of this study, we recommend that the Cameroon government should aggregate various educational ministries (encompassing the ministries of basic,

secondary, vocational and higher education, as well as scientific research) into a single ministry of education (called the Ministry of national education and scientific research). By so doing, this will facilitate the movement of staff from one educational sector to another whenever need arises. Moreover, the fusion of various educational ministries will help in curbing the corruption that has eaten deep into the educational sector in Cameroon.

Besides, the unique ministerial department should envisage the creation of separate directorates in charge of the English and French sub-systems of education that coexist in Cameroon. These directorates will be charged with the assessment of the needs and peculiarities of the various sub-systems of education in order to foster the eventual harmonisation of both systems to suit the demands of Cameroonians, irrespective of their linguistic heritage.

Moreover, unlike the current difficulties encountered by teachers (staff) in moving from one educational ministry to another (for instance from basic to secondary or secondary to higher), thereby discouraging hard work, the merging of various educational ministries will likely encourage hard work. This is because teachers will be motivated to further their education given that they can easily be promoted to higher grades and departments within the same ministry based on their newly acquired qualifications and competence.

Additionally, the Cameroon government should rethink her educational system. Efforts should be made to harmonise the existing educational systems (English and French) to suit national demands without undermining the esteemed values of one in favour of the other. Preferably, educational stakeholders could consider reforming the educational system by developing a unique system that lends from the positive values of the current educational systems practiced in the country. However, if both systems must be maintained, one should not be considered superior to the other.

Furthermore, it would be important for the government to consider detaching and transforming the national polytechnic institutions currently serving as schools under some state universities into full fledged autonomous technical universities. Although this would likely entail huge costs to government, it will eventually remedy the prevailing education and job market mismatch crisis. However, due to the high costs involved in simultaneously transforming all the polytechnic institutions into autonomous technical universities, the government can commence the process with the transformation of two of the existing

polytechnic institutions into two pilot technical universities, with one located in a French-speaking region and the other in an English-speaking region.

Given that this study is a maiden attempt to comprehensively model the fundamental causes of the educational crisis in developing countries, it therefore leaves room for future studies. Firstly, future research could endeavour to test the applicability of the proposed theoretical model by conducting an empirical investigation of the causes of the educational crisis in developing countries. Moreover, future studies should conduct impact studies with regard to different educational systems in relation to meeting the needs of the job market.

## References

- Achuo, E. D., Nchofoung, T. N., Asongu, S., &Dinga, G. D. (2021). *Unravelling the mysteries of underdevelopment in Africa* (No.WP/21/073).AGDI Working Paper.
- Adejumo, O. O., Asongu, S. A., &Adejumo, A. V. (2021). Education enrolment rate vs employment rate: Implications for sustainable human capital development in Nigeria. *International Journal of Educational Development*, 83, 102385.
- Africanews (2017). Cameroon doctors defy government caution, strike again. Retrieved on 14.12.2022. Available at:<https://www.africanews.com/2017/05/15/cameroon-doctors-defy-government-caution-strike-again/>.
- Africanews (2022). Under the banner of "OTS", thousands of teachers strike in Cameroon. Retrieved on 14.12.2022. Available at:<https://www.africanews.com/2022/03/12/under-the-banner-of-ots-thousands-of-teachers-strike-in-cameroon/>.
- Agwanda, B., Nyadera, I. N., &Asal, U. Y. (2020).Cameroon and the Anglophone crisis.*The Palgrave Encyclopedia of Peace and Conflict Studies*, 1-11. [https://doi.org/10.1007/978-3-030-11795-5\\_115-1](https://doi.org/10.1007/978-3-030-11795-5_115-1).
- Aloysius, M. N. (2010). The effects of educational attainment on poverty reduction in Cameroon.*International Journal of Educational Administration and Policy Studies*, 2(1), 001-008.
- Ama, N. O., (2008). Transition from higher education to employment: A case study of graduates of faculty of social sciences University of Botswana. *Educational Research and Review*, 3 (8), 262-274.
- Anderson, E. S., &Avegno, J. (2021).Education and employment.In*Social Emergency Medicine* (pp. 187-197).Springer, Cham.
- Angyie, E. A., Daniel, T., & Martin, N. (2022).Education and Youths Employability in Cameroon. *African Journal of Emerging Issues*, 4(5), 96-110.
- Arreyb (2021). Cameroon: State University Lecturers Begin Five-Day Strike. Retrieved on 14.12.2022.Available at:<https://arreyb.com/cameroon-state-university-lecturers-begin-five-day-strike/>.
- Asongu, S. A., &Usman, U. M. (2020). The COVID-19 pandemic:Theoretical and practical perspectives on children, women and sex trafficking.*Health Care forWomen International*, 41(11-12), 1384-1397.
- Asongu, S. A., &Tchamyou, V. S., (2019).Foreign Aid, Education and Lifelong Learning in Africa”, *Journal of the Knowledge Economy*,10(1), 126–146.

