#### UNIVERSITE DE YAOUNDE I

# FACULTE DES SCIENCES DE L'EDUCATION

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#### **FACULTY OF EDUCATION**

POST GRADUATE SCHOOL FOR SOCIAL AND EDUCATIONAL SCIENCES

DOCTORATE UNIT FOR RESEARCH AND TRAINING IN EDUCATION AND EDUCATIONAL FOUNDATION

DEPARTMENT OF CURRICULA AND EVALUATION

# THE EFFECT OF GOVERNMENT EDUCATIONAL INVESTMENT ON THE PERFORMANCE OF PRIMARY SCHOOL PUPILS IN THE YAOUNDE VI SUBDIVISION

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**Specialty: Educational Administration and Inspection** 

## **Presented by:**

# **David NING NJUH**

MATRICULE: 20V3302

B.A: Economic Sciences, University of Yaoundé II



#### Jury

Quality	Name and Grade	University
President	BIKOI Félix Nicodème, Pr.	UY1
Supervisor	Maureen EBANGA TANYI, Pr.	UY1
Examiner	MBEH Adolf TANYI, CC	UY1

## **CERTIFICATION**

This is to certify that this dissertation entitled "THE EFFECT OF GOVERNMENT EDUCATIONAL INVESTMENT ON THE PERFORMANCE OF PRIMARY SCHOOL PUPILS IN THE YAOUNDE VI SUBDIVISION" is written by David NING NJUH, matricule: 20V3302, student of the Faculty of Education, Department: Curriculum and Evaluation, Option: Educational Management, University of Yaoundé 1. In view of a Master's degree in Educational Administration and Inspection.

**Signatures** 

President of Jury			
Supervisor			
Examiner			

# **DEDICATION**

This work is dedicated to my grandfather Papa NING NJUH Henry of Blessed Memory.

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# TABLE OF CONTENTS

CERTIFICATION	i
DEDICATION	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF ABREVIATIONS AND ACRONYMS	vii
LIST OF TABLES	X
LIST OF FIGURES	xii
ABSTRACT	xiii
RESUME	xiv
CHAPTER ONE: INTRODUCTION	1
Background Of The Study	1
Contextual background	8
Conceptual background	29
Theoritical background	33
Justification Of The Study	35
Problem Statement	38
Research Objectives	39
General research objective	39
Specific research objectives	39
Research Questions	40
General research question	40
Specific research questions	40
Research Hypothesis	40
General research hypothesis	40
Specific research hypothesis	40
Scope Of The Study	40
Thematic scope	40
Theoretical scope	41
Demographic scope	41
Significance Of The Study	41
Defination Of Key Terms	42

Outline Of The Study	46
CHAPTER TWO: REVIEW OF LITERATURE	47
Conceptual Review	47
Government educational investment	47
Performance of primary school pupils	58
Theoretical Framework	63
The human capital theory	63
The theory of academic performance	66
Empirical Review	69
General empirical review	69
School infrastructure and educational performance	71
Didactic material and educational performance	73
Human capital and educational performance	75
Government educational investment and economic growth	76
Summary of reviewed literature and study gap	78
CHAPTER THREE: METHODOLOGY	80
Area of study	80
Research design	80
Population of study	82
Target Population	82
Accessible Population	82
Sample size and technique	82
Instrumentation	83
Validity of research instruments	85
Reliability of research instruments	86
Data collection procedure	87
Data analysis technique and presentation	88
Dissemination of results	88
Synoptic table	89
Ethical considerations	90
CHAPTER FOUR: Data Presentation, Analysis and Interpretation of Results	91
Qualitative data	91
Quantitative data	95

Summary table of results	104
CHAPTER FIVE: Discussion of findings, conclusions and recommendations	105
Discussion of major findings	105
General conclusion	110
RECOMMENDATIONS	112
LIMITATIONS AND DIFFICULTIES ENCOUNTERED	113
SUGGESTIONS FOR FURTHER RESEARCH	113
REFERENCES	114
APPENDICES	xx

#### LIST OF ABREVIATIONS AND ACRONYMS

AFD: French Development Agency

ADB: African Development Bank

AU: African Union

BUCREP: Bureau Central des Recensements Et des Etudes De Population

BTI: Bertelsmann Stiftung's Transformation Index

CAPIEMP: Certificat d'Aptitude Pédagogique d'Instituteur de l'Enseignement Maternel et

Primaire

CAPIET: Certificat d'Aptitude Pédagogique d'Instituer de L'Enseignement Technique

CBA: Competence Based Approach

CEP: Certificat d'Etudes Primaires

CEMAC: Central African Economic and Monetary Community

CNAMSMD: National Council for The Accreditation of Textbooks and Teaching Materials

CONFEMEN: Conference of Ministers of Education of French-Speaking Countries

DDEB/DDBE: Divisional Delegation of Basic Education

DREB/RDBE: Regional Delegation of Basic Education

DSCE/GESP: Growth and Employment Strategy Paper

DSSEF/ESSD: Education and Training Sector Strategy Document

DHS: Demographic and Health Survey

ENIEG: Ecoles Normales des Instituteurs de l'Enseignement Général

ENIET: Ecoles Normales des Instituteurs de l'Enseignement Technique

EFA: Education for All

FCFA: Franc de la Communauté Financière Africaine

FSLC: First School Leaving Certificate

FTI: Fast Track Initiative

IAEB: Inspectorate of Basic Education

IDA: International Development Association

IBM/ WBI: World Bank Institute

IDCJ: International Development Center of Japan

HDI: Human Development Index

INS/NIS: National Institute of Statistics

**INSET:** In-service Training

**GNI:** Gross National Income

**GPI**: Gender Parity Index

HIV: Human Immuno-Deficiency Virus

AIDS: Acquired Immune Deficiency Syndrome

**UIS: UNESCO Institute for Statistics** 

JICA: Japan International Cooperation Agency

ME: Memorandum of Understanding

MINEDUB: Ministry Basic Education

MINFI: Ministry of Finance

MINEFOP: Ministry of Employment and Vocational Training

MINESEC: Ministry Secondary Education

MINESEP: Ministry of Sports and Physical Education

MINESUP: Ministry of Higher Education

MINEPAT: Ministry of Economy, Planning and Regional Development

IMF: International Monetary Fund

MDGs Millennium Development Goals

NGO: Non-Governmental Organization

WFP: World Food Programme

PASEC: Programme d'Analyse des Systèmes Educatifs de la CONFEMEN

PAREC: Programme D'appui a La Reforme De L'education Au Cameroun

PTA: Parent Teacher Association

**GDP:** Gross Domestic Product

**GEM:** Global Education Monitoring

GPE: Global Partnership for Education

**UNDP:** United Nations Development Program

**HIPC:** Highly Indebted Poor Countries

TFP: Technical and Financial Partners

RESEN: Rapport d'Etat du Système Educatif National (State Report on the National Education

System)

RGPH: Recensement General De La Population Et De L'habitat

PETS: Public Expenditure Tracking Survey

PIB: Public Investment Budget

PRSP: Poverty Reduction Strategy Paper

OLS: Ordinary Least Squares Regression

SWAP: Sector Wide Approach

SPSS: Statistical Package for the Social Sciences

ICT: Information and Communication Technologies

ISCED: International Standard Classification of Education

EU: European Union

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations Children's Fund

USD: United States Dollar

**UIS: UNESCO Institute for Statistics** 

OCHA: United Nations Office for the Coordination of Humanitarian Affairs

WDI & GDF: World Development Indicator & Global Development Finance

WB: World Bank

SDG: Sustainable development goal

ZEP: Zone d'Education Prioritaires

# LIST OF TABLES

Table 1.1: Evolution of the population of Cameroon from 1976 - 2030	11
Table 1.2: Evolution of the school age population	12
Table 1.3 : Some key socio-economic indicators in Cameroon	16
Table 1.4 : State revenue and education expenditure	18
Table 1.5 : School years of primary education in the francophone and anglophone su	=
Table 1.6: Education sector strategy paper 2009 - 2013	27
Table 2.1 : Structure of current education expenditure in Billion FCFA	48
Table 2.2: Budgetary allocation for primary schools in 2017	49
Table 2.3: Resources made available to primary schools (2010 – 2011)	51
Table 2.4 : Salaries of teachers in primary and lower secondary schools by rank	55
Table 2.5: Proportion (%) of permanent teaching staff on duty in 2017 by region is schools	
Table 3.1 : Sample matrix	83
Table 3.2: Questionnaire options and corresponding weights on the likert scale	84
Table 3.3: Synoptic table	89
Table 4.1: Sex distribution of correspondents	95
Table 4.2: Age distribution of correspondents	96
Table 4.3: Frequency based on name of school	96
Table 4.4: Frequency based on class	97
Table 4.5: Respondents view on infrastructural investment	97
Table 4.6: Respondents view on didactic material investment	98

Table 4.7: Respondents view on human capital investment	99
Table 4.8: Respondents view on pupil's performance	100
Table 4.9: Correlation on infrastructural investment and pupil's performance	101
Table 4.10: Correlation on didactic material investment and pupil's performance	101
Table 4.11: Correlation on human capital investment and pupil's performance	102
Table 4.12: Correlation among variables	103
Table 4.13: Summary table of results	104

# LIST OF FIGURES

Figure 1.1: Share of the age population of the different sub-sectors in the school age po	opulation
from 2005 – 2030	13
Figure 1.2: Conceptual Framework	29
Figure 2.1: Distribution of primary establishment by region	50
Figure 2.2: Distribution of schools by number of supervisory visits received du 2017/2018 academic year	_
Figure 2.3: Net enrolment ratio in primary education by gender and region (2010)	

#### **ABSTRACT**

Education is the right of every child and primary education is compulsory. Primary education is universally accepted as the foundation laying level of education in all nations of the world. It provides the mini-structural framework on which the quality of other levels of education is anchored. It is on this premise that this study has as main objective to examine the effect of Cameroon's government educational investment on the performance of pupils in public primary schools of Cameroon and specifically in the Yaoundé VI municipality in the center region. This study was grounded on two theories: The Human Capital Theory and the Theory of Academic Performance. Three hypotheses were formulated based on the three variables: infrastructural investment, investment in didactic materials and human capital investment, to determine their effect on primary school pupil's performance. 210 pupils and 6 head teachers from 6 selected public primary schools in Yaoundé VI municipality were involved in this survey. Using a convergent parallel research design, a questionnaire and an interview guide were used for data collection. Both descriptive and inferential statistics were used to analyze the data with the help of SPSS 20.0. Results revealed that government's educational investment has an effect on the performance of primary school pupils. The hypotheses were retained at 0.05 level of significance, implying that infrastructural investment (r = 0.225,  $P = 0.001 \le 0.05$ ), didactic material investment (r = 0.148,  $P = 0.032 \le 0.05$ ) and human capital investment (r = 0.261,  $P = 0.000 \le 0.05$ ) affects pupil's academic performance. The researcher thus recommends the government to increase the budget allocated for the provision of infrastructures, didactic materials and human capital in the primary education sector, to pay attention to policies that enhance educational attainment, to improve and regularly provide teachers with incentives, to train and to evenly distribute qualified teachers to all primary schools, as well as to improve in-service teacher training amongst others.

**Keywords:** educational investment, infrastructure, didactic, human capital and academic performance.

# **RÉSUMÉ**

L'éducation est le droit de chaque enfant et l'enseignement primaire est obligatoire. L'enseignement primaire est universellement reconnu comme le premier niveau d'éducation dans toutes les nations du monde. Il fournit le cadre mini-structurel sur lequel la qualité des autres niveaux d'éducation est ancrée. C'est sur cette prémisse que cette étude a pour objectif principal d'examiner l'effet de l'investissement du gouvernement camerounais dans l'éducation sur la performance des élèves des écoles primaires publiques du Cameroun et specifiquement dans la commune de Yaoundé VI dans la région du centre. Cette étude s'appuie sur deux théories: La théorie du capital humain et la théorie de la performance académique. Trois hypothèses ont été formulées sur la base des trois variables: l'investissement infrastructurel, l'investissement en matériel didactique et l'investissement en capital humain, afin de déterminer leur effet sur la performance des élèves de l'école primaire. 210 élèves et 6 directeurs d'école de 6 écoles primaires publiques sélectionnées dans la municipalité de Yaoundé VI ont été impliqués dans cette enquête. En utilisant un design de recherche parallèle convergent, un questionnaire et un guide d'entretien ont été utilisés pour la collecte des données. Des statistiques descriptives et inférentielles ont été utilisées pour analyser les données à l'aide de SPSS 20.0. Les résultats ont révélé que l'investissement éducatif du gouvernement a un effet sur la performance des élèves de l'école primaire. Les hypothèses ont été retenues au niveau de signification de 0,05, ce qui implique que l'investissement infrastructurel (r = 0.225,  $P = 0.001 \le 0.05$ ), l'investissement matériel didactique (r = 0.148,  $P = 0.032 \le 0.05$ ) et l'investissement en capital humain  $(r = 0.261, P = 0.000 \le 0.05)$  affectent les performances scolaires des élèves. Le chercheur recommande donc au gouvernement d'augmenter le budget alloué à la fourniture d'infrastructures, de matériel didactique et de capital humain dans le secteur de l'enseignement primaire, de prêter attention aux politiques qui améliorent le niveau d'instruction, d'améliorer et de fournir régulièrement des incitations aux enseignants, de former et de répartir uniformément les enseignants qualifiés dans toutes les écoles primaires, ainsi que d'améliorer la formation continue des enseignants entre autres.

**Mots clés:** investissement éducatif, infrastructure, didactique, capital humain et performance académique.

## **CHAPTER ONE: INTRODUCTION**

#### **BACKGROUND OF THE STUDY**

At independence, education in Cameroon like in many other African countries was viewed as a vehicle for training high level manpower for the new nation to consolidate its autonomy and as a driving force for the nation's economic development (Comité Technique De Réflexion Pour l'Amelioration du System Nationale De L'Enseignement Supérieure, Rapport, Avril, 2004). To achieve these goals, the government of Cameroon needed to devote a large share of its budget to the expansion of education. This expansion was influenced by the conviction that it would be a benchmark for the development of manpower at lower levels of education and would be an important source of economic growth.

According to Sen (1999), schooling is desirable not only for individuals but for society as a whole. Education is the cornerstone of economic growth and social development. It creates greater social cohesion and a strengthened foundation for democracy. At the aggregate level, a better-educated workforce enhances a nation's stock of human capital, which is crucial for increased productivity and economic development (Barro, 1996; Romer, 1986; Lucas, 1988; Ravallion and Chen, 1997). From an economic standpoint, education is associated with high rates of return, both private and social. Among the different levels of education, primary education has been found to yield the highest social rates of return, especially in developing countries (Psacharopoulos and Patrinos, 2004). In recent years, there has been increased focus on achieving universal primary education in developing countries like Cameroon. A concerted effort to mobilize global efforts and resources to help developing countries was formalized through the endorsement of the Millennium Development Goals (MDGs) by 189 countries of the United Nations. The MDGs set targets to be achieved by 2015 for developing countries in eight areas, and specifically incorporates primary education in target 2A by stating the following: "Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling."

Legacy of its double English and French colonial dominion, the Cameroon educational system consist of 2 subsystems, the British and the French subsystems. The duality of the languages of education coupled with the related methods is to be added to the diversity types of education.

Education in Cameroon is provided by public and private investors, public by the government and private by lay private investors and the Catholics, Baptists, Protestants and Islamic missions. Education in Cameron is under the management of the ministries of basic education, secondary education, higher education, vocational training, youth and civic education and the ministry of sports and physical education. The state is the main institution that organizes the Cameroon education system. It particularly encourages the provision for private education and its type of education appears as a special partner. All sectors are divided into English and French sections including the teacher technical schools, apart from higher education which is common to both sub-systems. The basic sector has 2 levels; the preprimary or nursery school which takes children of 0 to 5 years and comprises of 2 to 3 years of studies but this section is not obligatory, and the primary level is made up of 6 years of study.

This research on the effect of government educational investment on the performance of primary school pupils will warrant us to first of all look at the goals, objectives and missions assigned to basic education by the laws and reforms or what the different reforms expect of basic education or its role in achieving vision 2035, but before going there, lets understand why the researcher chose to work with the primary school.

The primary school is the first level of compulsory education in Cameroon, it is that level that lays the ground work for subsequent levels. It is the foundation for future learning and future success in education as it is at this level that the brain is being built up to acquired basic reading, writing and mathematical skills. At the secondary and university levels, students only build on the skills and values that primary education instilled in them, consequently a poor quality primary education will definitely affect the other levels directly. That is why Priyanka Nagrale from India in an essay on the importance of primary education says that if we have to bring people out of poverty, then we need social mobility, and social mobility cannot be achieved unless we focus on primary education and health. The primary school is also the level that will be available to most Cameroonians as it is relatively cheap and the government has made provisions for this level to be free of charge, as article 9 of law no98/004 of 4"April 1998 makes primary education free and article 7 of the same law guarantees the right to education for every child.

Out of the family circle, the primary school is the major system of training which ensures the child's fundamental education. The state assigns it the objectives of providing a solid base for continues

training and development of the Cameroonian child. The other levels of education are built on the primary level. For these reasons, its vocation is to inculcate in the child the essential learning tools of reading, writing, oral expression, counting, problem solving and also the basic educational content of knowledge, aptitude, values and attitudes which the Cameroonian child needs to be able to solve his immediate problems of survival and of learning all through life.

The Growth and employment strategy paper (GESP) prescribed a reorganization of the education sector in order to provide quality fundamental education covering the primary cycle and the first cycle of the secondary education open to the largest number of children aged 6-15 years, and enabling the average level of the education to be on track with the vision of an emerging Cameroon by 2035. Actions undertaken as part of this strategy are underpinned by nine principles. Some of these principles include strengthening civic education, strengthening bilingualism, reduction of all sorts of disparities in education, promoting private education provision, accountability and many others. These principles served in the drafting process of the GESP (Country Report, 2010).

In order to meet up with the vision of an emerging Cameroonian economy by 2035, the government intends to lay special emphasis on the training of human capital through sustained implementation of the education sector strategy GESP P.21. Under the vocational education and training, there will be creation of human capital through (1) quality elementary education (2) Quality senior secondary education with a growing balance between grammar and technical education. (3) University education with a professional focus. (4) Expanded continuing training, supplemented with a system for evaluation through experience. (5) Effective mastery of numbers relevant to guaranteeing the quality of education.

The GESP thus seeks to develop education and vocational training through measures such as improving access to basic education, improving the quality of teachers and their working conditions, choosing appropriate syllabuses and testing and maintaining school infrastructures.

In chapter 3 GESP, on human capital under the framework of education and training point 252 on Preschool, the government plans to extend Nursery school average by developing community experiences involving of decentralized local authorities. Point 253 of the same chapter is on basic education. It stands that by 2015, the EFA plan must have been achieved including French-speaking and English-speaking programs harmonized and quality of education improved. But here we are in

2022, yes the community schools to an extent has been implemented but that is mostly in remote areas, and for what concerns the basic education, harmonization and quality education is still farfetched in the Cameron basic education.

Furthermore, the 2013-2020 education and training sector strategy paper (p.95 box 7) spells out its priorities for each level and that of the primary where we will be focusing is as follows: proceed with the achievement of universal primary education, improve the quality of learning, reduce gender/income/geographical location disparities, conduct focused policies for school enrolment of minorities (bororos, baka, refugee children and disabled children) and lastly, reduce the number of PTA teachers in schools. (MINEDUB, MINESEC, MINESUP and MINEFOP, 2013).

The above mentioned points reflect some of the missions of the basic education sector assigned to it by the laws of orientation on education, the 2006 ESSD, SWAP (sector wide approach), the GESP and the 2013-2020 education and training sector strategy paper, all in a bit to improve on the performance of the educational system so as to achieve an emerging Cameroonian economy by 2035. However, due to a number of shortcomings, the government did not wait for the meeting of the MDGs in 2015 to carry out a new exhaustive analysis of the national education system. The adoption, in 2010, of the Growth and Employment Strategy Paper7, indeed invited the education sector to update its strategic forecasts. A new RESEN (State Report on the National Education System) was carried out in 2012 and 2013. This diagnosis highlights the most salient difficulties that remain to be faced today, namely: The persistence of disparities linked to gender, region of residence, and wealth, these disparities expressing themselves more strongly as the child progresses in his or her schooling; A significant deterioration in the quality of education, as perceived through measures of learning achievements; The weakness of the regulations towards the upper part of the system; The irrelevant nature of the training offered in the terminal cycles (higher education and vocational training); And finally, weak management in the whole system leads to an inequitable distribution of inputs and a certain inefficiency in their use.

The exploitation of this diagnosis led to the drafting of a set of documents that record the state of the strategic thinking of the education and training sector as of May 2013. These documents include: An economic and financial simulation model, covering the period 2013-2021; An education and training sector plan covering the same period and indicating the political and financial means that Cameroon intends to implement; A budgeted three-year action plan (PTAB) detailing the

activities to be undertaken and their costs for the period 2014-2016.

However, the process of strategic reflection does not end with their publication. They have to be materialized through implementation, monitoring, and evaluation processes, all requiring huge government investments so as to achieve an overall improvement in the performance of primary education.

#### **Background of Educational Reforms in Cameroon**

It's equally very important we analyze the history of educational reforms in Cameroon because in order to ensure the availability of education, the government used numerous policies to improve the quality of its educational system. It started with the process of reform and decentralization of its educational system offered at the world conference on Education for All (1990) held in Jomtien. This reform undertaken under the Cameroonian decentralization policy in the context of educational reform and economic crisis was guided by both the principles articulated in Jomtien and the realities of economic crisis among others. It sets up a legal framework for the reform, aiming among others to universalize free primary education for all.

In addition, the Dakar action plan on education for all held in Dakar, Senegal in the year 2000, gave another impulse to ensure the availability of free primary education by 2015. Through this framework, states committed themselves to improving comprehensive early childhood care, eliminating gender disparities in schools and improving all aspects of the quality of education. Also the MDGs ensured education for all between 2001 and 2007 by giving the opportunity for every child to be able to complete full primary education through its minimum packages.

Informed by these commitments, and in order to ensure free and compulsory primary education, Cameroon formally adopted an EFA national plan in 2002. This plan aimed at serving both as a strategy document at the national level and as a tool to be used by development partners at the international and continental levels. This is known as the document for the Strategy against Poverty Reduction (DSPR) which comprises a decentralization methodology and an implementation strategy. The framework for its operationalization was 2003-2015, thus the coming of the SWAP in 2006.

The government charted and published the SWAP, an education sector strategy paper that spelled out the main policy options of the country by 2015 based on demographic, school and

financial projections covering the same period and building on the 2003 Poverty Reduction Strategy Paper (PRSP). The challenges faced by the Cameroon educational system was grouped under four domains and outstanding progress was made thanks to the strategies spelled out in 2006, even though it still had its own challenges. The government did not wait for 2015, the targeted year for MDGs to carry out a new comprehensive analyses of the national education. The PRSP only managed up to 2008 because it was not marked by a significant growth. It was however imperative for the Cameroon government to outline certain assumptions, ambitions and hence visions that if strictly followed can ameliorate the living conditions of its population, thus VISION 2035 which reads Cameroon, an emerging, democratic and united country despite its diversity (MINEPAT, 2010). This is a vision of the head of states to make sure that by 2035, Cameroon must have emerged as a developed country. Its main goals are; reducing poverty to a socially acceptable level, becoming a medium income county in 2035, acquiring the status of a newly industrialized country, reinforcing national unity and consolidating democratic process.

Vision 2035 cannot be discussed without making mention of the Growth and Employment Strategy Paper (GESP, 2010/2020), which is the first phase of implementing the two-decade development vision as Cameroonian authorities paid special attention to the Millennium Development Goals during the PRSP I implementation period. In order to assess the progress made in this regard, a national report written in 2008, gives an update on the trends of pursuance of each goal. In general, current trends suggested that it was unlikely that the country will achieve the goals set for 2015. This poor balance sheet with regards to progress towards achieving the MDGs was due to the difficulties encountered in implementing the strategy, and to the high cost of implementation of actions relating thereto (GESP P.36).

The GESP comes to continue or complete the works of PRSP and the 2015 MDGs by 2020 and in which these development goals have as one of its objectives to achieve universal primary education for all, giving every child the opportunity to be able to complete a full course of primary schooling. This paper focuses on accelerating growth, creating formal employment opportunities and reducing poverty. Preparing this paper needed a report from the PRSP, and it was being prepared in compliance with updates from all the sector strategies including the education sector strategy, to cover it with a holistic and coherent view in the implementation of the sector policies in close link with the goals of Vision 2035 (GESP P.36).

The education and training sector strategy paper stands as a framework of integration of actions for the development of education in coherence with national development goals. The sector wide identifies the major challenges facing education in Cameroon such as poor quality, weak governance and accountability across the system, leading to the inequitable and inefficient distribution of resources and persistent disparities related to gender, region of residence and income. In a nutshell, it is a framework of orientation of government action in the education and training sector for the next ten years. In order to tackle these challenges, the plan brings out core areas or axis like access and equity, quality and relevance, governance and management, with general and specific objectives as well as strategies of achieving the objectives being outlined for each "strategic core area".

Cameroon adopted in November 2020, the National Strategy for Development on the Horizon 2030 (SND 2020/30), of which one of the main strategic axes is the development of human capital through the implementation of sectorial strategies in the domains of education and training, health, social protection and employment.

The governmental objective assigned by this new frame of reference to the Sector of Education and Training is to "promote an educational system in which every young diploma is sociologically integrated, bilingual, and competent in a field capital for the development of the country and conscious of his role and what he has to do in order to contribute to that". This objective is defined into three specific objectives for basic education which are: To guarantee access to primary education to all children of school age; Achieve a 100% primary education completion rate; and Reduce regional disparities in terms of school infrastructure and teaching staff.

The Ministry of Basic Education has a strategic objective to ensure a quality basic education for all school-age children, uneducated young people and illiterate adults. The actions of MINEDUB are therefore enrolled in direct line with the SND30, are based on the State budget and on the support from Development Partners for their implementation (SND 2020/30).

However, it is not how many policies have been approved or how many programs have been developed, but rather, what has actually changed in practice (Fullan, 1982). Thus the implementation of the afore mentioned adopted policies will require huge government investment and expenditures, of which we shall particularly pay attention to investment in primary education so as to see what has actually changed in terms of pupil's performance.

#### CONTEXTUAL BACKGROUND

## The Right to Primary Education in Cameroon

In the Cameroonian context, primary education consists of the first six grades of compulsory schooling, normally provided from six to 12 year-olds, though with high repetition rates, students up to age 14 are often included (DSSEF 2013-2020).

In order to ensure the availability of education, the government uses numerous policies. It started the process of reform and decentralisation of its education system after the World Conference on Education for All held in Jomtien, Thailand, in 1990. This reform undertaken through the Cameroonian decentralisation policy in a context of educational reform and economic crisis was informed by both the principles articulated in Jomtien and by the realities of an economic crisis, the negative effects of which have marked all sectors of national activity, including the education sector (UNESCO, 2005).

The Cameroonian decentralisation policy in a context of educational reform and economic crisis entails, among others, the adoption of the Cameroon's Education Framework which set up the legal framework for the reform; aiming, among others, to universalise free primary education. In addition, the 2000 Dakar Framework for Action promoting education for all gave another impulse to ensure the availability of free primary education. Through this framework, states commit themselves to: expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children; eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality; and improving all aspects of the quality of education and ensuring excellence of all so that recognised and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills (Dakar Framework for Action, 2000).

Informed by these commitments, and in order to ensure free and compulsory primary education, Cameroon formally adopted an EFA National Plan in 2002. This plan aims to serve both as a strategy document at the national level and as a tool to be used by development partners at continental and international levels. It comprises a decentralisation methodology and an implementation strategy, the time frame for its operationalisation is divided into three stages: short

term from 2003 to 2005, medium term from 2006 to 2010, and long term from 2011 to 2015 (UNESCO, 2005).

Still to improve the availability of education, Cameroon uses priority six of Cameroon's Poverty Reduction Strategy Paper (PRSP) aimed at strengthening human resources and the social sector and facilitating the integration of vulnerable groups into the economy to cater for the right to education. In assessing free primary education, the General State of Education Workshop held in May 1995 in Yaoundé, Cameroon, provided a general consensus calling for free and compulsory basic education for all. As a result, the principle of free primary education was underlined by the government's order of February 1996 that organises education in the country, and was translated into the Finance Law 2000/8 of 30 June 2008. In addition, through Decree 2004/320 of 8 December 2004, to ensure the availability of education, the government created three ministries: one in charge of basic education (nursery and primary schools), the other in charge of secondary education (general and technical) and the last one in charge of higher education.

Against the background of these policies aiming to ensure education for all, Cameroon attempted to ensure the availability of primary education. In this respect, having received the HIPC (Heavily Indebted Poor Countries) funds of CFAF 16,66 million, 3,768 primary schools were built from 2001 to 2005, and 1,498 classrooms by development partners (Japan and the African Development Bank). More than a thousand teachers were recruited (IMF Country Report, July 2006). The implementation of the education sector strategy was successful through rational management of personnel, and computers were set up in various schools to enhance the quality of services provided.

Furthermore, to ensure the continuation of education in rural areas, the government adopted a circular on rationalising the management of national education staff (MINEDUC, 2003). Accordingly, teachers remain in their working posts and may be transferred only after at least three academic years in the initial school, and five years for administrative personnel, except in case of transfer to join one's family or for health reasons where the submission of proof is required. In spite of these measures, many schools still lack teachers, especially in rural areas where conditions do not attract them. In fact, most rural areas have no electricity or infrastructure and, consequently, teachers are reluctant to settle in such areas. Most of those employed there are trained teachers waiting to be on the government pay roll and are paid by the pupils' parents (Maurice, 2011).

### **Context of Deployment of Education and Training in Cameroon**

The retrospective and prospective context of the education system makes it possible to identify the threats and opportunities that can influence the performance of the system. These elements take into account demographics, macroeconomic and public finance aggregates, as well as the social, political and security environment. The implementation of the Education and Training Sector Strategy (SSEF) adopted in 2013 took place in the context of the implementation of the first phase of Vision Cameroon 2035: "Cameroon, an emerging, democratic and united in its diversity", operationalized through the Strategy Document for Growth and Employment (DSCE). This vision of long-term development of the nation expects from the education sector, the production of a considerable mass of human resources qualifies as likely to carry the ambition of emergence.

The revision of this education sector strategy takes place at the end of the ten-year period (2010-2019) and coincides with the work of drafting the National Development Strategy (2020-2030) whose recommendations and actions aim at a transformation structure and inclusive development of the nation. In this approach, the training of human resources appears as a keystone, as indicated by the SND (2020, p, 80)

The structural transformation of the national economy requires the availability of competent and competitive human capital. It represents an indispensable factor for the development of a dynamic industrial sector and is based on the existence of a large, well-trained and optimally occupied workforce.

Thus, the training and availability of human capital appears to be one of the conditions for achieving national development objectives. Because the Government intends to "promote an education system from which all young graduates are sociologically integrated, bilingual, competent in a field that is essential for the development of the country and aware of what they must do to contribute to it (SND, p. 83).

The analysis of the dialogical posture between the production sector and the education and training sector in a functional complementarity will certainly lead to epistemological orientations aimed at facilitating the formation of human capital by school and achievement of the nation's development goals, because, as Hummel (1988) pointed out, "It is through school that we can better influence the future of a society, because it is through it that we train the leaders of tomorrow. It is through the school that we change a society, it is through it that we have a hold on the future".

# > Demographic Context

Cameroon's last RGPH dates from 2005. It goes without saying that after more than ten years, the degree of confidence granted to the resulting population projections is diminishing. In addition, the unavailability of recent data taking into account the effects of population movements due to the socio-political security situation experienced by Cameroon and its neighbouring countries further contributes to reducing the level of confidence in the available data. However, given the availability of population projection data by age at the national level, it was agreed in the context of this work to use the population data from the 2005 RGPH as a basis for estimating/correcting the numbers by age and age bracket of the school-age population for the year 2019 which will serve as a reference in this study, and for 2030 used as a horizon on the basis of available national projections.

Since 1960, the year of its accession to independence, Cameroon has organized three major operations to enumerate its population, notably in 1976, 1987 and 2005. The population of Cameroon has increased from 7,663,246 to 10,493,655 from 1976 to 1987 then to 17,463,836 inhabitants in 2005; which corresponds to an average growth rate of 2.9% between 1976 and 1987 and 2.8% during the period 1987-2005. According to BUCREP data, the population of Cameroon would grow at an average annual growth rate of 2.5% over the period 2005-2020 and 2% over the period 2020-2025. This shows a rapid population growth observed over the years despite a declining average annual growth rate. The population of Cameroon is estimated at 24,348,251 inhabitants in 2019 and 30,647,180 in 2030; i.e. a projected increase of 21% in the total population between 2019 and 2030. Moreover, over the period 1976-2030, the gender structure within the population remains marked by a slight predominance of women.

**Table 1.1:** Evolution of the population of Cameroon from 1976 to 2030

Year	1976	1987	2005	2019	2025	2030
Population	7,663,246	10,493 655	17,463 8 36	24,348 251	27,538 142	30,647,180
Men	3,754,991	5,173 372	8,632 036	12,026 108	13,601 661	15,137,281
Women	3,908,255	5,320 283	8,831 800	2,322 143	13 9364 81	15 5098 99
Annual average rate of increase (%)	-	2.9	2.8	2.5	2	-
Feminine Population (%)	51.0%	50.7%	50.6%	50.6%	50.6%	50.6%

Sources: RGPH 1976, RGPH 1987, RGPH 2005 and Population projections

The age and sex structure of the population shows that the population of Cameroon is extremely young. Its age pyramid is characterized by a very broad base and a progressive and regular narrowing top as one advances in age. It bears the mark of still high fertility (estimated fertility rate of 4.71 children per woman in 2016), associated with equally high mortality (estimated infant mortality rate of 55.10‰). The graph below highlights the continued widening of the age pyramid between 2005 and 2020.

The median age of the population is around 18.7 years. Children under 15 represent 42% of the population and those under 30, 70%. The proportion of elderly people (65 and over) is not negligible. It is around 4.0%. The population of school age (4-23 years) represents 53% of the population for a total population estimated at 12.8 million inhabitants in 2019. These figures show on one hand the significant proportion of children and young people to be educated for the adult population of working age, which in fact finances it, and on the other hand, the demographic weight that this age group exerts on the education system in terms of school supply.

The demographic pressure on the education and training sector will decrease in the years to come, but the extreme youthfulness of the Cameroonian population will remain a challenge for public authorities. The total school-age population is estimated at just under 12.8 million in 2019 against 9.4 million in 2005, corresponding to an average annual growth of 2.3%. According to BUCREP projections, it will reach almost 16 million in 2030, an increase of 24% over the 2019-2030 period. By 2030, the schooling population should represent 52% of the total population against 53% in 2019. It will then grow at a rate of 2% per year like the global population.

**Table 1.2:** Evolution of the school-age population

Year	2005	2015	2019	2020	2025	2030
Total population	17,766 561	22,179 707	24,348 251	24,910 305	27,840 083	30,969 039
3-5 years old	1,637,682	2,094,826	2,236,405	2,290,054	2,438,309	2,712,351
6-11 years old	2,860,362	3,713,556	3,961,245	4,059,653	4,232,781	4,708,504
12-15 years old	1,708,700	2,120,693	2,322,712	2,369,058	2,595,616	2,887,338
16-18 years old	1,181,046	1,427,916	1,581,241	1,616,749	1,904,771	2,118,849
19-24 years old	2,036,104	2,509,939	2,774,301	2,847,188	3,209,774	3,570,521
Subtotal	9,423,894	11,866 930	12,875 904	13,182 702	14,381 251	15,997 563

Sources: BUCREP, 3rd RGPH Volume III - Volume 03 "Demographic projections of Cameroon"

The growth observed during the 2019-2030 period will also concern the different school age groups, but at different rates. Thus, over the period, it is the children of ages corresponding to the population enrolled in the first and second cycle of secondary education and higher education who will grow the fastest with annual growth rates of 2%, 2.7% and 2.3% respectively. The population enrolled in preschool and primary school will grow by 1.8% and 1.6% respectively. This will presage a certain accentuation of the pressure of the demand for education and in particular educational infrastructures, didactic materials and human capital, which will henceforth be exercised more and more in secondary and higher education. The following graph illustrates the evolution and projection of the school-age population during the period 2005-2030:

**Figure 1.1:** Share of the age population of the different sub-sectors in the school-age population from 2005 to 2030



Sources: BUCREP, 3rd RGPH Volume III

#### Social Context

According to data from the latest World Education Report of 2017, the incidence of poverty, measured by the percentage of the population living on less than 1.90 dollars in Cameroon is 24%, representing a little less than a quarter of the Cameroonian population. This level of poverty remains relatively better compared to the medians values observed in the countries of Central Africa and Sub-Saharan Africa, which are respectively around 42.2% and 41.1%.

Furthermore, between 2001 and 2014, the incidence of poverty fell slightly: from 40.2% in 2001 to 39.9% in 2007, to reach 37.5% in 2014 (INS ECAM 2, 3 and 4). This poverty rate in 2014 is still high compared to the ambitions of the DSCE, which sets it at 35.2% in 2015 and 28.7% by 2020. The number of poor people has gradually increased over this period due to particularly the strong demographic growth between these years and also weakly distributive public policies. The results of ECAM 3 and 4 reveal 6.2 million poor people in 2001; 7.1 million poor in 2007; and 8.1 million in 2014. The national poverty level averages for these years, however, hide significant disparities. The incidence of poverty in 2014 is 74.3% in the Far North region and 4.2% in Yaoundé. In rural areas, poverty affects 56.8% of households against only 8.9% in urban areas. The Eastern region, for example, experienced a decline of 20%, while poverty increased by 8.4% in the Far North. The level of family poverty is not unrelated to the children's living conditions, in particular their socio-financial vulnerability and their access to health services. Even if we note an improvement in the health and nutritional status of children in Cameroon in recent years, the fact remains that child mortality and malnutrition are major causes of non-schooling, dropping out, absenteeism and reduced attention in class (Pôle de Dakar, 2017).

Early marriages and pregnancies are among the factors that contribute more to preventing young girls from benefiting from a quality education and to widening the gaps between boys and girls. According to the results of the 2018 DHS, 24% of adolescent girls aged 15-19 in Cameroon have started their reproductive life, of which 5% are pregnant with a first child and 19% have had at least one child. It appears that the percentage of adolescent girls who have already begun their childbearing life increases rapidly with age, rising from 4% at age 15 to 23% at age 17 and then to 49% among those age 19. According to the 2017 Global Education Monitoring Report, it appears that in Cameroon, 1 in 5 girls aged 15 to 19 are already married, thus a major cause of school dropout.