- Asongu, S. A., Nounamo, Y., Njangang, H., & Tadadjeu, S. (2021). Gender inclusive intermediary education, financial stability and female employment in the industry in Sub Saharan Africa. *Finance Research Letters*, 43(November), 101968.
- Asongu, S. A., Orim, S. I., & Nting, R. T. (2019). Inequality, information technology and inclusive education in sub-Saharan Africa. *Technological Forecasting & Social Change*, 146 (April), 380–389.
- Baye, F. M., Epo, B. N., & Ndenzako, J. (2016). Wage differentials in Cameroon: A gendered analysis. *African Development Review*, 28(1), 75-91.
- BBC News (2021). Cameroon Lecturers Strike: About 2000 lecturers stop for teach as de nova get research bonuses. Retrieved on 14.12.2022. Available at: <https://www.bbc.com/pidgin/tori-55989270>.
- Beach, D. (2017). Process-tracing methods in social science. Oxford Research Encyclopedia of Politics.
- Becker, G. S. (1994). Human capital revisited. In *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, Third Edition* (pp. 15-28). The University of Chicago Press.
- Bessa, I., Charlwood, A., & Valizade, D. (2021). Do unions cause job dissatisfaction? Evidence from a Quasi-Experiment in the United Kingdom. *British Journal of Industrial Relations*, 59(2), 251-278.
- Cameroon Post (2011). Recruitment Of 25,000 Youths Pushed To December. Retrieved on 14.12.2022. Available at: <https://cameroonpostline.com/recruitment-of-25000-youths-pushed-to-december/%E2%80%8B>.
- Cameroon Tribune (2011). Recruitment of 25,000 Youths: Selected Candidates Posted. Retrieved on 14.12.2022. Available at: [http://ct2015.cameroon-tribune.cm/index.php?option=com\\_content&view=article&id=66228:recruitment-of-25000-youths-selected-candidates-posted&catid=4:societe&Itemid=3](http://ct2015.cameroon-tribune.cm/index.php?option=com_content&view=article&id=66228:recruitment-of-25000-youths-selected-candidates-posted&catid=4:societe&Itemid=3).
- Cameroon Tribune (2021). Recruitment of 1000 bilingual teachers: Minister clarifies on prevailing situation. Retrieved on 14.12.2022. Available at: <https://www.cameroon-tribune.cm/article.html/39186/en.html/recruitment-of-1-000-bilingual-teachers-minister>.
- Che, S. M. (2007). Technical and Vocational Education in Cameroon and Critical Avenues for Development. *Research in Comparative and International Education*, 2(4), 333-345. <http://dx.doi.org/10.2304/rcie.2007.2.4.333>.
- CMR (Republic of Cameroon) (2010). *Growth and Employment Strategy Paper (GESP) – 2010/2020*. Retrieved on 14.12.2022. Available at: [https://www.cameroonembassyusa.org/images/documents\\_folder/quick\\_links/Cameroon\\_DSCE\\_English\\_Version\\_Growth\\_and\\_Employment\\_Strategy\\_Paper\\_MONITORING.pdf](https://www.cameroonembassyusa.org/images/documents_folder/quick_links/Cameroon_DSCE_English_Version_Growth_and_Employment_Strategy_Paper_MONITORING.pdf)
- Collier, D. (2011). Understanding process tracing. *Political Science & Politics*, 44(4), 823–830.
- Collins, R. (1974). Where are educational requirements for employment highest?. *Sociology of Education*, 47(4), 419-442.
- Cornu, B. (2015). Teacher Education in France :Universitisation and Professionalisation – form IUFMs to ESPEs. *Education Inquiry*, 6(3), 289-307
- CRTV (Cameroon Radio Television) (2018). Secondary Education: Recruitment of Bilingual science teachers. Retrieved on 14.12.2022. Available at: <https://www.crtv.cm/2018/04/secondary-education-recruitment-of-bilingual-science-teachers/>.
- CRTV (Cameroon Radio Television) (2020). Recruitment of PhD holders : Protesters turn down government’s offer, continue protest. Retrieved on 14.12.2022. Available at:

<https://www.crtv.cm/2020/01/recruitment-of-phd-holders-protesters-turn-down-governments-offer-continue-protest/>.

- Dze-Ngwa, W. (2015). Cameroon: Trends and futures. *Education in West Africa*, 29, 85.
- Endeley, M. N. (2014). Teaching practice in Cameroon: The effectiveness of the University of Buea model and implications for quality. *Australian Journal of Teacher Education (Online)*, 39(11), 147-160.
- Eposi, T. K. &Ewange, M. P. (2021). Education under Attack in Cameroon: The Effects of the Socio-Political Crisis on the Anglophone Sub-System of Education of the Anglophone Regions of Cameroon. *International Journal on Integrated Education*.4(12), 156-171. <https://doi.org/10.31149/ijie.v4i12.2527>.
- Eta, E. A., Kallo, J., &Rinne, R. (2018).Process of transfer and reception of Bologna Process ideas in the Cameroon higher education system.*EuropeanEducationalResearch Journal*, 17(5), 656-675.
- Etomes, S. E. (2021). Skills Acquisition and Labour Market Opportunities for Graduates of Higher Education in Cameroon.*African Journal of Development Studies (formerly AFFRIKA Journal of Politics, Economics and Society)*, 11(1), 249-272.
- Fallwickl, E., McNally, R., & Mackie, C. (2021).Education in Cameroon.*World Education News and Reviews*.Retrieved on 15.12.2022. Available at: <https://wenr.wes.org/2021/04/education-in-cameroon>.
- Ferrer-Estévez, M., &Chalmeta, R. (2021). Integrating Sustainable Development Goals in educational institutions.*The International Journal of Management Education*, 19(2), 100494.<https://doi.org/10.1016/j.ijme.2021.100494>.
- Fonkeng, G. E. (2007). The History of Education in Cameroon: 1884-2004. Queenstown Lampester, New York: The Edwin Mellen Press.
- Forster, A. G., Bol, T., & Van de Werfhorst, H. G. (2016).Vocational education and employment over the life cycle.*Sociological Science*, 3, 473-494.
- GPJ (Global Press Journal) (2012). Government Initiative Employs 25,000 New Workers in Cameroon, Fails to Pay Most. Retrieved on 14.12.2022.Available at:<https://globalpressjournal.com/africa/cameroon/government-initiative-employs-25-000-new-workers-in-cameroon-fails-to-pay-most/>.
- Healy, M., Hammer, S., &McIlveen, P. (2022). Mapping graduate employability and career development in higher education research: A citation network analysis.*Studies in Higher Education*, 47(4), 799-811.
- Heleta, S., &Bagus, T. (2021). Sustainable development goals and higher education: leaving many behind. *Higher Education*, 81(1), 163-177.
- Iqbal, N., Khan, M. M., Mohmand, Y. T., &Muftaba, B. G. (2020). The impact of in-service training and motivation on job performance of technical & vocational education teachers: Role of person-job fit. *Public Organization Review*, 20(3), 529-548.
- JDC (Journal du Cameroun) (2018). Cameroon: Paul Biya orders recruitment of 2000 lecturers into State varsities. Retrieved on 14.12.2022. Available at:<https://www.journalducameroun.com/en/cameroon-paul-biya-orders-for-recruitment-of-2000-lecturers-into-state-varsities/>.
- JDC (Journal du Cameroun) (2020). Cameroon/Recruitment of varsity dons: Disgruntled PhD holders call off strike action. Retrieved on 14.12.2022. Available at:<https://www.journalducameroun.com/en/cameroon-recruitment-of-varsity-dons-disgruntled-phd-holders-end-strike/>.
- JDC (Journal du Cameroun) (2022). Cameroon : Health Workers Grant Government 4-months Truce Against Planned Strike. Retrieved on 14.12.2022. Available at:<https://www.journalducameroun.com/en/cameroon-health-workers-grants-government-a-4-months-truce-against-planned-strike/>.