A prevalence of HIV/AIDS still relatively high even if it has been in continuous decline since 2004. According to the latest results of the 2018 DHS, the prevalence of HIV among people aged 15-49 is 2.7% (3.4% in women and 1.9% in men) against an average of 2.9% observed in ECCAS countries. It varies from 2.4% in rural areas to 2.9% in urban areas. At the regional level, the southern (5.8%) and eastern (5.6%) regions overall have the highest HIV prevalence. Conversely, it is in the regions of the Far North (1.1 %), the West (1.6%) and the North (1.7%) which have the lowest prevalence. The trend of HIV/AIDS prevalence in Cameroon has been declining since 2004.

It fell from 5.4% in 2004 to 4.3% in 2011 to reach the current level. This decrease is observed in both men and women. However, it should be noted that HIV/AIDS remains a public health challenge likely to have negative effects in the Cameroonian education and training sector on both educational supply and demand. Indeed, HIV/AIDS can have a negative impact on the educational offer insofar as it can increase the rate of absenteeism among teachers as well as the death of qualified teachers (Pôle de Dakar, 2017). HIV/AIDS can also increase the absenteeism of children living with this pandemic or prevent them from going to school. The proportion of young people aged 15-19 affected by the pandemic is not negligible. It is 0.8% for girls and 0.7% for boys. This trend could continue or increase further if nothing is done to improve the level of knowledge of young people about HIV/AIDS. Indeed, in Cameroon only 36% of young women and 33% of young men aged 15-24 have complete knowledge of the means of preventing HIV3 (EDS, 2018).

There is still low levels of schooling and literacy in relation to national priorities and the achievement of SDG4-Education 2030. At the start of the SDG4-Education 2030 Agenda, the Cameroonian educational context remains characterized not only by low levels of schooling and literacy, but also by significant disparities (according to gender, social classes, vulnerable groups, etc.). A little less than 3 out of 10 children do not go to school or drop out of primary school without having finished their studies. In terms of literacy, the data available for the period 2010-2016 show that respectively, 81% and 71% of young people and adults are literate in Cameroon. Thus efforts still have to be done so as to meet the targets set at 100% for these education and literacy indicators in the DSSEF for 2020, as they have certainly not been achieved.

A social and human context measured by the Human Capital Index (HCI) and the Human Development Index (HDI) not very favourable to support the development of the education system. This unfavourable social context for the expansion and development of the Cameroonian education system weighs negatively on HCI and the HDI. Indeed, according to the World Bank, the HCI ranks Cameroon 132nd country out of 157 in 2017. Its value is then estimated at 0.39 against 0.41 in 2012. In other words, a child born today in Cameroon will be a worker of tomorrow less productive by 61% than if he had benefited from a complete education and enjoyed optimal health. The value of the index for girls is lower than that for boys (0.39 against 0.4). Moreover, the Human Development Index (HDI) of the UNDP ranks Cameroon among the middle-income countries in the world. Cameroon is ranked 150th country out of 188 with an HDI of 0.556 in 2017.

<b>Table 1.3:</b>	
Some key socio-economic indicators in Came	roon

Population	M	25.2	HDI	0.563	GDP	M \$	38502.1
Pop. growth	% p.a.	2.6	HDI rank of 189	150	Gini Index		46.6
Life expectancy	years	58.5	UN Education Index	0.564	Poverty	%	44.7
Urban population	%	56.4	Gender inequality	0.566	Aid per capita	\$	49.4
Inflation (CPI)	%	1.1	GNI (\$ per person)	1540	Unemploymen	ıt %	3.4

Sources: BTI 2020 Cameroon Country Report (WB)

#### **➤** Macroeconomic Context

Three highlights have marked the performance of the macroeconomic context in Cameroon in recent years: Irregular evolution of growth between 2001 and 2010; Acceleration of growth between 2010 and 2014; and a reversal of the trend (economic growth down) since 2015 mainly due to the drop in oil prices and the security crisis.

- Irregular economic growth between 2001 and 2010, with an average annual real GDP growth of -0.3% over the period with significant fluctuations per year: 0.4% in 2001, 6.8% in 2003, 2, 5% in 2005;
- Slightly more sustained and regular growth between 2006 and 2012: real GDP grew by an average of 3.1% per year;
- A collapse of the national economy in 2013, with a drastic fall in the real GDP growth rate which reached a value of -36.7% following the coup d'état and the political and security crisis that followed;
- A timid recovery in economic activity from 2014, which seems to be gradually consolidating given the real GDP growth rate estimated at 4.5% in 2016 against 1% in 2014, even if the country is struggling to regain its level economic output before the crisis.

The implementation of the strategy for growth and employment (DSCE) enabled Cameroon to maintain a growth rate of its GDP between 4.1 and 5.9% over the period 2011-2015. The occurrence in 2015 of the fall in the prices of the main raw materials, including oil, globally affected all the CEMAC countries. Although Cameroon has shown relative resilience, this unfavourable

international economic environment has largely contributed to the deceleration of growth. The GDP growth rate was only 3.5% in 2017 against 4.6% in 2016. The gradual decline in economic growth has resulted in balance of payment difficulties which led the government to conclude in June 2017 a three-year economic recovery program supported by an extended credit facility, to restore the country's fiscal and external sustainability. Moreover, because of the major investment projects very often financed by external loans, the increase in the debt to GDP ratio has become worrying, although Cameroon is still relatively far from the 70% threshold set by the CEMAC convergence. Indeed, since 2010, the debt ratio has gradually increased to reach a high value in 2017; from 16.3% (2010) to 31.3% (Basic education analysis report, 2012).

Despite significant improvements in poverty alleviation and human development since the 1990s, Cameroon still ranks low and the rate of improvement has stalled. Cameroon has currently only met one of the Millennium Development Goals (MDG2: net school enrolment). The current crises in the Far North and Anglophone areas have had a devastating humanitarian impact. The United Nations has reported that 1.4 million people are in need of humanitarian assistance, and that over 400,000 have been internally displaced.

With a per capita GDP of \$1,466 in 2017, Cameroon is a lower middle-income country. Cameroon's calculated HDI value of 0.556 now places it at the very low end of "medium human development" spectrum, and the country is ranked 151 out of 188 countries assessed. Life expectancy is 58 years old, 38% of the population lives on less than \$3.10 a day, and 24% of the population lives on less than \$1.90 a day. This reflects only a slight improvement from levels in 2010 and means that Cameroon still has a very high level of poverty. Likewise, there have been mixed improvements according to other indicators of development. Between 2010 and 2017, infant mortality fell from 110 per 1,000 births to 84 per 1,000 births, which is still considered high. At the same time, primary school completion rates have remained flat for many years at 70%

In addition, socioeconomic development is strongly shaped by persistent inequalities. Over 40% of the population lives in rural areas, and poverty is heavily concentrated in the rural Extreme North and East Region. For instance, in urban areas, 93% of the population uses an improved water source, while in rural areas that rate is just 54%. In addition, approximately 38% of the urban population lives in slums with poor sanitation conditions. Cameroon's HDI value falls to 0.366 when accounting for inequality. This value is below the average for sub-Saharan Africa (0.372) and far below the average for medium HDI countries (0.483). Gender inequality is also an issue,

most evident in differences in educational attainment and labour force participation. Cameroon's Gender Inequality Index is currently 0.569, which is the average for sub-Saharan Africa but above the average for medium HDI countries (0.489). Economic inequality has gotten slightly worse over the past decade.

#### **Public Finance Context**

The resources that the State is able to mobilize determine the leeway for financing education. The public resources allocated to the education sector are determined by the level of national wealth, the tax burden and the priority given to the education and training sector. Over the period 2011-2015, the tax burden varied between 16.1% and 16.5%. The unfavourable external environment, coupled with security crises in four regions (North-West, South-West, Far-North, and East) of the country resulted in a decline of 14% in 2016 and 2017. In addition, over the same period mentioned above, the share of public resources granted to the education sector has seen ups and downs, varying between 12.9% (2016) and 15.9% (2012). This statement of figures shows that the Education and Training sector is still underfunded given the various targets of 19.6% in 2015; 20.0% in 2016 and 22.0% in 2020, concerning state budgetary resources for this sector, set by the sectorial strategy for Education and Training (2013-2020).

**Table 1.4:** State revenue and education expenditure

	2010	2011	2012	2013	2014	2015	2016	2017
State revenue in billions FCFA	1869	2259.7	2400.9	2575.7	2858.5	3002.2	2784.4	2866.1
Revenue in % GDP	14.4	16.3	16.2	16.1	16.5	16.4	14.4	14.1
State executed expenditure in billion FCFA	2333.0	2454.0	2724.8	2974.5	3277.3	3819.7	4021.8	4229.4
Executed expenditure on education in billion FCFA	398.0	373.0	431.9	455.7	517.0	526.5	518.1	642.1
Priority given to education (%)	17.1	15.2	15.9	15.3	15.8	13.8	12.9	15.2

Source: MINFI data (CAA, 2017)

Cameroon, like most African countries in the sub-region, faces enormous challenges in terms of public financing of education and training. According to data from the 2019 World Education Report, expenditure on education as a percentage of total public expenditure and GDP, which stand

at 16% and 3.1% respectively, are higher than the median values of countries in the world. Central Africa estimated at 11.5% and 3% and those of sub-Saharan Africa which are around 14.1% and 4%.

#### > Political and Humanitarian Context

The Republic of Cameroon is a unitary and decentralized State, made up of 10 regions, 8 of which are French-speaking and 2 English-speaking; legacy of the colonial period. A stable country for several decades despite the great diversity of its population, Cameroon has recently been confronted with internal convulsions (socio-political and insurrectional turmoil, kidnappings with ransom demands, etc.) and the effects of ongoing crises in the surrounding countries faced with attacks by the Boko Haram group in the Far North and political instability in the Central African Republic, which reflects a rather worrying humanitarian context. The current decade is marked by the influx of Central African refugees in the East and Adamawa regions and Nigerians in the Far North region. In addition to these crises with exogenous causes, there has been the socio-political crisis that has been raging in the two English-speaking regions since 2016, resulting in migratory movements towards Nigeria and internal displacements towards the neighbouring regions of the Littoral and the West, in particular.

According to the OCHA classification, the country is affected by three crises of different magnitudes. While those of the Far North and the East are level 2, the crisis in the English speaking regions is level 3, thereby justifying the cluster that has been set up. According to figures from the United Nations Refugee Agency, the humanitarian situation in Cameroon currently concerns 1,298,694 people, including 104,724 refugees from Nigeria and 279,155 from the Central African Republic. This humanitarian situation is causing an increase in the need for water and food resources, at the same time as sanitation and hygiene problems arise. The impact of the refugee crisis has reinforced existing patterns of spatial inequality. Pressure on resources and services in already very poor and underserved areas has been increased. The populations of these areas have urgent needs, particularly those related to physical security, food security and access to basic social services, including health and education, as well as the need to register the refugees.

Added to this is violence resulting in intense emotional stress among the victims, particularly among unaccompanied or separated children who need urgent assistance and psychosocial care. A growing number of girls and boys no longer enjoy their right to education; which will have serious consequences for their development, not to mention the immediate risks of abuse, forced labour, etc.

The daily precariousness of life sets in insidiously. The lack of security and the inaccessibility of certain areas force the humanitarian community to carry out a very summary assessment of needs. Consequently, it is difficult to have complete and reliable information on the repercussions of the current situation on the educational system, although it is undeniable that these population movements have enormous consequences on the education of children and the Cameroonian educational system at large.

# **Main Orientations of the Education Policy**

The fundamental mission of the new school remains the complete training of the citizen on the individual, collective, moral, economic, intellectual, political and civic levels. Nine principles underpin the actions undertaken as part of the Development Strategy for the Education and Training Sector currently being implemented (DSSEF 2013-2020). These principles that guided its drafting and informed its implementation are: the strengthening of civic education at all levels of education and training; the strengthening of bilingualism; the orientation of the education and training system towards growth and employment; the reduction of all kinds of disparities; the promotion of private education offer; effective and well-coordinated partnership; accountability; the strengthening of decentralized/devolved management; and the promotion of national languages and cultures.

For the period 2013-2020, the strategy adopted for the education and training sector is focused on three strategic axes:

- Axis 1. Access and equity: Improve access and equity at all levels of education and training;
- Axis 2. Quality and relevance: Improve the quality of learning while adapting its content to the socio-economic environment,
- Axis 3. Governance and management: Improve governance and management of the education system.

One of the six specific objectives of this third axis is to improve transparency in the management of resources.

The priorities of the 2013-2020 sectorial policy for primary education covered by this study are: to pursue the achievement of universal primary education; to improve the quality of students' learning; to reduce gender/income and geographical disparities; to pursue targeted

policies to promote the enrolment of minorities (baka, bororos, refugee children, children with disabilities); and to reduce the stock of parents' teachers still existing in schools.

Also, targeting basic education and particularly the performance of primary school pupils will require a focus on the Education For All (EFA) action plan, which principally focuses on free primary education, availability, access and equity, quality and relevance and governance of primary education, which are investments having a direct incidence on the performance of its pupils. Per Kamga (2011), the general comment 13 of the Committee for Economic, Social and Cultural Rights (ESCR committee) calls upon state parties to ensure the availability, accessibility, acceptability and adaptability of education.

# Availability of Primary Education in Cameroon.

According to the December 1999 ESRC committee in Cameroon, the availability of primary education requires that all educational institutions and programs be made available to learners in sufficient quantity. It also entails facilities at schools such as well- equipped classrooms, libraries, sanitation facilities for both sexes, safe drinking water, trained and well paid teachers and teaching materials be made available. Surprisingly, in a main town like Yaoundé we still find schools with inadequate infrastructures, lacking most of the basic necessary facilities. The question we turn to ask is, if schools in urban areas can be this way, what more of those in rural areas? For instance, the teacher-pupil ratio still remains a problem in most of our primary schools today as we can still find ratios of 1 teacher to 100+ pupils against the norm of 1 is to 45. This certainly will have an impact on the academic performance of this pupils.

# Access to Primary Education in Cameroon.

Following the December 1999 ESRC committee in Cameroon, accessibility of education requires three features; nondiscriminatory education, physical accessibility and economic accessibility.

Non - Discriminatory education refers that system of school which guarantees equal access to all children of school going age. The Cameroonian constitution guarantees the right to equality and the right to not be discriminated against in these terms. It prohibits discrimination in all sectors with the education sector not being an exception, meaning boys and girls should have free and universal access to school. This was one of the main objectives of the decentralization policy of 1998, and its main aim was to facilitate access to school for all children, specifically in most

disadvantaged areas (Kamga, 2011). It should also be noted that the Cameroon government had committed itself to eliminate gender disparities in primary and secondary schools by 2005 and achieving gender equality by 2015 as stated by the 2000 Dakar framework on education for all which has been extended into one of the goals of the GESP, and which has to be achieved by 2020. This to some extent has been achieved, but for the northern regions who are still suffering from this discrimination as only 77 percent of girls eligible to attend primary school are in fact enrolled, whereas 88 per cent of eligible boys are enrolled in primary schools (Cameroon's third report, 2010). However nondiscriminatory education does not end with the girl child but extends to children with disabilities and this is the part less moved by most of our schools, due to inadequate and insufficient facilities.

Physical accessibility of schools refers to the location of schools not far from the homes of learners, or the use of new technologies for distance learning. Achieving this objective is far fetched in Cameroon as in most areas, pupils still have to work for kilometers to attain classes and as earlier mentioned, there is no provision to accommodate physically impaired learners in schools. The government thus has to make sure that schools especially in rural or disadvantaged areas be brought closer to pupil's homes, make provisions for accommodating the disabled in schools and to use diverse technological methods for those who cannot make it to school (ESCR Committee General Comment 13). Another factor keeping pupils away from school is the ongoing crises in the two Anglophone regions of North West and Southwest. Three years of violence and instability in these regions has left more than 85000 children out of school (report from the UN Children's Fund 5th Nov 2019), "thousands of children are living in fear, they need peace so that they can resume their education and reclaim their future" said UNICEF Executive Director Henrietta Fore. This can be done by putting emphases on distance learning which is yet to be a reality in Cameroon.

Economic accessibility means making primary education less costly for every parent so as to encourage the sending of children, especially the girl child to school. This leads us to pose three questions; Is there a special funding system to ensure access to education for students from marginalized groups? Is there a special funding system to ensure access to education for children with disabilities? What is the percentage of household expenditure on education? (Tomasevski, 2006). Providing answers to these questions will enable the government know how economically

accessible or not its education sector is, and what measures to put in place in case of economic inaccessibility.

# **Education Sector Policy and Reform**

## > National Development Plan

In the Poverty Reduction Strategy Paper (PRSP) formulated in 2003, the development framework for the 2015 target was indicated and the priority objectives were defined: a visible, continuous and sustainable improvement in the standard of living which translates into a reduction in the poverty line from 40.2% in 2001 to a level below 25.2% in 2015, GDP growth in the short term of 5% and in the medium term of 6-7% and maintaining the inflation rate at around 2%. The education sector is included in one of the 7 priority sectors for poverty reduction which is "human resource development, social sector strengthening and economic participation of the disadvantaged" (JICA, 2009).

- Correcting gender disparities and expanding access to education: 100% enrolment (2008) and completion rate in primary education (2015)
- Improving the quality of education
- Development of vocational and technical training
- Improving the governance and management skills of the overall education system

In 2009, the Education and Growth Strategy Paper (EGSP 2010-2020) was chosen as the successor to the PRSP in the national development plan. With poverty reduction and the Millennium Development Goals as its pillars, the aim is to boost recruitment, increase investment in industry and information technology, develop agriculture and prepare infrastructure. At the same time, measures for the decentralization of power, the improvement of governance and against corruption have also been taken into consideration. As part of the education sector's priorities, universal primary education has been integrated into the DSCE strategy. The original target year was 2015, but this was changed to 2020 (JICA, 2009; DSCE, 2009).

#### Law On Education

In April 1998, the Education Orientation Law (Law N. 98/004) was enacted and it states that education is the priority of the nation, provided by the government and supported by private partners. The age of compulsory education is not stipulated. The revision of the 1996 constitution (Law N.

96/06) stipulates the right to education for children and the obligation to primary education (UNESCO, 2010). In parallel with the constitutional reform, the Education Act states that primary education is compulsory. In addition, the state guarantees the opportunity for education regardless of place of birth, language, religion, political status or gender.

The same law guarantees dual culture by setting up two "sub-systems" of education in French and English and emphasizes bilingualism. The same law defines the framework for pre-school, primary, secondary, technical and teacher training, the age limit at each level, the system of diplomas, the conditions for the choice of the head teacher and their regulations. The articles that make this law special are freedom of expression, beliefs and information, school counselling at all levels, prohibition of violence, corporal punishment, discrimination and narcotics (Republic of Cameroon, 1998, JICA, 2004).

In the area of basic education in Cameroon, with compulsory primary education following the reform of the constitution in 1996 by the government and the application of the policy of disseminating primary education through free education from the year 2000, it is basic education that has been at the centre until now. Moreover, with the formulation of the new education sector strategy underway as a starting point, the expansion of compulsory education from pre-school, primary to lower secondary education is planned.

## Sector Policy Education

As mentioned above, the Education Act stipulated in 1998 is the basis for education policy. In 2001, the education sector strategy (2001 - 2011) which is a ten-year plan for the development of education was formulated. As Cameroon was designated as a Heavily Indebted Poor Country (HIPC), the education sector strategy took into consideration the fact that the country was going to be a recipient of HIPC aid funds. In 2000, primary school fees were eliminated and, as a result, enrolment increased rapidly and the gross enrolment rate exceeded 100%, but the environment, such as the deployment of teachers and the maintenance of classrooms, was not prepared. At the mid-point of the education sector strategy, the project's budgetary and state funding gap, the imbalance between supply and demand of public education services and the stagnation of activities deepened. The Ministry of Education during this period had to revise its education sector strategy and in 2005, the Ministry of Education carried out a major structural reform, notably by dividing the Ministry into two: The Ministry of Basic Education (hereafter referred to as MINEDUB) and the Ministry of Secondary

Education (hereafter referred to as MINESEC). The strategic sector has since shown more commitment to a strategy that clearly defines the MDGs and its achievement. The 4 Ministries in charge of education (Ministry of Basic Education, Ministry of Secondary Education, Ministry of Higher Education and Ministry of Employment and Vocational Training) as well as the Ministry of Finance carried out a cross-cooperation and formulated the "Education Sector Strategy Paper (ESSP)" (JICA, 2009, 211). In this DSSE 2006 sector strategy document, the objectives in the field of primary education were defined for 2015 as follows 1) correcting the disparity and achieving 100% schooling and completion rates; 2) improving the quality and efficiency of education services; 3) establishing an effective partnership with education stakeholders; 4) improving education administration and governance (JICA, 2009, 2011).

## > System

In Cameroon, it is stipulated in the Fundamental Law on Education (Republic of Cameroon, 1998) that Francophone and Anglophone education shall be guaranteed and that institutions shall exist at all levels of education in French and English in both sub-systems. As shown in Table 6 below, the education system in the French-speaking sub-system currently consists of 6 years of primary education (SIL - CM2), and the names of the school years are: SIL, CP, CE1, CE2, CM1, CM2. As in the Francophone sub-system, the number of years in primary education are the same. The names of the school years are: Class (CL) 1 - CL6. (JICA, 2011; UNESCO, 2010). Nursery education for 4-5 year olds is also composed of the two sub-systems.

**Table 1.5:** School years of primary education in the Francophone and Anglophone subsystems

Primary Education			
Year	Anglophone subsystem	Francophone subsystem	
1	CL-1	SIL	
2	CL-2	CP	
3	CL-3	CE1	
4	CL-4	CE2	
5	CL-5	CM1	
6	CL-6	CM2	

(Source: JICA, added by the author in 2011)

In the French-speaking sub-system, the end of primary education is sanctioned by the CEP, while in the English-speaking sub-system it is sanctioned by the FSLC. In addition, an entrance examination (Common Entrance) is required for pupils wishing to transfer from primary to lower secondary education in both subsystems. In case of failure of the CEP, the system allows the pupil to move to lower secondary education if he or she passes the entrance exam. In the Francophone zone, schools in the Anglophone subsystem are called bilingual schools, but this does not mean that bilingual education in French and English is provided.

In the new sector strategy, an 8-year compulsory education, consisting of 6 years of primary education and 2 years of secondary education, is being studied and formulated. The plan is to adjust the French-speaking system to the English-speaking system: 5 years for lower secondary education, 2 years for upper secondary education and to split the 5 years of lower secondary education into 2 years and 3 years. In this context, the elimination of the common entrance examination for lower secondary education and the disappearance of the technical high school (lower secondary school) in the future to leave only upper secondary schools are issues that are currently being discussed within the Ministry of Basic and Secondary Education (hearing at the Ministry of Basic Education).

# > Program of The Education Sector

Following the "Education Sector Strategy Action Plan 2007 - 2009" detailing the DSSE - 2006 indicated in 3-3, the 2009 - 2013 medium-term expenditure planning has been formulated in parallel to the new 2009 - 2013 strategy document (program of activities). Although the MDGs are at the heart of the education sector, concrete activities are expected to address disparities and improve access, increase the quality and efficiency of education services and improve the management of the education system and governance. In concrete terms, this translates into a comprehensive plan aimed at strengthening school infrastructure and hygiene, recruiting teachers, implementing a program for school headmasters, and reforming and disseminating instruction manuals and teaching materials (JICA, 2011).

**Table 1.6:** Education Sector Strategy Paper (2009 - 2013)

Main objectives	Secondary objectives	Main activities in the field of primary education
1. Correction	Universal enrolment and	- Construction in three years of 13,582 classrooms,
of disparities	completion of primary education	
and		- 172,000 tables and chairs built in three years
improving		- Repair of 1,300 classrooms per year
access		
2. Increase in	Significant reduction in	- Revision of the school method (programs for
quality and	exclusion and repetition in	30,000 teachers)
performance of	primary and	- Activities with 9000 schools for improving the
educational services	reorganization of education	number of repeaters
	Revision of instruction manuals	- Revision of the educational program concerning
	and teaching materials,	the life skills approach
	curriculum and textbooks	- New curriculum and preparation of instruction
	instructions for teachers	manuals and teaching materials for students and teachers
	Improvement of the	- Construction of classrooms and implementation
	working environment	of classes with 40 students per teacher
	of students	- 1 to 1.2 teachers per class by eliminating the
		double flow system
	Improving the quality	- Conduct another training program for 30,000
	of teachers	head teachers and teachers
		- Reorganization of the regional program
		training courses for teachers of training schools in
		the departments and the capital
	Improvement of the social	- Contract (as a civil servant) with 18,025 teachers
	situation the teaching staff	and employ 8,000 contractual teachers
	Dissemination and distribution of quality instruction manuals	- Reconstruction of the national commission to study
	and teaching materials to	the issue of instruction manuals and teaching
	students and teachers	materials
	students and teachers	- Distribution of textbooks to school's instructions and teaching materials
	Rehabilitation of school	- Reform of the hygiene system in primary
	hygiene to enable improved	schools
	adaptability in society and	- Distribute hygiene kits to 10,000 primary
2 I 1	school-based learning	schools
3. Improving the	Accelerate adequate	- Strengthening education sector planning
management of the	governance of the education	capacity and improving the information system
education system	system	- Participatory school management program and
and governance		instruction for recruitment community of teachers

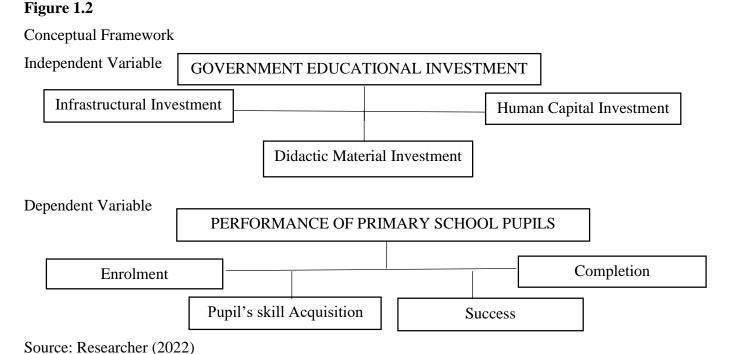
(Source: JICA, 2011)

## > Authority and Control

Currently, primary and pre-school education are under the jurisdiction of the Ministry of Basic Education (MINEDUB) and the teacher training institution for primary, secondary and technical education are under the jurisdiction of the Ministry of Secondary Education (MINESEC). These two ministries are the result of the division of the Ministry of National Education in 2005. In 2005, the literacy activity was under the jurisdiction of the Ministry of Social Affairs, but since December 2011 it has been under the coordination of both ministries with MINEDUB. Under the Minister and the Minister's Secretariat, MINEDUB is composed of 5 institutions: The Directorate of Nursery and Primary Education, the Directorate of Planning and Cooperation, the Directorate of Human Resources, the Directorate of Financial and Material Resources and the Directorate of Private Education (JICA, 2011). MINEDUB has jurisdiction over pre-school and primary education, and has under its jurisdiction the formulation of measures and policies concerning education at the national level, the implementation and planning of educational development projects, the formulation of a national education program such as the curriculum, analysis of studies and organization of information concerning education etc. The Ministry of Sports and Physical Education (MINSEP) is responsible for improving and advancing the sports program in school education. (JICA, 2011).

#### CONCEPTUAL BACKGROUND

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Government investment is synonymous to public investment, or expenditure, and has arisen historically from the need to provide certain goods, infrastructure or services that are deemed to be of vital national interest. It tends to be measured quantitatively, on an annual basis, as a percentage of total national income (Robert G., 2020). In the domain of education, public investment is financed with the allocation of funds for the running of public educational institutions and the payment of teacher's salaries. It is infrastructural with the construction of schools, it is material with the provision of didactic materials to schools, teachers as well as to the learners, and it also is in the form of investment through the training of teachers and school support staff. These various investments are all in a bid to ameliorate the teaching-learning process so as

Public investment generally constitutes a relatively small percentage of overall public spending but is frequently a major component of total national capital investment. Musgrave and Musgrave, (1989) argued that public spending on education is to be based on the classical literature on public goods, where it is argued that social goods provide a rationale for the allocative function of budget policy. It is argued that the public sector performs certain functions because some goods

to improve the performance of the educational system and in return achieve economic growth.

cannot be provided efficiently through the market system owing to apparent market failures or associated inefficiencies. Market failure occurs because the benefits created by social goods are not limited to one particular consumer who purchases the goods, as is the case with private goods. The non-rival or non-excludability nature of public goods has important implication for consumer behavior and on the provision of both private and social goods.

Primary education or elementary education is typically the first stage of formal education, coming after nursery school and before secondary school. Primary education takes place in primary schools, elementary schools, or first schools and middle schools, depending on the location or country, and it is for children who are five to twelve years of age (ISCED, 2011). Primary school is the preferred term in the United Kingdom, Ireland and many Commonwealth nations like Cameroon, and in most publications of the United Nations Educational, Scientific, and Cultural Organization (UNESCO). However, elementary school is still preferred in some countries, especially in the United States and Canada.

In most parts of the world including Cameroon, primary education is compulsory, and is normally available without charge, but may also be offered by fee-paying independent schools. The United Nations Children's Fund (UNICEF), believes that providing children with primary education has many positive effects. It decreases poverty, decreases child mortality rates, encourages gender equality and increases environmental understanding.

Evidence from PISA shows the level of education spending can have an impact on a nation's educational performance, however higher spending does not guarantee higher performance (OECD (2012).

Formal education is evaluated using academic performance and it is based on this that a learner is promoted to a higher class on the academic ladder. The complexity of the academic performance starts from its conceptualization. Sometimes it is known as school readiness, academic achievement and school performance, but generally the difference in concepts are only explained by semantics as they are used as synonyms. Conventionally, it has been agreed that academic performance should be used in university populations and school performance in regular and alternative basic education populations (Moloko, 2014).

Low academic performance is therefore a great concern for learners, teachers, parents and other stakeholders in the educational system. An education system or school system or

teaching system is an organized and coherent structure that society gives itself in order to fulfil a certain number of functions, in particular that of ensuring its reproduction. Any education system defines a set of values with a view to an educational project which is generally to decide the type of man it wants to train. An education system is thus said to be performant when it is effective, efficient, when there is equity, commitment and equilibrium.

**Effectiveness** is generally defined as the measurement of the achievement of objectives. It is reflected in the relationship between the results obtained on the objectives targeted. Depending on the nature of the latter, two types of effectiveness can be distinguished: internal and external (Sall & De Ketele, 1997).

- Internal effectiveness measures internal objectives. It is interested in the relationship between educational inputs and school results and is generally measured by success rates, repetition, dropout, etc. It is quantitative in nature if the outputs and inputs are quantifiable, for example the ratio between the number of graduates and the number of enrolments; or the relationship between the number of repetitions and the size of a cohort. Meanwhile it is of a qualitative nature if the outputs are expressed according to mastered educational objectives and the inputs are defined by the initial achievements, for example comparing the skills profiles at the output with respect to the input (Sall & De Ketele, 1997).
- External effectiveness responds to the objectives of society since it measures the ability of the education system, as a whole or within a specific educational institution, to prepare pupils and students for their future role in society. It is assessed, for example, through the prospects of employment and remuneration of students. It is quantitative in nature if we take into account the relationship between the number of effective jobs and the number of graduates, and it is of a qualitative nature if we take into account the relationship between the skills implemented in professional life and the skills developed in the system or the relationship between the skills newly acquired or targeted by the education system and the skills developed by the system (Sall & De Ketele, 1997).

**Efficiency** is defined as the relationship between the means implemented and the results obtained (costs vs. effectiveness). Like effectiveness, it can be internal or external and have quantitative and qualitative facets (Sall & De Ketele, 1997).

- **Internal efficiency** is quantitative when it compares outputs to inputs within the training system, highlighting quantitative data such as the relationship between the number of graduates and personnel expenditure, or the relationship between number of registered students and educational support expenses. It is qualitative when it favors the qualitative aspect of the studies such as the assessment of the quality of the studies (or the educational added value) according to the costs, or the assessment of the knowledge and skills acquired by trained them according to the skill level of the teachers (Sall & De Ketele, 1997).
- External efficiency assesses the external effects to the training system. It is quantitative in nature when it expresses the relationship between the number of people leaving a training system holding a job and the total investment that was necessary for their training. It is of a qualitative nature when it considers the relationship between the skills implemented in professional or social life and the costs of training workshops intended for the installation of know-how. It can also measure in the current context, the relationship between the skills acquired in class (Sall & De Ketele, 1997).

**Equity** means everyone is provided with what they need to succeed. An educational system is said to be equitable when all students have the same opportunities or chances to navigate through the educational system and succeed. Per Sall (1997), Four types of equity can be distinguished in an educational system;

- Access equity: reducing the barriers inhibiting individuals get access to education.
- Pedagogic equity: the state must try to guarantee the same pedagogic conditions in all his schools.
- Success equity: children getting the same training or in the same class and conditions should be able to obtain similar results and skills acquired.
- Social equity: pedagogy should be differentiated to meet the needs of the different profiles of learners in the educational system.

**Equilibrium** is defined as a state in which demand equals market supply. An educational system is said to be equilibrium when the total demand for education and training equals the total supply of education (Sall & De Ketele, 1997).

**Commitment** is the state or quality of being dedicated to a cause or activity. In this context, commitment is the link between equity and equilibrium. To guarantee equity and equilibrium in

an educational system, all the actors involved in providing the education service should be committed in executing their duties and given optimum conditions. When there is equity and equilibrium in an educational system through commitment, it will lead to effectiveness and efficiency thus guaranteeing the performance of the educational system (Sall & De Ketele, 1997).

The performance of primary school pupils is thus strongly linked to the performance of the education or school system as schools cannot be said to be performant if their pupils perform poorly, and are often blamed for pupil's poor academic performance despite the fact that teachers and head teachers work hard to provide strong curricula, high expectations and safe or good learning environments. Academic performance involves factors such as the intellectual level, personality, motivation, skills, interests, study habits, self-esteem or the teacher-student relationship (Berliner, 2009). When a gap between the academic performance and the student's expected performance occurs, it refers to a diverging performance. An unsatisfactory academic performance is the one that is below the expected performance. Sometimes it can be related to teaching methods. (Marti, 2003, p. 376).

## THEORITICAL BACKGROUND

# The Human Capital Theory (HCT) by Gary Becker and Theodore Schultz, 1960

One theory that has influenced educational policies both in developed and in developing countries like Cameroon since the early 1960s is the Human Capital Theory of Gary Becker and Theodore Schultz, as they pointed out that education and training were investments that could add to productivity. The theory states that education increases people's general mental capabilities and technical skills, thereby increasing their productive potential in the labor force. Fagerlind and Saha (1997) poses that Human Capital Theory provides a basic justification for large public expenditure on education both in developing and developed nations. This is because of the expected returns or benefits. Benefits to the individual or "private rate of return" are his or her total earned income due to schooling minus private costs of attending school. The private costs include what the person would have earned had he or she been in the labor force during the years of schooling ("income foregone"), plus actual expenses for fees, supplies etc. Individuals are said to calculate the likely return or benefits in deciding whether it "pays" to go to school or continue for additional years if they are already in school.

The theory is consistent with the ideologies of democracy and liberal progression found in most western societies. Its appeal was based upon the presumed economic return of investment in education at both the macro and micro levels. Efforts to promote investment in human capital were seen to result in rapid economic growth for the society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement. Most economists agree that it is the human resources of a nation, not its capital nor material resources, which ultimately determines the character and pace of its economic and social development. Human resources constitute the ultimate basis of the wealth of nations (Fagerlind and Saha, 1997). The Human capital theory indicates that education increases people's general mental capabilities and technical skills, increasing their productive potential in the labor force. High-quality education is required to make a significant contribution to economic growth and development (Almendarez, 2011). It follows that school is an investment and that people are an essential reservoir of capital and not merely a source of raw labor. Education contributes a tremendous and substantial role in the economic development of a nation. Thus educational expenditures constitute a form of investment. This augments an individual's human capital, leads to a greater output for society, and enhances earnings for the individual worker. It increases their employment opportunities in the labor market, allows them to reap pecuniary and non-pecuniary returns, and gives them a chance for job mobility (Almendarez, 2011). The theory is partly responsible for the large share of the budgets of developing nations given to education, as is the case in Cameroon.

## The Theory of Academic Performance (ToP) by Don Elger, 2007

The theory of academic performance (ToP) was developed by Don Elger (2007). The theory emphasizes six foundational concepts to form a framework that can be used to explain performance as well as performance improvements. To perform is to produce valued results. A performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey, and level of performance describes location in the journey. Current level of performance depends holistically on six components: context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. Three axioms are proposed for effective performance improvements. These involve a performer's mindset, immersion in an enriching environment, and engagement in reflective practice.

#### JUSTIFICATION OF THE STUDY

According to UNICEF, (2021), more children in the West and Central African Region (WCAR) are not attending school than was the case 10 years ago, representing one out of every five out-of-school children worldwide. Although the number of out-of-school primary and lower secondary school-age children in WCAR has declined over the past decade, today 38.8 million children are not in school compared to 31.6 million 10 years ago.

A significant disparity between regions in primary education is noted through the gross enrolment, completion and net enrolment rates and the number of pupils per class. Completion rates are high in the West and North-West regions, while the low level of completion rates is noted in the East, North, Far North and Adamaoua regions (MINEDUB, 2012). As for the number of pupils per classroom, the number is high in the Adamaoua, North and Far North regions. The national average of the gender disparity index is 0.89 (2010) and by region, it is the North, Far North and Adamaoua regions that have a high disparity with figures around 0.7 (2010). The government has designated the East, North, Far North and Adamaoua regions, which are lagging behind in the development of education, as Priority Education Zones (ZEP) where intensive support is being developed (MINEDUB, 2012).

Although there is notable increase in government spending on education, Cameroon falls short of meeting the regional target of allocating 20 percent of government resources to education as agreed upon at the African Union's Dakar Commitment on Education for All. Cameroon only allocates about 17% of government's resources to education. This weakness in the public financing of education is perceptible in the share of GDP allocated to the sector, which is around 3%, while the average for countries in sub-Saharan Africa and emerging countries outside Africa is around 4.4%, a higher effort of more than a third (RESEN Cameroon 2013).

The inadequacy between education financing and education performance raises serious concerns about value-for-money in education spending. Poor education performance is as much related to insufficient investment in the sector as to the inefficient use of existing resources. Salaries consume the vast majority of education budgets, leaving scarce resources for teaching material and capital expenditures needed to improve performance outcomes (UNICEF, 2021). Research and learning assessments have demonstrated a positive correlation between the availability of books and learning achievement. Inequality in the allocation of education budgets. A child from the wealthiest households can benefit as much as 12 times more government resources than a child

from the poorest households, and the former is most likely to complete higher levels of education where unit costs are greater. Also, consumption of public resources is unfairly made in that it systematically benefits certain pupils whose characteristics are: male, urban, outside northern regions and whose parents belong to the highest wealth quintile. Parental funding for education is high and compensates for the relative decline in the State budget, particularly for the management of PTA teachers (UNICEF, 2021).