- Jennum, P., Debes, N. M. M., Ibsen, R., & Kjellberg, J. (2021). Long-term employment, education, and healthcare costs of childhood and adolescent onset of epilepsy. *Epilepsy & Behavior*, 114, 107256. <https://doi.org/10.1016/j.yebeh.2020.107256>.
- Kouam, J., & Asongu, S. (2022). Female Unemployment and Economic Growth in Cameroon: An Estimation of a Nonlinear Okun's Law Specification by the ARDL Cointegration Model. *European Xtramile Centre of African Studies WP/22/078*.
- McMahon, W. W. (1987). Student Labour Market Expectations. In Psacharopoulos, G (1987) *Economics of Education*, Oxford: Pergamon Press.
- MINEDUB (Ministry of Basic Education) (2021). Conjoint order MINEDUB/MINESEC fixing the calendar of the 2021/2022 School year in the Republic of Cameroon. Retrieved on 14.12.2022. Available at: [http://minedub.cm/uploads/media/CONJOINT\\_ORDER\\_FIXANT\\_CALENDAR\\_2021\\_2022\\_02.pdf](http://minedub.cm/uploads/media/CONJOINT_ORDER_FIXANT_CALENDAR_2021_2022_02.pdf).
- MINEPAT (Ministry of Economy, Planning and Regional Development) (2020). National Development Strategy 2020-2030: For structural transformation and inclusive development. Retrieved on 14.12.2022. Available at: [http://bibliotheque.pssfp.net/livres/NATIONAL\\_DEVELOPMENT\\_STRATEGY\\_2020\\_2030.pdf](http://bibliotheque.pssfp.net/livres/NATIONAL_DEVELOPMENT_STRATEGY_2020_2030.pdf)
- MINESEC (Ministry of secondary Education) (2022). Conjoint order MINEDUB/MINESEC to fix the calendar of the 2022\_2023 school year in the Republic of Cameroon. Retrieved on 14.12.2022. Available at: <https://www.minesec.gov.cm/web/index.php/en/decisions/item/1392-conjoint-order-minedub-minesec-to-fix-the-calendar-of-the-2022-2023-school-year-in-the-republic-of-cameroon>.
- Ndjomo, N. (2022). « Cameroun : les ministres de l'Éducation de 1957 à 2022 ». Retrieved on 12.12.2022. Available at <https://sukulu.news/cameroun-les-ministres-de-leducation-de-1957-a-2022/>.
- Ngalim, V. B. (2014). Harmonization of the Educational Sub-Systems of Cameroon: A Multicultural Perspective for Democratic Education. *Creative Education*, 5, 334-346
- Ngwang, R. (2021). Arresting Roadside Corruption: What Prospects Remain for Anglophone Cameroon. *American Journal of Public Policy and Administration*, 6(1), 1-11.
- Njeuma, D. L., Endeley, H. N., Mbuntum, F. F., Lyonga, N., Nkweteyim, D. L., Musenja, S., & Elizabeth, E. (1999). Reforming a national system of higher education: The case of Cameroon. *A Report of the ADEA Working Group on Higher Education*.
- Okereke, C. N. E. (2018). Analysing Cameroon's anglophone crisis. *Counter Terrorist Trends and Analyses*, 10(3), 8-12.
- Okereke, C. N. E. (2018). Analysing Cameroon's anglophone crisis. *Counter Terrorist Trends and Analyses*, 10(3), 8-12.
- Petrov, A. N. (2017). Human capital and sustainable development in the Arctic: Towards intellectual and empirical framing. In *Northern Sustainabilities: Understanding and addressing change in the circumpolar world* (pp. 203-220). Springer, Cham.
- Poon, A., Giroux, S., & Eloundou, P. (2020). Baccalaureate Practice Test in Cameroon: The Impact of SMS-based Exam Preparation. *Journal of Economic and Social Measurement*, 41(16), 219-228.
- Poon, T. S. C. (2019). Independent workers: Growth trends, categories, and employee relations implications in the emerging gig economy. *Employee Responsibilities and Rights Journal*, 31(1), 63-69.
- Psacharopoulos, G. (1982). The Economics of Higher Education in Developing Countries. *Comparative Education Review*, 26(2), 139-59.