The inefficient use of education resources drives poor education performance. According to UNICEF 2021, Africa remains the world's least efficient region in the use of education funding. African countries and Cameroon in particular could improve their primary education completion rate by 42 percent and secondary education completion rate by 41 percent with their current levels of spending, just by improving the efficiency of education financing. The causes of this lack of efficiency are mainly high repetition rates (10 percent in primary and 13 percent in lower secondary, compared to 2 and 3 percent, respectively, for the rest of the world) and high dropout rates. If efficiency levels in Africa met those in Asia or Latin America, the completion rate for primary education could rise to 98 percent, suggesting that many African countries could achieve universal primary enrolment by improving the efficiency of their education spending.

Unfortunately, the limited resources available are not being spent in the most effective way possible due to high repetition and drop-out rates as well as poor management. There is lack of transparency in the management of the education system in terms of the participation of communities and civil society organizations on the one hand, and the management of human and financial resources on the other.

The COVID-19 pandemic has further undermined children's learning outcomes across the region, in part due to the economic contraction, which is projected to have led to a decline in total education spending during 2020. It is estimated that domestic government expenditure on education in Cameroon shrank by about 2 percent in 2020 compared to 2019 (UNICEF 2021). Education spending is projected to rebound to pre-pandemic level as from 2021 but remains grossly insufficient to reach the performance targets required to achieve Sustainable Development Goal 4 (SDG4, 2015-2030), which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."

Education is free (no fees) at the primary level. Despite this, the illiteracy level is still high in regions of the country. The United Nations Educational, Scientific and Cultural Organization (UNESCO) estimate was at 45% in 1990; this rate is below the national average. In 1990, two thirds of the male population aged 15 and more had some knowledge of reading and writing, while this figure was only two-fifths for the female population.

The primary completion rate is stagnant at a low level of 78.8% (2010) compared to the high levels of gross intake and gross enrolment rates. The gender difference in completion rate is 12.5% (2010) and there has been no significant improvement since 2003. The lower secondary completion rate is very low at 26.8% (2009) but the gender difference is very small and is only 2 points. The pass rates for the primary and lower secondary school leaving examinations are about 56% (2010) and 47% (2010) respectively. The success rate is higher in the Anglophone sub-system in lower secondary education with 58% in the GCE-O compared to 36% in the BEPC (MINEDUB, 2012). In addition, in PASEC 2005, Cameroon ranked first among the 13 participating countries. Furthermore, in comparison with the 1996 results, a stagnation in knowledge acquisition was noted.

The number of students per classroom is 57 (2010) with a wide disparity between regions of up to 80 students. Although the objective of eliminating the double flow system is included in the DSSE 2006, the lack of classrooms and teachers forces it to be maintained. In the case of the double flow system, there is a shortfall of about three and a half hours of classes per week, despite the fact that Saturday classes are organized to try to remedy this. In addition, the number of teaching hours is 1000 hours but it was reported that the absence of teachers and the organization of various events mean that a quarter of the teaching hours are not completed.

With 10% of books needed in arithmetic and 9% in English and French, the government's distribution of primary school books falls far short of the one book per student target. Currently, books are purchased by households. Although distribution is supported by UNICEF programs and HIPC funds. This research is thus a response to these concerns so as to find out the effect of government educational investment in terms of infrastructure, didactic materials and human capital on the performance of primary school pupils with respect to their enrollment, skills acquired, success and their level of completion of primary education.

#### PROBLEM STATEMENT

The problem of poor performance or poor academic achievement is an issue of great concern in the Cameroonian educational system and in the primary school education in particular being our main area of interest as with regards to the underperformance of its pupils. Educational quality is measured by academic results, learning conditions and also the student-teacher ratio.

Despite various means and policies put in place by the government in the last decade to remedy and improve the situation changes have been quite slow. Basic education statistical reports show increase in enrolment rates but not in all regions of the country. Disparity between regions still exists as the enrolment of pupils in the North West and South regions are particularly low representing 3.8% and 4.1% respectively, and the Far North and Center regions having the highest enrolments (21.2% and 16.5% respectively) of the total pupil enrollment in the country of 4,191,992 (MINEDUB, 2017/2018). This implies a significant portion of children in regions with low enrolments are not learning the basics in reading, writing and mathematics.

There's limited improvement in internal performance as with regards to the pass, repeat, drop-out and survival rates. The number of pupils who cannot pass from class 1 to class 5 in primary education is 10-15% and about 15% repeat class 6. The average dropout rate is 8.4% and the highest rate of 10% is in class 1 (WDI and GDF, 2012). In 2010, the average repetition rate in classes 1-6 of primary education was 11%. Apart from the third year which is relatively low (9%), the other years vary between 10 and 12% and do not show any significant difference.

There is a common thread between the repetition rate and the high drop-out rate in first year. Pupils especially in rural areas are unable to follow courses in English and French, which are not the languages used in the family home, pupils do not pass the entrance exam and are forced to repeat the year. Repeated repetition leads to a decrease in motivation to learn and consequently to drop-out (WDI and GDF, 2012). According to Fonkeng (2021), repeating a class increases private and public costs of education shouldered by individual parents and the state. It also leads to large classes with attendant problems of assessment and supervision of students; more facilities are needed to be constructed and equipped, the training and recruitment of more teachers as well as providing additional didactic materials. Repeating a class also delays the socio-economic integration of youths in the productive system of a nation and consequently, slows down economic and social development.

There is also a general lack of morale among the teachers owing to discrepancies in their status since some are civil servants and are paid more, while others are on contract and are paid much less and poor working conditions (PRSP, 2006). This generally results to teacher absenteeism due to poor working conditions. In addition, teachers and students alike suffer from a shortage of recommended textbooks. According to the MINEDUB (2010) data, the rate of possession is about 8.5% in relation to the number of school books needed. The distribution rate is quite low, except for language books with English and French books at 9%, 11% for mathematics and only 4% for science books. This turns to have a direct repercussion on the academic performance of pupils.

Also, the economic situation since the achievement of the completion point of Heavily Indebted Poor Country status has been characterized by increasing unemployment. This has led to the increase of general poverty among the majority of the population accompanied by increasing inability for them to avail themselves and their families with the basic necessities of life among which features very strongly, the education and training of their forebears. Given this prevailing situation of shortage of financial resources for both parents and the state and the need to meet the requirements for universal quality primary education it was thus necessary to carry out this study to determine how the available government educational investments in terms of infrastructure, didactic materials and human capital are affecting primary school pupil's performance.

#### RESEARCH OBJECTIVES

# **General Research Objective**

This research has as objective to assess the effect of Cameroon's government educational investment on the performance of primary school pupils.

## **Specific Research Objectives**

- > To examine how government's infrastructural investment influences the performance of primary school pupils.
- ➤ To examine how government's investment in didactic materials influences the performance of primary school pupils.
- ➤ To assess how government's human capital investment influences the performance of primary school pupils.

# **RESEARCH QUESTIONS**

# **General Research Question**

How does government educational investment influence the performance of primary school pupils?

## **Specific Research Questions**

- ➤ How does government's infrastructural investment influence the performance of primary school pupils?
- ➤ In what way does government's investment in didactic material influences the performance of primary school pupils?
- ➤ How does government's human capital investment influence the performance of primary school pupils?

#### RESEARCH HYPOTHESIS

# **General Research Hypothesis**

**Ha:** Government educational investment influences the performance of primary school pupils.

**Ho:** Government education investment does not influence the performance of primary school pupils.

## **Specific Research Hypothesis**

Hal: Government's infrastructural investment influences the performance primary school pupils.

Ha2: Government's investment in didactic material influences the performance of primary school pupils.

Ha3: Government's human capital investment influences the performance of primary school pupils.

#### SCOPE OF THE STUDY

## Thematic Scope

The research study entitled "The Effect of Government Educational Investment on the Performance of Primary School Pupils" delimits itself to government's educational expenditure on primary schools, seeking to analyze the effects of infrastructural, didactic material and human

capital investment on the performance of this schools and their pupils. Thus, performance indicators include enrollment, skills acquired, success and completion.

# **Theoretical Scope**

For the purpose of this research work, three theories will be used: The Human Capital Theory by Gary Becker and Theodore Schultz (1960), The Theory of Academic Performance by Don Elger (2007) and The Education Production Function by James S. Coleman (1966).

# **Demographic Scope**

This research is limited to public primary schools in the center region of Cameroon, specifically in the Mfoundi division and the Yaoundé IV subdivision to be more precise.

## SIGNIFICANCE OF THE STUDY

- This study would help the government assess the effect of its investment in the primary education system on the performance of its pupils.
- ➤ It would help the government evaluate the performance of the primary education system with respect to its education policies and orientations such as the Strategy Document for Education and Training Sector (2013-2020).
- ➤ It would help the government assess the deployment and utilization of teaching staff, infrastructures and didactic materials in primary schools, and the effect these allocations have on the performance of primary school pupils, as well as reflect and make evaluation on the requirements of other instructional materials apart from those already being put in place.
- ➤ It would help identify dysfunctions in the management and utilization of funds and resources allocated for primary schools.
- ➤ It would help identify ongoing challenges faced by primary schools and pupils as well as their causes so as to be able to come up with adequate solutions to those challenges.
- ➤ It would help the government see some of the needs of primary school, thus fostering continuous and even higher investments as well as proper management, so as to foster the fight against illiteracy and poverty, achieve economic growth and be an emerging, democratic and united country in diversity by Cameroon Vision 2035.

- The study would also influence education planners to consider appearances of physical structures such as classrooms and availability of other teaching and learning materials as some of the important factors that can influence parents to send their children to particular schools, which have attractive physical appearance and variety of other facilities. Attractive environment and the availability of other learning resources can influence students to stay in schools and stimulate learning.
- This study would be helpful for fulfilments of the requirement for Masters in Educational Management, with specialty Administration and Inspection of Education.
- Also the knowledge acquired from this study would be very important to other researchers who have interest in factors affecting educational performance, and in particular the effects of public education investments.

## **DEFINATION OF KEY TERMS**

#### Government

Government is a human organization which exists for the maintenance of cohesion and order in a country (Hinchliffe, 1989). According to the Oxford dictionary, the government is the group of people who are responsible for controlling a country or a state.

According to Enders, Troolin and Robb (2022), a government is the authority that sets rules for a society. The government definition is very broad because of the unique ways that countries exist and function. The function of the government also depends on the level of participation and input that its citizens have. Because of these reasons, the term "government" can also refer to:

- A group of people who make decisions for a country, nation or state; this can include a single authority or group of people who primarily make laws.
- A group responsible for making policy at all levels of society; this can include different divisions of government (federal, state, local).
- The steering mechanism for a society; this refers to the direction or goals that a country has for itself and what it is prioritizing for its citizens.

### Education

Education comes from the Latin word "educare", the action of educating, training, instructing someone. Education can be defined as a process of transmitting knowledge and acquiring values,

the aim of which is to enable the individual to act more effectively in his natural and social environment as a citizen (DSSEF 2013-2020). Education, which could be formal or informal, serves as one of the major instruments of government for inculcating in the people, the norms, morals and other behavioral patterns that are necessary for the survival of the people as a nation.

Several scholars have defined education as a life-long process through which man's all round (moral, emotional, physical and intellectual) development is facilitated so that he can be useful to himself and the society into which he is born (Ijaiya, Bello and Ijaiya, 2004).

According to Malcolm X (1965), education is the passport to the future, for tomorrow belongs to those who prepare for it.

According to John Dewey (1978), education is the development of all those capabilities in the individual which will enable him to control his environment and fulfill his responsibilities.

According to Plato, the primary role of education is to develop citizens so that they can contribute to the community (Longworth & Osborne 2010). It is also thought that education is what forms the base of an economy of a given area and what determines the well-being of the people who live in it (Weber, Marre, Fischer, Gibbs, & Cromartie 2007). Although education is not the only road to success in the working world, much effort is made to identify, evaluate, track and encourage the progress of students in schools (Bell, 2017).

### **Investment**

Economists such as Adam Smith (1776), view investment as the production of goods that is used to produce other goods. This definition differs from the popular usage, wherein decisions to purchase stocks or bonds are thought of as investment. According to Keynes (1936), investment is the expenditure on goods and services not meant for consumption (Investment = Income – Consumption i.e. I = Y - C). Investment is usually the result of forgoing consumption. According to Adan Hayes (2021), an investment is an asset or item acquired with the goal of generating income or appreciation over time.

Investment is defined as the commitment of current financial resources in order to achieve higher gains in the future. It deals with what is called uncertainty domains. From this definition, the importance of time and future arises as they are two important elements in investment. Hence, the information that may help shape up a vision about the levels of certainty in the status of investment

in the future is significant. From an economic perspective, investment and saving are different; saving is known as the total earnings that are not spent on consumption, whether invested to achieve higher returns or not (Capital Market Authority, 2022).

School finance or investment is concerned with the mobilization and allocation of resources to schools. School finance issues are of paramount concern to all levels of educational system both at central and local government level. The child's future as well as the future of a society in general, depends largely on the quality of the educational system. (Olabanji & Abayomi, 2010). Education is therefore seen as a sound economic investment that raises the quality of life, improves health and productivity in market and non-market work, increase individuals' access to paid employment and often facilitates social and political participation (Hill and King, 1991).

## **Government Investment**

Public investment is an investment by the state in particular assets, whether through central or local governments or through publicly owned industries and institutions. It refers to money spent by the public sector on the acquisition of goods and provision of services such as education, healthcare, social protection, and defense. Government spending is financed primarily through two sources: Tax collections (direct and indirect taxes) and Government borrowing from its own citizens or from foreign partners and institutions. Government spending on education consists of recurrent and capital government spending on education. It includes government spending on educational institutions (both public and private), education administration as well as subsidies for private entities (students/households and other private entities) (UNESCO, 2010).

## **Performance**

According to the Merriam-Webster dictionary, performance is defined as the execution of an action, the ability to perform. Performance could also be defined as the quality of execution of an action, operation, or process; the competence or effectiveness of a person or thing in performing an action. According to Verboncu and Zalman (2005), performance is a particular result obtained in management, economics, marketing etc., that print features of competitiveness, efficiency and effectiveness of the organization and its procedural and structural components.

Academic performance is the extent to which a student has achieved their short or long-term educational goals (Ward, Stoker, & Murray-Ward 1996). Cumulative GPA and completion of

educational degrees such as High School and bachelor's degrees represent academic performance. Academic performance is commonly measured through examinations or continuous assessments but there is no general agreement on how it is best evaluated or which aspects are most important procedural knowledge such as skills or declarative knowledge such as facts (Bhagat 2013).

For Caballero et al. (2007), academic performance involves meeting goals, achievements and objectives set in the program or course that a student attends. These are expressed through grades which are the result of an assessment that involves passing or not certain tests, subjects or courses. On their part, Torres and Rodríguez (2006 quoted by Willcox, 2011) define academic performance as the level of knowledge shown in an area or subject compared to the norm, and it is generally measured using the grade point average.

Academic performance is considered an intellectual competence indicator. Opinions vary as to why some students excel academically while others appear to be underachievers. As a result, many psychologists have consistently attempted to identify the major predictors of individual academic performance. Academic performance on examinations is the result of interactions among multiple variables such as learning. Learning occupies a significant role in the life of students (Mangal & Mangal 2009). It means modification of behavior (Dutt, 2007) that is measured using the yardstick of academic performance. People have different learning styles that are reflected in different academic strengths, weaknesses, skills, and interests. It has often been asserted that academic performance can be explained largely by factors such as individual initiative, effort, and merit (Timothy, & Kammeyer-Mueller, 2007) Parents care about their child's academic performance because they believe good academic results will provide more career choices and job security (Bell, 2017). The child's future as well as the future of a society in general, depends largely on the quality of the educational system. (Olabanji & Abayomi, 2010).

## **Primary education**

The International Standard Classification of Education considers primary education as a single phase where programs are typically designed to provide fundamental reading, writing, and mathematics skills and establish a solid foundation for learning. This is ISCED Level 1: Primary education or the first stage of basic education. Primary education: This is the second level of formal education. The duration of the primary cycle is six years. The legal age of admission is 6 years old and represents the only condition of registration for a child, whether or not he has attended nursery

school. The end-of-cycle diploma is the Certificate of Primary Studies (CEP) for the French-speaking subsystem or the First School Leaving Certificate (FSLC) for the English-speaking subsystem (DSSEF 2013-2020). A primary, elementary school or grade school is a school for primary education of children who are five to twelve years of age. Primary schooling proceeds from pre-school and precedes secondary schooling. School finance is concerned with the mobilization and allocation of resources to schools. School finance issues are of paramount concern to all levels of educational system both at central and local government level.

#### **OUTLINE OF THE STUDY**

The study is organized in five chapters: chapter one deals with the introduction to the study covering its background, statement of the research problem, research questions, research hypothesis, research objectives, the relevance of the study, scope, and outline of the study. Chapter two covers the literature review on the government's financial, material, infrastructural, and human capital investment in education, and it equally covers the theoretical framework of the study which is the Theory of Human Capital, developed by Gary Becker and Theodore Schultz. Chapter three presents the methodology from the research design, area of study, population of the study, instrumentation, data collection procedure, technique of data analyses, and synoptic table. Chapter four deals with data presentation, interpretation, and analyses, while chapter five covers the interpretation and discussion of findings, recommendations, and limitations of the study.

## **CHAPTER TWO: REVIEW OF LITERATURE**

This chapter presents the review of relevant literature for this study. The first part presents the conceptual framework, presenting the clarifications of the main concepts and keywords used in the study. The second part will present the theoretical literature in which we shall have two theories used for our study: The Human Capital Theory of Gary Becker and Theodore Schultz and the Theory of Academic Performance of Don Elger. The last part presents the variable related literature review or empirical literature review, and will revolve around the main variables of our work developed in chapter one. These includes; a general review on government education expenditure and educational performance; school infrastructure and pupil's performance; didactic material and pupil's performance; human capital investment and pupil's performance; and government educational investment and economic growth.

#### **CONCEPTUAL REVIEW**

#### **Government Educational Investment**

Education is a service sector because it is designed to produce educated men and women who will contribute to the labour market and ultimately the economy. Given that it is responsible for the development of human resources in any economy, investment in education is tantamount to investment in human capital formation. Investing in education can take many forms including the establishment and management of schools as a business venture and/or the acquisition of any particular type of education by individuals to enhance their employment prospects and income earning capacity. Government can also invest in the development of a particular type of human capital considered important to national development. Rationale for Investing in Education

The major reasons for investment decisions in education include:

- Production of Human Capital: The economic sector benefits directly from the education sector because the products of education are the skilled or semi-skilled labour for the economic sector. The application of economic principles in the provision of education ensures adequate production of relevant human capital and the reduction of wastage in the process of human resource development.
- Cost Effectiveness: The application of prudential principles in resource utilization in the practice of education ensures that investment in education produces a labour force that is

- relevant to the economy in terms of quality and quantity. The production of irrelevant labour amounts to increased unemployment and a wastage of education resources.
- Program Planning: Adequate investment in education ensures that suitable education programs are properly planned and implemented for the various levels of education. This is irrespective of whether the system of education is formal, informal or non-formal.
- Creation of Awareness: Students in various fields of study are exposed, in the course of
  their study, to the economic opportunities and benefits that accrue from the careful
  application of the skills they have acquired through education. The student is also equipped
  with necessary managerial skills that will enable him/her to function in the world of work
  and entrepreneurship

In this study we shall analyse government educational investment in terms of its financial investment, infrastructural investment, investment in didactic materials and human capital investment.

## > Financial Investment

Financially, the government invest in education by simply allocating or making available funds for the proper functioning and operation of educational institutions and also for the execution of educational projects. In recent years, the share of State resources devoted to education has remained below the regional average; i.e. 18.57% of current expenditure. In addition, the structure of expenditure by level is different from that observed on average in the region: the shares of primary and higher education are lower and the share of secondary is significantly higher. It should also be noted that 80% of the funds are used to pay salaries.

**Table 2.1:**Structure of current education expenditure in Billion FCFA

Year	MINEDUB	MINSEC	MINSUP
2023	254.2	461.2	73.4
2022	244	400	63.9
2021	232.74	386.95	65.2

Source: MINFI data 2023.

The counterpart of fairly limited public funding leads to much accentuated recourse to funding by families. This recourse is visible through the remuneration of PTA teachers and temporary workers by parents in both primary and secondary schools. If the State were to cover the salaries of teachers paid by parents in primary and secondary education, it would have to increase its current budget by almost a quarter. Over the past ten years, unit costs in public education have varied divergently depending on the level of study: increase in primary (+18%) due in particular to the payment by the State of the salaries of contractual teachers; drop (-22%) in secondary education due to increased use of temporary teachers paid by parents; sharp drop (-38%) in higher education, where the resources granted have not kept pace with the strong growth in student numbers linked to the absence of selection at the entrance to universities. Due to these developments, the unit cost in higher education is about 50% below the average of countries with a GDP/inhabitant comparable to that of Cameroon.

**Table 2.2:**Budgetary allocation for primary schools in 2017

Region	Operation		Investment	
_	School operating	Minimum	Construction of	Construction of
	credit (in	Package (in	classrooms (in	latrines (in
	thousand CFA	thousand CFA	thousand CFA	thousand CFA
	francs)	francs)	francs)	francs
Adamawa	272,328	135,374	545,000	28,000
Centre	761,714	310,682	709,250	38,500
East	324,255	130,339	515,500	24,500
Far North	813,771	422,280	827,000	24,500
Littoral	319,280	120,549	466,000	24,500
North	419,298	242,601	625,500	28,000
North-West	455,518	198,116	575,500	28,000
West	635,860	292,441	532,000	35,000
South	244,614	100,378	471,500	28,000
South-West	309,748	133,312	578,000	21,000
Total	4,556,386	2,086 072	5,845,250	280,000
Share (%) in	2.05	0.94	2.63	0.13
MINEDUB's overall				
budget in 2017				

Source: MINEDUB, 2017 Project Journal

The above table represents nearly 5.8% of the Ministry of Basic Education's budget in 2017, for a total of 12,768,708,000 CFA francs. The credit allocated to divisional delegations for school operation was 4.556 billion in 2017, or 2.3% of the total operating budget.

### > Infrastructural Investment

Infrastructures here refers to the set of necessary equipment for the operation of a school or an educational institution. The facilities that are needed to facilitate effective learning in an educational institution include adequate classrooms, adequate power and water supply, good communication system, improved transportation system, libraries, laboratories as well as furniture items and sporting equipment. The quality of infrastructure has strong influence on the academic standard which is an index of quality assurance in the school.

Looking at the data for the period 2007 - 2010 on the number of primary schools in the country, there was an increase of 14,255 in 2010, an average annual increase of 4.7% (MINEDUB, 2010). In basic education, there are three types of schools: public, private and community. An increase of about 400 public schools has been observed in three years. As shown in figure below, the proportion of private schools in primary education is highest in the Littoral region with 59%, followed by the Centre and North West regions with 30%. It should be noted that the number of private schools in the Littoral region is higher than that of public schools (MINEDUB, 2010). The Littoral region is home to Douala, the second largest city in Cameroon. A high number of businesses and government agencies, a high level of household education, a large English-speaking population due to the proximity of an English-speaking region, and the large number of wealthy families constitute the context for a strong tendency for children to attend private schools.

100% 90% 93% 91% 89% 91% 90% 80% 80% 73% 70% 69% 70% 59% 60% 50% 419 Public 40% 30% 30% 27% ■Privat 30% 20% 20% 7% 9% 9% 5%49 10% Community 3% 2% 0% 0% Sud Ouest Oneer

**Figure 2.1:** Distribution of primary establishments (by region)

(Source: prepared with reference to MINEDUB documents, 2010)

**Table 2.3:**Resources made available to public primary schools (2010-2011)

School organization factors	Proportion
Permanent classrooms	69%
Number of students per place	1.46
Water availability	29%
Electrical connection	8%
Availability of latrines	43%
Presence of a canteen	2.3%

Source: RESEN Cameroon, 2013.

#### > Didactic Material Investment

Didactic materials also known as instructional materials are any kind of aid that assist teachers or students to achieve their objectives during the entire teaching learning process (Koper R. 2000). There are two types of didactic materials according to the actors of the educational process: teaching materials and learning materials. Learning materials are those resources that support learners during the process of learning (e.g., books, games, worksheets, etc.). On the other hand, teaching materials provide academic staff with resources to guide and support the learning process of students. According to Farombi, (1998), instructional materials include books, audio-visual, software and hardware of educational technology. He further opines that the availability, adequacy and relevance of instructional materials in classrooms can influence quality teaching, which can have positive effect on students' learning and academic performance. Instructional materials have been observed as a powerful strategy to bring about effective teaching and learning.

# - Distribution and supply system for learning materials

In 2002, the National Council for The Accreditation of Textbooks and Teaching Materials (CNAMSMD) was established as an advisory body. Composed of representatives of public institutions (higher education, culture, education) and civil society, it is responsible for selecting and proposing to MINEDUB the most suitable textbooks (UNESCO, 2010; JICA, 2011). The development of teaching materials is delegated to the National Printing Press and to French and English publishing companies (JICA, 2011). It is expected that the purchase of teaching materials will be done by households due to the delay in the allocation of teaching materials by the

government (interview with MINEDUB and during school visits). Several types of teaching materials per subject in primary education have been selected by the National Council for the Approval of School Textbooks and Teaching Materials. The system consists of informing parents of the type of teaching materials to be purchased following the selection of the head teacher of each school by the approved list (interview during school visits). In the past, reform of teaching materials was frequent, but now a reduction in the frequency of reform with multi-year use is being considered (JICA 2011).

## - Status of the distribution of teaching materials

It was noted that teaching materials were rarely used, which influences the stagnation of school results (UNESCO, 2010). MINEDUB collects data on the situation of the appropriation of teaching materials. According to the 2010 data, the rate of possession is about 8.5% in relation to the number of school books needed, concerning the situation of storage and distribution in schools of English and French school books, science, arithmetic and language from the first to the sixth year of primary education. The distribution rate for language books is 11%, for mathematics books 10% and for science books only 4%. The rate of possession of English and French books is 9%. These statistics on the distribution of school books coincide approximately with the distribution situation verified in the schools visited. School books were only distributed once 5 years ago and the school recommends that households buy them directly. MINEDUB's policy is to distribute one main school book per person, but due to lack of budget, sufficient distribution is not achieved and therefore the burden is borne by the households or the teachers who are obliged to buy teaching materials themselves because they were not distributed by the state

# - Management of minimum package

The minimum package is part of a logic of measures to support free primary school by providing schools with a minimum of materials and supplies necessary for the running of the school. According to the instruments, it comprises: Office supplies for teaching staff;

- Teaching materials for teachers;
- Teacher monitoring and student assessment materials;
- Sports and leisure equipment;
- Small pharmacy.

The minimum package has been introduced to enable the effective start of teaching in schools from the start of the school year, without being delayed by the procedures for disbursing operating resources. The purchase and distribution of the minimum package entrusted to the council are part of the competences transferred to the councils as part of the decentralization process. In 2017, almost all schools received the minimum package. Only a few in some regions were deprived of it.

# > Human Capital Investment

Human capital here refers to all the human resource needed for the proper functioning and management of the education system. It entails their training, recruitment, deployment and even their professional or pedagogic supervision. Teacher training here refers to the training of personnel that work in educational institutions such as teaching staff, school administrators, guidance counsellors and pedagogic inspectors for the effective and efficient provision of the education service. Teaching staff refers to professional personnel directly involved in teaching students, including classroom teachers, special education teachers, and other teachers who work with students as a whole in a classroom, in small groups in a resource room, or in one-to-one teaching inside or outside a regular classroom (OECD glossary of statistical terms 2002).

# - Teacher Qualification, Training and Deployment

Due to the financial crisis in 1990, teacher training schools closed between 1991 and 1995 and this stopped the increase in the number of teachers because the recruitment of new teachers stopped. Recruitment of civil servant teachers was not carried out even after the reopening of teacher training colleges. 34,500 primary education teacher diploma holders could not find regular employment until 2006 and some were teachers hired by the PTA or employed temporarily for one year (JICA, 2011).

During this period, the quality of lessons declined and, although the remuneration of teachers temporarily employed by parents and communities was low, the financial burden on communities was immense (WB, 2010). From 2007 onwards, with the HIPC funds, the recruitment of contract teachers (quasi-civil servants) resumed throughout the country. Between 2007 and 2010, the number of primary school teachers increased from 72,827 to 76,655, i.e. by 3,828, an increase of 5.3%. In addition, during this period, the number of primary school students increased from

3,120,357 to 3,502,636 and with an increase of 382,279 or 12.3% (JICA, 2011). In relation to the total number of teachers in primary education, the proportion of teachers with civil servant status stagnates at 23%, while the proportion employed by the PTA is 21.4%, and contract teachers represent 54.8% (MINEDUB, 2010).

The maximum number of pupils per teacher is set by the government at 60 per school class, and the target stated in the DSSEF 2006 action plan (2009 - 2013) is 40 (JICA, 2011). The national average of the number of pupils per teacher in primary education was high at 62.7 in 2001, but has improved significantly to 45.5 in 2010. When we look at regional disparity, there is a more than twice a difference between the Far North region with 75 and the South region with 31 (MINEDUB, 2010).

The diploma in primary education is the CAPIEMP delivered after spending 1 to 3 years at a public or private school called Ecole Normale d'Instituteurs de l'Enseignement Général (ENIEG), and to be eligible, the GCE O/L or A/L are required (JICA, 2011). The schools charge a fee. At the end of the training, it is possible to work in both the public and private sectors. 2,904 people graduated in 2008 - 2009 and 2/3 were women (JICA, 2011). Civil servant, temporary and contract teachers are required to have this diploma to teach. Since 2012, the jurisdiction of ENIEG has been transferred from primary to secondary education as well as the reform of the training system. MINESEC is advancing the reform of ENIEG by alleviating the burden of school operating costs, optimizing the teacher training system and ensuring the quality of teachers. In order to ensure the quality of teachers, a reform of the training period and the conditions for enrolment are being studied (MINEDUB report 2012). Besides ENIEG, there is the Ecole Normale d'Instituteurs de l'Enseignement Technique (ENIET), which is a technical education training school where teachers for technical schools are mainly trained. The training period and enrolment requirements are identical to those of ENIEG (MINEDUB, 2010).

### Teachers' Salaries

The salary of teachers in primary and lower secondary education is shown in Table 12 below. A reform on civil servants' salaries was implemented in 2008 and is currently in force. The salary regulation between teachers and civil servants is identical and the rank is determined according to degree, education and seniority (MINEDUB, 2010). Whatever the rank, the minimum level starts

at more than CFAF 100,000 and the maximum at more than CFAF 200,000 or even more than CFAF 300,000.

**Table 2.4:**Salary of teachers in primary and lower secondary schools by rank

Rank			Salary of civil servants	
В	1	Minimum	140,843 FCFA	
		Maximum	215,865 FCFA	
	2	Minimum	150,276 FCFA	
		Maximum	239,394 FCFA	
A	1	Minimum	172,515 FCFA	
		Maximum	295,008 FCFA	
	2	Minimum	184,299 FCFA	
		Maximum	336,718 FCFA	

Source: National Personnel Authority, 2019.

# - Teacher Recruitment and Management

As mentioned above, no new teachers were recruited between the late 1990s and 2006 due to the consequences of the financial crisis of the 1990s. Teacher training colleges were reopened in 1996, but 34,500 elementary education graduates could not find regular employment and had no choice but to be hired temporarily for one year or employed as teachers by the PTA (JICA, 2011).

Large-scale teacher demonstrations have been organized to demand improved salaries and working conditions following the reduction in teachers' salaries due to state budget cuts, the consequences of which have even affected regular civil servants. To date, the administrative procedure is time-consuming and the salaries of newly employed contractual workers are often not paid for six months to a year. As a result, they are forced to work for free during this period. Late salaries are paid later and in one go. When the teacher registration process is completed, problems with delayed payment of salaries become rare. There is a chronic shortage of teachers in remote areas because when teachers are assigned there, as there is no form of compensation for remote postings, many wish to return to urban areas (MINEDUB report 2012).

Cameroon's Basic Education sector benefitted the sum of 54.3 billion CFAF from the World Bank under the 3rd phase of the Cameroon Education Reform Project. The announcement was made on Friday August 27, 2021 by the minister of Basic Education, during a sectorial meeting. During that period two successive recruitment test had been launched for 3,000 teachers each (6,000 teachers

in total), following joint communiqués from the Minister of Basic Education, Professor Laurent Serge Etoundi Ngoa and the Minister of Public Service and Administrative Reform, Joseph LE.

The exercise was part of the third phase of the 2021 session of contract program for nursery and primary school teachers in the Ministry of Basic Education. According to the press release, the recruitment exercise was intended to fill the gap in various schools across the country, reason why candidates had to choose their preferred school while submitting their files and write the recruitment exam as well at the regional head quarter in which the chosen school was found. Meanwhile, the allocation of places as well as quota by region were determined by the needs expressed by various schools.

This recruitment exercise was opened to applicants who were not more than 40 years, and had to be holders of a diploma from the teachers' training college. This teacher recruitment under the Cameroon Education Reform Support Project financed by the World Bank seek to enrol 12,000 teachers within four years (Cameroonian press review of July 05, 2021). The development objective of the Education Reform Support Project for Cameroon is to improve equitable access to quality basic education, with a focus on selected disadvantaged areas.

## - Attendance of Teachers in Primary Education

Article 22 of the Orientation Law provides that "The school year shall comprise at least 36 weeks of effective courses". A PETS3 survey was carried out and focused on assessing the percentage of teachers who were absent from their duty stations during the 2016/2017 school year. These are teachers in irregular absence i.e. those who have never assume duty, those who have assumed duty and have not returned to school, or those who have disappeared at some time during the school year without any reason known to the school head.

Globally, the survey did not show any significant discrepancies between the number of teachers reported by the sub-divisional inspectors as being on duty in the schools and the number of pupils reported by heads of schools as teachers who have actually been on duty. Out of 100 teachers supported by the State budget, 6 were not in office in 2017. By category of staff, contract workers were the most absent from their duty stations in 2017, with 35 absentees out of 100. Among civil servants, the phenomenon was more prevalent in the Far North and West regions with respectively

40% and 35% of cases of absence from duty stations reported. For all three categories of staff, absenteeism was more prevalent in schools located in rural areas.

**Table 2.5:** Proportion (%) of permanent teaching staff on duty in 2017 by region in primary schools

Region	Profile			Total
	Civil servants	Contract primary school teachers	Contract workers	
Adamawa	93	97	-	97
Centre	95	96	33	94
East	75	95	100	93
Far North	60	95	100	94
Littoral	92	98	100	97
North	100	93	-	94
North-West	91	99	69	93
West	65	97	17	86
South	100	94	-	95
South-West	100	100	100	100
Urban	96	98	74	96
Rural	81	96	52	92
Total	90	97	64	94

Source: PETS3 Cameroon, 2019

Globally, 65% of heads of schools rated the attendance of current teaching staff as satisfactory. This assessment is somehow the same in urban and rural areas. Teacher attendance is most problematic in the Far North and South-West regions. According to officials, this phenomenon would be aggravated by a number of factors such as the lack of infrastructure and amenities in some localities, late financial support of newly affected staff, scarcity of inspection visits and even the absence of sanctions against unscrupulous staff. These attendance problems obviously have an impact on the pedagogical performance of teachers. Over 40% of officials rated the pedagogical performance of their teachers as low or average. In the South-West region, heads of schools were the least likely to rate teacher performance as satisfactory (33%).

## - Pedagogical Supervision

Pedagogical supervision aims to improve teachers' pedagogical skills and practices. It is carried out through diagnostic, training, supervision, evaluation and inspection, and remediation missions. Supervision is carried out by the various actors in the chain, who may come from the sub-divisional

inspectorate, the Divisional or Regional Delegation or central services. During the 2017/2018 school year, most schools (76%) received between one and three supervision visits, whether from the sub-divisional inspectorate, the Divisional or Regional Delegation or central services of MINEDUB (PETS3 report 2019). However, some schools did not receive any visits in that year. It is clear that this reduced number of visits to most schools can hardly enable to cover all stages of supervision, and thus achieve the expected objectives. Officials also noted as difficulties with regard to staff, the lack of teachers' mastery of the new curricula.

**Figure 2.2:** Distribution (%) of schools by number of supervisory visits received during the 2017/2018 school year



Source: PETS Cameroon, 2019

## **Performance of Primary School Pupils**

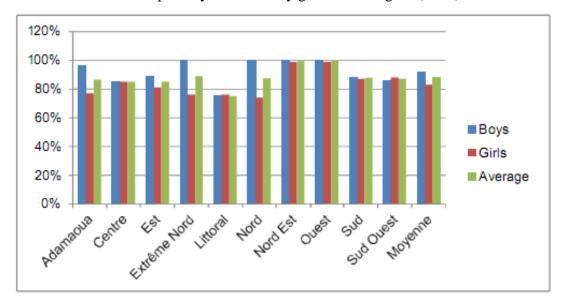
# > Enrolment

According to David P. Baker, access to schooling in a population can be measured as school enrolment, which is simply a count of the number of children who have registered with all schools in a nation. As a related statistical indicator, the school enrolment rate is defined as the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. Official school ages are defined by UNESCO in the International Standard

Classification of Education (UNESCO, 1997). For example, in Cameroon's primary education, this rate is equal to the number of pupils multiplied by 100 and divided by the population of 6 to 11 years. Enrolment in schools represents the largest component of the investment in human capital in most society (Schultz, 2002). The gross enrolment rate in primary education is, as shown in chart 6 below, 109.1% in 2005 and 119.8% in 2010, an increase of 10 percentage points during this period (UIS, 2012).

In Cameroon, the gross enrolment rate in primary education passed the 100% mark in 2001. This coincides with the start of free primary education in 2000 (UNESCO, 2010). Moreover, the net enrolment rate was high in 2008 at 90.8% and reached a level of 92.4% in 2010, and the country is surely moving towards full enrolment. The difference between boys and girls in the gross and net enrolment rates is about 20 points and 13 points respectively and we can say that a disparity exists at this level (UIS, 2012). However, in primary education, with a 27.4 percentage point difference between gross and net enrolment in 2010, the gap is also large compared to neighbouring countries. These data indicate that many pupils are above or below the corresponding age and are probably influenced by the number of repeaters.

**Figure 2.3:**Net enrolment ratio in primary education by gender and region (2010)



(Source: MINEDUB, 2010)

## > Skills acquired

Primary education is designed to provide fundamental reading, writing, and mathematics skills and establish a solid foundation for learning. Thus this are the basic skills that each pupil upon completion of the primary cycle is expected to have acquired. In the Basic Law on Education, it is stipulated that the purpose of education is to make possible the harmonious participation of children in society without the problem of morality from a political, social or economic point of view by encouraging the development of the child's virtue, body and mind. It is stipulated that the aim of education is to enable the child to learn discipline, justice, honour and dignity that are universal so as to respect stability and the common interest and to open up to the world while belonging to the culture of each citizen. Furthermore, from the point of view of curriculum development, the aim is to enable the acquisition of knowledge to adapt to the development of technology and the labour market (UNESCO, 2010).