- Reuters (2017). Cameroon doctor strike leaves patients unseen amid political crisis. Retrieved on 14.12.2022. Available at: <https://www.reuters.com/article/us-cameroon-strike-idUSKBN17J1EA>.
- Russo, G., Xu, L., McIsaac, M., Matsika-Claquin, M. D., Dhillon, I., McPake, B., & Campbell, J. (2019). Health workers' strikes in low-income countries: the available evidence. *Bulletin of the World Health Organization*, 97(7), 460-467.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1-17.
- Shu, S. (1982). Education in Cameroon. In *Education in Africa* (pp. 28-48). Routledge.
- Shi, L. P., & Wang, S. (2022). Demand-side consequences of unemployment and horizontal skill mismatches across national contexts: An employer-based factorial survey experiment. *Social Science Research*, 104, 102668. <https://doi.org/10.1016/j.ssresearch.2021.102668>.
- Sinha, Y. (2022). Best education system in the world. Retrieved on 17.12.2022. Available at: <https://www.upgradabroad.com/articles/best-education-system-in-the-world/>.
- Stijepic, D. (2021). A cross-country study of skills and unemployment flows. *Journal for Labour Market Research*, 55(1), 1-30.
- Takam, A. (2020). English and French Bilingual Education and Language Policy in Cameroon. *Journal of Political Economy*, 106(2), 19-35.
- Tchamyou, V. S., Asongu, S. A., & Odhiambo, N. M., (2019). The Role of ICT in Modulating the Effect of Education and Lifelong Learning on Income Inequality and Economic Growth in Africa. *African Development Review*, 31(3), 261-274.
- Tchombe, M. T. (1999). Structural Reforms in Education in Cameroon. <http://www.educationdev.net/educationdev/Docs/Cameroon.PDF>.
- Teichler, U. (2000). Higher Education and Graduate Employment in Europe, New Perspective for Learning. The European Union- Briefing Paper 10. <http://www.pjb.co.uk/npl/bp10.htm>
- THE (Times Higher Education) (2022). World University Rankings 2022. Retrieved on 17.12.2022. Available at: <https://www.timeshighereducation.com/world-university-rankings/2022/world-ranking>.
- Totouom, A., Mboutchouang, V. D. P., & KaffoFotio, H. (2018). The effects of education on labour force participation in Cameroon: A gender perspective. *African Development Review*, 30(1), 45-55.
- Tripney, J. S., & Hombrados, J. G. (2013). Technical and vocational education and training (TVET) for young people in low-and middle-income countries: a systematic review and meta-analysis. *Empirical Research in Vocational Education and Training*, 5(1), 1-14.
- United Nations (2015). Transforming our world: the 2030 agenda for sustainable development. Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>.
- UWN (University World News) (2022). Lecturers plan to strike if government fails to pay dues. Retrieved on 14.12.2022. Available at: <https://www.universityworldnews.com/post.php?story=20220322051401342>.
- Wirba, E. L., Akem, F. A., & Baye, F. M. (2021). Earnings gap between men and women in the informal labor market in Cameroon. *Review of Development Economics*, 25(3), 1466-1491.
- World Bank. (2021). *The Socio-Political Crisis in the Northwest and Southwest Regions of Cameroon: Assessing the Economic and Social Impacts*. World Bank.