The reform of education started with the implementation of the 1998 Law on the Orientation of Education and the reform of the curriculum has started. This reform enables students to acquire the knowledge to adapt to the development of technology and the labour market through an interdisciplinary approach; an approach allowing maximum participation of students in teaching is being studied. Since 2001, with the collaboration of the French Development Agency, the Competence Based Approach (CBA) has been developed. This is a new educational approach with child-centered lessons. In 2003 – 2004, the CBA was integrated in a few pilot schools to reduce the number of repeaters.

With regard to the curriculum, although this is due to differences between the French and English sub-systems, there is a significant difference in the number of hours of language (French and English), arithmetic, science and civic education in primary education. The distribution of teaching hours differs according to subject, with 2.5 hours to 5 hours of arithmetic from SIL to CM2 per week in the Francophone subsystem, while there are 6.5 hours in the Anglophone subsystem for all classes, 1 to 1,5 hours of science from CE1 to CM2 in the Francophone sub-system compared to 2 hours for all classes in the Anglophone sub-system and 1.5 hours of civics for CM1 and CM2 in the Francophone sub-system compared to 3 hours from CL-4 to CL-6 in the Anglophone subsystem. Also, many hours are devoted to language learning in the francophone subsystem and there

are relatively few hours for subjects such as science lessons compared to the Anglophone subsystem (JICA, 2011).

#### > Success

The internal return of an educational system is analysed with the aid of a many indicators such as the promotion rate, proportion of repeaters and results in official exams. The analyses of these indicators show the actual behaviour of the learners in the school system in terms of the wastage of resources allocated to education. The promotion rate or apparent promotional rate represents the percentage of students of a course or class for a given year, which passes in the next higher course or class the following year. Transition to primary education used to be through the end-of-year examination. As a result, it was common to have repeaters in each class and school year (JICA, 2011). With the collaboration of the TFPs, MINEDUB has piloted a system to reduce repetition since 2009 as part of the sector strategy. This system consists of considering each two years of primary, secondary and higher education as a stage to allow automatic passage during these two years (JICA, 2011). The system of automatic passing or collective promotion every two years is being implemented in public schools. Although in the regulation the promotion is automatic every two years, there are cases where repetition is advised for pupils with significant academic difficulties and decided autonomously after consultation with parents.

The CEP / FSLC must be taken at the end of the sixth year of primary education (UNESCO, 2010). Graduation from Primary education is granted to pupils who have passed the exam. In addition to the CEP / FSLC, it is necessary to pass the Common Entrance Examination to move from primary to lower secondary education. It is possible to take the CEP / FSLC as many times as desired even after moving away from primary school and the system also allows for passing if the student fails the CEP / FSLC but passes the junior secondary entrance exam.

The proportion of repeaters represents the percentage of students of a course for a given year who will still study or repeat the same class the following school year. In 2010, the average repetition rate in classes 1-6 of primary education is 11%. Apart from the third year which is relatively low (9%), the other years vary between 10 and 12% and do not show any significant difference. MINEDUB statistics do not show a particularly high repetition rate in the sixth year (MINEDUB, 2010). However, when we break down the data into subsystems, we can see that the repetition rate

in the French-speaking sub-system is much higher than in the English-speaking sub-system (MINEDUB, 2010). The average of all school years in the subsystems is 15% for the Francophone subsystem and 6% for the Anglophone subsystem, a difference of 9 points. The level of the repetition rate is low for the Anglophone subsystem, both by gender and by school year. When we look only at grades 1 and 6 in the Francophone subsystem, the repetition rate is 17%, which is a high level. The reasons for this may be failure to pass the assessment due to a low level of schooling in the first year and the choice to remain in primary education after failing the CEP in the sixth year. Repeated repetition leads to a decrease in motivation to learn and consequently to drop-out.

Results in official exams corresponds to the end of cycle exams which are generally harmonized and organized by the appropriate administrative authority. The end of the primary cycle is sanctioned by the First School Leaving Certificate (FSLC) for the English subsystem, and the Certificat d'Etudes Primaires (CEP) for the French subsystem. Primary education for both subsystems is done for a period of six (6) years.

# **Completion**

The completion rate represents the proportion of new entrants at the end of a given cycle to the proportion of the official age population of the end of this cycle class. In primary education, the survival rate, which indicates the estimated number of children who will complete class 1 to 5 between 2006 and 2009, is in the range of 63% to 81.8% (UIS, 2012). Girls are 0.5 percentage points higher with a 76.5% survival rate. The survival rate for boys is 76% (2009). In 2009, the survival rate is 76.3% in primary education. 23.7% of the 706,180 new enrolees in 2009 will drop out without finishing class 5, or 167,365 students. It is estimated that the investment made in these students is wasted. By gender, the dropout estimate is higher for boys due to a larger number of enrolments. The gender distribution of the estimated number of children whose investment is considered wasted is as follows: 90,741 for boys and 76,62343 for girls, more than 14,000 more boys than girls (UIS, estimate based on 2012 figures).

#### THEORITICAL FRAMEWORK

# The Human Capital Theory (HCT) by Gary Becker and Theodore Schultz, 1960

In the 1960s, economists Gary Becker and Theodore Schultz pointed out that education and training were investments that could add to productivity. As the world accumulated more and more physical capital, the opportunity cost of going to school declined. Education became an increasingly important component of the workforce. Human capital is the intangible economic value of a worker's experience and skills. This includes factors like education, training, intelligence, skills, health, and other things employers value such as loyalty and punctuality. The human capital theory posits that human beings can increase their productive capacity through greater education and skills training.

Human capital theory rests on the assumption that formal education is highly instrumental and necessary to improve the productive capacity of a population. It argues that an educated population is a productive population. HCT emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of innate abilities and investment in human beings. The provision of formal education is seen as an investment in human capital, which proponents of the theory have considered as equally or even more worthwhile than that of physical capital (Woodhall, 1997).

According to Babalola (2003), the rationality behind investment in human capital is based on three arguments:

- The new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations.
- The new generation should be taught how existing knowledge should be used to develop new products, to introduce new processes and production methods and social services;
- People must be encouraged to develop entirely new ideas, products, processes, and methods through creative approaches.

The Human capital theory indicates that education increases people's general mental capabilities and technical skills, increasing their productive potential in the labour force. High-quality education is required to make a significant contribution to economic growth and development. It follows that school is an investment and that people are an essential reservoir of capital and not

merely a source of raw labour. Education contributes a tremendous and substantial role in the economic development of a nation. Thus educational expenditures constitute a form of investment. This augments an individual's human capital, leads to a greater output for society, and enhances earnings for the individual worker. It increases their employment opportunities in the labour market, allows them to reap pecuniary and non-pecuniary returns, and gives them a chance for job mobility (Almendarez, 2011).

HCT concludes that investment in human capital will lead to greater economic outputs, however the validity of the theory is sometimes hard to prove and contradictory. Fagerlind and Saha (1997) poses that HCT provides a basic justification for large public expenditure on education both in developing and developed nations. The theory is consistent with the ideologies of democracy and liberal progression found in most western societies. Its appeal was based upon the presumed economic return of investment in education at both the macro and micro levels. Efforts to promote investment in human capital were seen to result in rapid economic growth for the society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement. Most economists agree that it is the human resources of a nation, not its capital nor material resources, which ultimately determines the character and pace of its economic and social development. Human resources constitute the ultimate basis of the wealth of nations.

## **Application of the Human Capital Theory to Educational Systems**

In order to enhance human development in the general society, it is necessary to apply the theory of human capital to educational systems. By such means, productivity is enhanced and sustained based on an increased and diversified labour force. Babalola (2003) asserts that the contribution of education to economic growth and development occurs through its ability to increase the productivity of an existing labour force in various ways. Therefore, economic appraisal of educational investment projects should take into account certain criteria, according to Psacharopoulos and Woodhall (1997):

- Direct economic returns to investment, in terms of the balance between the opportunity costs of resources and the expected future benefits;
- Indirect economic returns, in terms of external benefits affecting other members of society;

- The private demand for education and other factors determining individual demand for education:
- The geographical and social distribution of educational opportunities; and,
- The distribution of financial benefits and burdens of education.

Education plays a great and significant role in the economy of a nation; thus, educational expenditures are found to constitute a form of investment. It increases the chances of employment in the labour market, and allows individuals to reap pecuniary and non-pecuniary returns and gives them opportunities for job mobility. Education is a source of economic growth and development only if it is anti-traditional to the extent that it liberates, stimulates, and informs the individual and teaches him how and why to make demands.

The central difference in the policy implications of the human capital model and the alternative models relates to the desirable level of government spending on education. The basic implication of the human capital model is that allocation of resources on education should be expanded to the point where the present value of the streams of returns to marginal investment is equal or greater than the marginal costs. Many of the developing nations have thus realized that the principal mechanism for developing human knowledge is the education system. Thus, they invest huge sum of money on education not only as an attempt to impact knowledge and skills to individuals but also to impart values, ideas, attitudes and aspirations which may be in the nation's best developmental interest.

In addition to manpower planning needs, parents strongly feel that in an era of scarce skilled manpower, the better the education their children can get, the better are their chances of getting well paid jobs. The poor often look at their children's education as the best means of escaping poverty. The concept of human resources has provided a useful bridge between the theoretical concerns of students of the developmental process and the practical requirements of assistance to planners. Irrespective of the explanation given for global educational expansion, the consequences of this expansion for social systems can be problematic. The tensions and strains of educational expansion can impede economic, social and political development. For example, the accelerated costs of expanding educational system compete with other sectors of the respective societies for finite resources. As mass primary education is attained, expansion shifts to the secondary and tertiary levels as these too are gradually transformed into mass systems. At the same time, the

increase in costs is not arithmetic but geometric. These pressure ultimately creates a dilemma for governments who must realistically assess and determine spending priorities for scarce economic resources (Olaniyan and Okemakinde, 2008).

It is also worth noting that the causal relationship between education and earnings has important implications for public policy. If human capital theorists are correct in arguing that education is the primary cause of higher earnings, then it obviously makes sense to provide more education to low-income groups of society to reduce poverty and the degree of income inequality. This analysis suggests that the primary focus of subsidies to education should be on ensuring that all those who can benefit from, have access to appropriate opportunities, rather than on reducing costs incurred by those who would undertake higher education in any case.

# The Theory of Academic Performance (ToP) by Don Elger, 2007

The theory of academic performance (ToP) was developed by Don Elger (2007). The theory emphasizes six foundational concepts to form a framework that can be used to explain performance as well as performance improvements. To perform is to produce valued results. A performer can be an individual or a group of people engaging in a collaborative effort. Developing performance is a journey, and level of performance describes location in the journey. Current level of performance depends holistically on six components: context, level of knowledge, levels of skills, level of identity, personal factors, and fixed factors. Three axioms are proposed for effective performance improvements. These involve a performer's mind-set, immersion in an enriching environment, and engagement in reflective practice.

The theory of performance is a challenge to educators: by improving our own performance, we empower ourselves to help others learn and grow. As advocated by Harvard's Project Zero, performance is closely related to learning-for-understanding (Wiske, 1998). When people learn and grow, they are empowered to create results that make a difference. Working and learning together in ways that make the world better has been a primary goal of higher education throughout the ages.

## **Rationale for a Theory of Performance**

Humans are capable of extraordinary accomplishments. Wonderful accomplishments also occur in day-to-day practice in education. An advisor inspires students to follow their dreams.

A teacher magically connects with students. A researcher continually asks the quintessential questions that lead to revolutions in thinking. A dean inspires an entire college to collaborate and attain wonderful outcomes. Since worthy accomplishments are produced from high-level performances, a theory of performance (ToP) is useful in many learning contexts.

Traditional Contexts: A ToP informs learning in classrooms, workshops, and other venues that are traditionally associated with learning.

Non-Traditional Contexts: A ToP informs learning in contexts that are not traditionally conceptualized as learning environments. Examples of these contexts include academic advising, self-development, departments, academic committees, professional research groups, and colleges.

Organizational Learning: A ToP informs learning by organizations through the idea of examining the "level of performance" of the organization.

To perform is to take a complex series of actions that integrate skills and knowledge to produce a valuable result. In some instances, the performer is an individual; in other instances, the performer is a collection of people who are collaborating, such as an academic department, research team, committee, student team, or a university. Performance, as the adage goes, is a "journey not a destination." The location in the journey is labelled as the level of performance. Each level characterizes the effectiveness or quality of a performance.

As an academic department improves its level of performance, the members of the department are able to produce more effective student learning, more effective research, and a more effective culture. As a teacher advances his levels of performance, he is able to produce deeper levels of learning, improved levels of skill development, and more connection with the discipline for larger classes while spending less time doing this. Performing at a higher level produces results that can be classified into categories:

Quality increases - results or products are more effective in meeting or exceeding the expectations of stakeholders

Cost decreases - amount of effort or financial resources to produce a result goes down; amount of waste goes down

Capability increases - ability to tackle more challenging performances or projects increases

Capacity increases - ability to generate more throughout increases

Knowledge increases - depth and breadth of knowledge increases

Skills increase - abilities to set goals, persist, maintain a positive outlook, etc. increase in breadth of application and in effectiveness

Identity and motivation increases - individuals develop more sense of who they are as professionals; organizations develop their essence

Improving Performance: While some factors that influence improving performance are immutable, other factors can be influenced by the performer or by others. The factors that can be varied fall into three categories;

- Performer's Mind-set; it includes actions that engage positive emotions. Examples include setting challenging goals, allowing failure as a natural part of attaining high performance, and providing conditions in which the performer feels an appropriate degree of safety.
- Immersion; in a physical, social, and intellectual environment can elevate performance and stimulate personal as well as professional development. Elements include social interactions, disciplinary knowledge, active learning, emotions (both positive and negative), and spiritual alignment.
- Reflective practice; involves actions that help people pay attention to and learn from experiences. Examples include observing the present level of performance, noting accomplishments, analysing strengths and areas for improvements, analysing and developing identity, and improving levels of knowledge.

Conditions for optimal performance and improvements in performance can be synthesize in three axioms: Axiom 1- engage the performer in an optimal emotional state (performer's mind-set). Axiom 2- immerse the performer in an enriching environment. Axiom 3- engage the performer in reflective practice. Additional support for the axioms can be found in the work of Bransford et al. (2000). Their model for effective teaching and learning includes knowledge-centred, learner-centred, assessment-centred, and community-centred components. The learner-centred component involves the performer's mind-set. The knowledge-centred and community-centred components connote immersion in an enriching environment, while the assessment-centred component embraces elements of reflective practice.

#### EMPIRICAL REVIEW

# **General Empirical Review**

A number of studies have focused on the relation between government expenditure and educational performance in developed and developing countries like Cameroon. Most of these studies have analysed the situation of developing countries which have attempted to stimulate the accumulation of human capital through public education expenditure (Jung and Thorbecke, 2001). Obi et al (2016) investigated the impact of public education spending, recorded that public spending has a positive effect on education which was measured by primary enrolment rates using the ordinary least square method. Included in this study was the effect of per capita income, urbanization and public spending on health, which had a weak positive relationship with primary enrolment rates.

McMahon (1999) found a negative and significant relationship between per pupil expenditures and the primary gross enrolment rate, and a positive and significant impact of total education expenditure as a proportion of GNP. Findings from McMahon study suggest that increasing primary education expenditures has a positive and significant impact on the primary gross enrolment rate.

Gupta and Verhoeven (2001) apply Free Disposable Hull (FDH) techniques to measure the efficiency of government spending in social sector in developing countries. The study utilizes the FDH analysis taking government expenditure on education as the input and literacy, primary and secondary enrolment as output. Results show that there was an increase in efficiency in expenditure over time in Africa. However, it still lags behind compared to countries in Asia and Latin America. In a study of 5 African countries Ogbu and Gallagher (1991), attempt to establish whether education outcome is affected by the composition of government spending. They reported that enrolment rates are significantly affected by the composition of government spending. Mehrotra (1998) observes that high education attainment is associated with relatively high public spending on education and a relatively high share of primary education in total education expenditures.

Using a panel data for African countries from 1990 to 2002, the aim of Anyanwu and Erhijakpor (2007) was to investigate the relationship between government expenditure on education and enrolment at the primary and secondary school levels, with illustrations from the

SANE countries (South Africa, Algeria, Nigeria and Egypt). Results provide support for the proposition that government expenditure on education impacts positively on education attainment. The evidence is stronger for secondary education. The study also finds that other policy interventions, such as consolidating and sustaining democracy, accelerating national income and international community fulfilling its aid promises to Africa also were found crucial for school enrolment. This is consistent with the findings of Mingat and Tan (1992) and Appleton et al (1996) which reported that others variables such as per capital income, the age distribution of the population, parental perceptions of costs and benefits, urbanization and family background or parental education are statistically significant variables explaining education attainment.

Psacharopoulos (1994) made an extensive survey of published studies on private returns to investments in education around the world, using the elaborate and the earnings function method. He found that private returns to education are generally higher than corresponding social returns. There is an observed declining pattern of the returns to education over time, while all social returns decline between two and eight percentages over a 15-year period. Within a country, the rates of return generally decline with the higher the level to which they refer. Most of these rates are substantially higher than conventional returns on alternative opportunities. Finally, the less developed the country, the higher the returns to investment in education. However, these results have been criticized as been irrelevant given the fact that they employed out dated cross sectional data and that the educational expansion over the decade since then must have decreased the returns to investment in education.

In the same direction, Tafah-Edokat (1998) studying private returns to investments in education in Cameroon reached the same conclusion like Psacharopoulos above. He found that returns to education are positive and in some cases higher than returns to investment in other sectors of the economy. Primary education gives the highest returns followed by secondary and tertiary education. Thus, he concludes like Psacharopoulos, the investment in primary education should be emphasized and that individuals willing to pursue further education should be made to bear a higher proportion of the cost of such education. This study was carried out when the Cameroon economy was buoyant and the respondents were mostly limited to civil servants. However, since 1986, the Cameroonian economy has experienced a crisis and the civil servants have suffered more than 60% salary reduction, while the numbers of unemployed people have increased. The study is

restricted to primary level in a region of the country, in total neglect of the social benefits of higher education. In fact, the change in the supply of unemployed graduates calls to question the relevance of Tafah-Edocat's study. Furthermore, stress should not be only on the primary level, given the critical role of higher education in today's world.

Duflo (2001), focuses on the case of Indonesia where a massive school construction program was implemented by the national government during the 1970s. She noted that, as a result of the program, the enrolment rate went up to 83 percent in 1978 from 69 percent in 1973. Furthermore, the years of education for enrolled students and wages were also observed to increase in the same period. The importance of public expenditure in education has also been highlighted by Handa (2002) who shows that building more schools in Mozambique has a larger impact on primary school enrolment rates compared with public interventions that raise household income.

Oladoyin (2010), examined the effect of government educational spending and macroeconomic uncertainty on students' performance in SSCE in Kaduna State in Nigeria using the econometric methods of co-integration and error correction mechanism together with the vector auto-regression methodology. The study found that government educational spending impacts positively on schooling outcome while macroeconomic instability impacts negatively. The impulse response analysis shows that any unanticipated increase in the macroeconomic uncertainty rate will have a contractionary impact on literacy rate. The policy implication of this study is that government should pay attention to policies that enhance educational attainment through adequate public social investment under stable macroeconomic environment.

## **School Infrastructure and Educational Performance**

Infrastructure plays a very important role in the growth process of an economy; thereby raising the level of productivity and also leads to a higher potential level of output for the future. Infrastructure refers to the fundamental facilities and systems serving a country, city, or area, including the services and facilities necessary for its economy to function. Infrastructural development involves fundamental structures that are required for the functioning of a community and society. This is usually referred to as structures like roads, water supply, sewers, electrical grids, telecommunications, renewable energy, and so on [Abosedra etal, 2009; Mandel, 2008; Frischmann, 2007; CBN, 2003; Pendse, 1980].

School infrastructure constitutes a large component of the World Bank's education investment projects. The Bank's World Development Report 2018 titled "Learning to Realize Education's Promise" stresses the importance of making schools work for all learners and focuses on the need to ensure the high quality of education. The report emphasizes the need to guarantee the efficient use of public resources in delivering the maximum benefits of education to all children. To ensure that investments in school infrastructure achieve the maximum positive impact on learning, this report suggests that a comprehensive set of questions needs answers:

- Do all children actually have access to a place at school?
- Do the school buildings provide a safe and healthy environment?
- Are the existing learning spaces optimally designed for learning?
- Does the design of the school foster current pedagogy and community engagement?
- How can the school infrastructure be designed to evolve sustainably over the longer term?

There is actually a general belief that the condition of school's learning environment, especially infrastructure has an important impact on students' academic performance and effectiveness. The facilities that are needed to facilitate effective learning in an educational institution include adequate power and water supply, good communication system, improved transportation system, adequate classrooms, libraries, laboratories as well as furniture items and sporting equipment. The quality of infrastructure has strong influence on the academic standard which is an index of quality assurance in the school. For instance, Earthman [2002], reporting on California, revealed that comfortable classroom temperature and smaller classes enhance student's effectiveness and provides opportunities for participation more fully in discussions, reduce discipline problems and thereby enhanced better performance than students in schools with substandard buildings by several percentage points.

The landmark 2002 report "Dollars and Sense: The Cost Effectiveness of Small Schools" (Bingler et al. 2002) examined 489 schools whose designs were submitted to design competitions between 1990 and 2001 and concluded that small schools can be built and operated cost effectively according to a broad variety of measures. The same study also mentioned that small schools are not effective solely by virtue of being small but rather work best when they take advantage of being small. The best small schools offer an environment where teachers, students, and parents see

themselves as part of a community and deal with issues of learning, diversity, governance, and building in a home-like learning place. The study found the most common drawbacks of larger schools were: higher transportation costs, higher administrative overheads, lower graduation rates, higher absenteeism, higher rates of vandalism and lower teacher satisfaction.

The Tennessee STAR (Student Teacher Achievement research) (Finn Krueger 2001) was carried out between 1985 and 1989. In this study, random students from kindergarten to third grade were placed in either small classes or large classes. The students in smaller classes, consisting of 13–17 students, scored 0.015 to 0.020 or about 5 percent higher than the students in the larger classes on standardized tests in both math and reading. This was particularly significant for students from kindergarten to third grade, and those benefits were carried on into higher grades. Using a slightly different methodology, a study published by the Los Angeles Unified School District (Fidler 2001) showed that, with other parameters being equal, the longer a student is taught in smaller classes, the higher his or her achievement in reading and language. In general, larger gains were observed in mathematics, except for those students with limited English proficiency.

Research done in Latin America in 2011 (Duarte et al. 2011) showed that the lack of basic services such as electricity, potable water, sanitary drains, telephone or proper ways to dispose garbage and waste in schools is strongly associated with violence, discrimination, and limited opportunities to learn. The study pointed out that investments in school infrastructure and the physical conditions for learning are not a luxury but a need. In 2014, The Organization for Economic Co-operation and Development (OECD) published a report highlighting seven key ways to protect schools from earthquakes, which in 2017 became a monitored framework.

## **Didactic Material and Educational Performance**

Adeogun (2001) in his study revealed a strong positive link between instructional resources and academic performance. According to Adeogun, schools that possess more instructional resources performed better than schools that have less instructional resources. This finding supported the study by Babayomi (1999) that private schools performed better than public schools because of the availability and adequacy of teaching and learning resources. Adeogun (2001) noted that there was a low level of instructional resources available in public schools and hence commented that public schools had acute shortages of both teaching and learning resources.

He further commented that effective teaching and learning cannot occur in the classroom environment if essential instructional resources are not available.

Mwiria (1995) supports that student's performance is affected by the quality and quantity of teaching and learning resources. This implies that the schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, hear and experiment with, stand a better chance of performing well in examination than poorly equipped ones.

A study by Chonjo (1994) on the physical facilities and teaching-learning materials in Primary schools in Tanzania supports the above views. Chonjo interviewed teachers and students on the role of instructional materials on effective learning. From his study he learned that performance could be attributed to adequate teaching and learning materials and equipment that are in a school. He recommended that in order to provide quality education the availability of sufficient quality facilities is very important. Chonjo's study was one of its kinds in Tanzania which directly linked the role of physical facilities with students' academic performance in primary schools. However, Chonjo focused only on physical facilities, leaving out instructional materials. To me, physical facilities such as buildings including classrooms, chairs and desks are not enough to provide quality teaching and learning. Instructional materials are also necessary.

Adalikwu and Iorkpilgh (2013) in their research found that there is a statistical relationship between the academic performance of chemistry students and the use of instructional materials in Teaching-learning. The result agrees with the findings of Inyang (1997) that teaching is effective when the teacher make use of instructional materials.

Lance et al, (1999); Todd & Kuklthau, (2004) Confirmed a significant correlation between the presence and the use of library materials by students and teachers with better performance. Similarly, (Todd & Kuklthau, 2005, p.82.) found a simple correlation between the student's inputs and better academic achievement. Analysis shows that the availability and the use of didactic materials like chalkboard, math kit, teaching guide, science guide, audio-visual aids and the use of science kit have positive impact on the academic performance for science students. The concept of instructional materials revolves on the fact that, it does not only stimulate the learner, but enhances learning outcome generally, increased relationship and recall by involving the relevant senses and makes instruction clear, meaningful and in most cases real.

Also Emma & Ajayi, (2004) asserted that "teaching equipment and materials have changed over the years, and do not only facilitate the teaching-learning situation but also addresses the instructional needs of individuals and groups." Okendu (2012) asserted that regular instructional supervision has a significant bearing on students' academic performance. He also, affirmed that adequate supply of instructional resources has significant effect on students' academic performance. Onasanya & Omosewo (2011) confirmed that both standard and improvised instructional materials have the same positive effects on students' academic performance.

# **Human Capital and Educational Performance**

The development of human resources is a key element in updating knowledge, mobilizing skills and a lever for managing professional careers. A training is a process to get the required skills for a particular subject. Teaching is the learning process in which knowledge and information's are transferred to the children to understand the scientific process (Sivarajah et al 2019). A teacher is the facilitator to provide the guidance in the teaching-learning process (Obidike, 2017). The training is a valuable practice for the teachers to enhance their teaching skills. A trained teacher has more skills and techniques to be applied for the better academic achievements of learners (Ulla, 2018). A teacher having better teaching skills can also produce students' interest in a particular subject (Giovazolias et al., 2019). Many researchers including (Oliveira et al., 2019; Supriatna, 2015; Ulla, 2017) stated the importance of teachers training. The teacher's training provides the solutions of educational problems (Schütze et al., 2017).

In this modern age, the teacher's training is an important requirement and essential component for all the educational activities including conducive learning environment, curriculum development and implementation and assessment (Zulfiqar, 2016). A trained and skilful teacher has more ability to teach the students and implement the various teaching methods successfully (Saira et al., 2021). When teachers apply the various teaching methods and techniques according to the acquired skills then students achieved higher academic results and the interest of the student is also increased (Wuryaningsih et al., 2019). For Guérin and Ouadahi (2007), training can be envisaged to develop the skills of the employee, based on his level of education and the experience he may have already acquired, and boost his self-confidence and his sense of personal effectiveness. To this end, teacher training and continuous teacher training is inseparable from the quest for the overall performance of the education system.

There is a close relation between the teacher's training, teaching methods and students' academic achievements. A trained teacher can apply multiple teaching methods and techniques in better way. Nzarirwehi et al. (2019) conducted a study to compare the academic achievements of students learnt from trained and untrained teachers. The outcomes of the research indicated that the pupils who learnt from the trained teachers got high academic achievements and the other students learnt from the untrained teachers got low academic achievements.

Behroz-Sarcheshmeh et al. (2017) investigated in a study that the trained teachers have better communication, teaching and critical thinking skills. They also concluded that students' academic achievement and interest improve when a trained teacher apply the teaching methods according to the classroom environment and situations. Özüdogru (2020) conducted a research to check the responses to the questions raised by students from trained and untrained teachers. The conclusion of the study indicated that the teachers who have done trainings responded the students in a better way as compared to the untrained teachers.

A study from the Global Poverty Research Group, looking at student performance in India, finds that pre-service teacher training and having a Masters' level qualification together raise student achievement by a small, but significant, amount (Kingdon, 2006). Other studies also show that teachers' subject knowledge increases students' test scores (Lee et al, 2005; Spreen and Fancsali, 2005). A few studies show that girls' achievement is higher when they have a female teacher (Aslam and Kingdon, 2008). The TEGINT project in particular, finds that better trained teachers (pre-service training) are associated with girls speaking out more about obstacles to completing their education (e.g. early marriage and pregnancy) and possible solutions.

## **Government Educational Investment and Economic Growth**

Empirically, education has been found to have a positive and significant effect on economic growth. This goes to explain why government involvement in spending on education is necessary. Otani and Villanueva (1990), in a study carried out on 55 developing countries from 1970 to 1985 found that educational program and human capital investment such as vocational training and health training would increase a country's output and per capita income. Consequently, the countries would achieve high level of economic performances. The research demonstrated that human capital development contributes an annual average of 1% increase in developing countries' growth rate.

Permani (2009) in his study on development strategy in East Asia concluded that this region gives greater emphasis to education. His study found that there is positive relationship between education and economic growth in the East Asia. In the meantime, there is bidirectional causality between education and economic growth. Pradhan (2009) supported this finding and proved that education has high economic value and must be considered as a national capital. He suggested that this capital must be invested and his country, India, must capitalize this human capital development besides the physical capital that contributes to country's economic growth.

Azomahou et al. (2009) makes use of generalized additive models and shows that countries which are near the technology frontier have to invest in higher education while those far away from the frontier can enhance their technology level by investing in primary and secondary schooling. The study differs from others as it shows the need of complementarities between education and research & development expenditures that is essential for economic growth. The study takes enrolment ratio to measure education which may not be a very good indicator as it fails to capture the dropout rates or passing ratio.

Afzal and al. (2010) acknowledged that education has positive long-run and short run relationships on economic growth in Pakistan. This is in line with findings from Lin (2003), and Tamang (2011) on their studies in Taiwan and India respectively. In addition, Baldacci and al. (2004) documentation on 120 developing countries from 1975 – 2000 found that there are positive relationships in the long-run between educational expenses and economic growth. Finding by Kakar and al., (2011) on their study in Pakistan concluded that there is no significant relationship between education and short-term economic growth but the educational development has impact in the country's long run economic growth. These findings demonstrated that government expenditure in educational sectors does not only have a positive impact on a country's economic growth in a short run but in the long run as well.

Douanla and al., (2015) in a study carried out to evaluate the role of public education spending on economic growth in Cameroon from the period 1980 to 2012, found out that there is a significant relationship between public education spending and economic growth in the long run in Cameroon since the result obtained was positive and statically significant. They emphasized that public education spending is an essential factor that affects economic growth in Cameroon, as such for

any policy measures aimed at ameliorating the economic growth of Cameroon, public education spending must be taken into consideration.

## SUMMARY OF REVIEWED LITERATURE AND STUDY GAP

From the analysis of the above literature on government educational spending and its effect on academic performance, it is seen that most authors concerning infrastructure highlight the fact that smaller schools and classrooms positively affect students' performance. According to Earthman (2002), smaller classes enhance student's effectiveness and provides opportunities for more participation in discussions, reduce discipline problems and thereby enhance better performance than students in schools with substandard buildings by several percentage points. Bingler et al. (2002), found that the most common drawbacks of larger schools were: higher transportation costs, higher administrative overheads, lower graduation rates, higher absenteeism, higher rates of vandalism and lower teacher satisfaction.

Looking at human capital investment, many researchers including (Oliveira et al., 2019; Supriatna, 2015; Ulla, 2017) state the importance of teachers training. To them there is a close relation between the teacher's training, teaching methods and students' academic achievements. A trained teacher can apply multiple teaching methods and techniques in better ways. For Behroz-Sarcheshmeh et al. (2017), trained teachers have better communication, teaching and critical thinking skills. They also concluded that students' academic achievement and interest improve when a trained teacher applys the teaching methods according to the classroom environment and situations.

With respect to didactic materials, all reviewed authors found that there was a strong positive link between instructional resources and academic performance, as according to Adeogun (2001), schools that possess more instructional resources performed better than schools that have less instructional resources. Mwiria (1995), supports that student's performance is affected by the quality and quantity of teaching and learning resources.

The researcher supports the point of view that government educational expenditure has a positive effect on educational attainment, as infrastructural investment renders the learning environment more conducive thereby improving school enrolment, the availability of didactic or instructional materials facilitates the teaching – learning process and also permits to meet the

instructional needs of individual group of students/pupils, while human capital investment permits to equip teachers with the necessary skills and competences needed to carry out their teaching function effectively and efficiently. We believe that investments in education and at the primary level in particular should be prioritized as it yields higher returns than investments in other sectors of the economy as affirmed by Tafah-Edokat (1998), who found out that returns to education are positive and in some cases higher than returns to investment in other sectors of the economy. Primary education gives the highest returns followed by secondary and tertiary education. Thus, investment in primary education should be emphasized, and individuals willing to pursue further education should be made to bear a higher proportion of the cost of such education.

However, the above literature doesn't specify a certain level or rate of government educational investment, thus it's at the discretion of governments to invest according to their abilities, priorities and goals. Also most authors focus solely on enrolment as the main indicator of performance, living out many other relevant performance indicators such results, repetition and promotion rates, skill acquisition as well as completion rate. Thus in a bid to fill this gap, this study will focus on four performance indicators namely: enrolment, skill acquisition, success or results and completion.

## CHAPTER THREE: RESEARCH METHODOLOGY

This chapter provides a description of the methodology, which was used in this study. It includes description of the research design, area of the study, population of the study, sampling technique and sampling size, instrumentation, validity and reliability of the instrument, data collection procedure, data analysis technique and presentation, ethical considerations and summary.

#### AREA OF THE STUDY

The Area of study refers to the geographical location of the population to be studied. The study is carried out in the Mfoundi division. The division has six subdivisions that is Yaoundé I, Yaoundé II, Yaoundé IV, Yaoundé V, and Yaoundé VI subdivision. It extends from the center to the Southwest of the city, Northwest of Yaoundé III and Southeast of Yaoundé VII. The Mingosso River forms the Southwestern boundary and separates it from the commune of Mbankomo. To the North, the Abiergue River and Urban Forest No. 2 form the boundary with Yaoundé II.

The district commune of Yaoundé VI was created in 1993 (Presidential decree n°93/312 of November 25, 1993), by dismembering the Northwestern part of the commune of Yaoundé III. It has as mayor since 2007 Mr Jacques Yoki Onana, and its main district is the Biyem-Assi district. The commune is made up of the following districts; Biyem-Assi, Mendong Camp Sic, Nkolbikok II, Etoug-Ebe I, Melen I, III, IV, V, VI & VIIA, Mvog-Betsi, Etoug-Ebe II, Melen VIIB, Eba Biyem-Assi, Melen VIIIC, Melen IX and Nkolbikok I. The Yaoundé VI Subdivision is chosen for the study. It is chosen for the proximity and availability of many primary schools and experienced head teachers who are vital for the study.

## RESEARCH DESIGN

A research design is the 'procedures for collecting, analysing, interpreting and reporting data in research studies' (Creswell & Plano Clark 2007, p.58). It is the overall plan for connecting the conceptual research problems with the pertinent (and achievable) empirical research. In other words, the research design sets the procedure on the required data, the methods to be applied to

collect and analyse this data, and how all of this is going to answer the research question (Grey, 2014). De Vos et al (2012, p.307), adds that a design refers to all those decisions a researcher makes in carrying out the study. The researcher has adapted a convergent parallel research design which is a type of the mixed method research approach. The purpose of the convergent parallel design mixed methods is to provide a comprehensive analysis of the research problem by converging or merging quantitative and qualitative data. In this design, the researchers typically collect both forms of data at the same time, prioritizes the methods equally, keeps the data analysis independent, mix the results during the overall interpretation and tries to look for convergence, divergence, contradictions or relationships of the two sources of data (Hui Bian, n.d). The idea here is that by collecting both, the weaknesses of each will be strengthened by the other. Here the qualitative data and the quantitative data can be used to check one another.

A mixed-methods approach offers a number of benefits to approaching complex research issues as it integrates philosophical frameworks of both post-positivism and interpretivism (Fetters, 2016), interweaving qualitative and quantitative data in such a way that research issues are meaningfully explained. It also offers a logical ground, methodological flexibility and an in-depth understanding of smaller cases (Maxwell, 2016). In other words, the use of mixed-methods enables researchers to answer research questions with sufficient depth and breadth (Enosh, Tzafrir, & Stolovy, 2014) and helps generalize findings and implications of the researched issues to the whole population. The quantitative data brings breadth to the study, while the qualitative data provides depth to it. Moreover, quantitative results can be triangulated with qualitative findings and vice versa. Triangulation, as a qualitative research strategy, is the use of multiple methods or data sources to develop a comprehensive understanding of a research problem or to test validity through the convergence of information from different sources (Carter et al., 2014). A mixed-methods approach, therefore, offers the best chance of answering research questions by combining two sets of strengths while compensating at the same time for the weaknesses of each method (Johnson & Onwuegbuzie, 2004). Consequently, "mixed-method research designs are becoming increasingly relevant to addressing impact research questions" (Saville, 2012, p.7).

In this study, the researcher has adopted a convergent parallel research design as the integration of both the quantitative and the qualitative results will enable him gain a complete understanding of the influence of government educational investment on the performance of primary school pupils. It is an approach in which two data sets are combined to get a complete picture of the issue being explored and to validate one set of findings with the other (Creswell and Plano Clark, 2018). The quantitative data will be collected using questionnaires, while the qualitative data will be collected through interviews.

## **POPULATION**

A population is the entire group of individuals, events or objects having common observable characteristics (Mugenda & Mugenda, 2009). The population of the study was made up of all the public primary school head teachers and class six pupils in the Yaoundé IV subdivision. Data obtained from the inspectorate of basic education for Yaoundé IV shows that there are 45 government primary schools in the subdivision, each having one head teacher and 3,061 class six pupils (MINEDUB, 2019).

# **Target Population**

Borg and Gall (2007) defines target population as all members of a real or hypothetical set of subjects/people/events to which a researcher wishes to generalize the results of the study. This study targeted 414 respondents from six selected public primary schools in the Yaoundé IV subdivision, consisting of 06 head teachers and 408 class six pupils (Mfoundi regional delegation, 2019).

## **Accessible Population**

The accessible population is the portion of the population to which the researcher has reasonable access. In our study, the accessible population was all the class six primary school pupils and the head teachers of the six targeted primary schools in the Yaoundé IV subdivision.

## SAMPLING TECHNIQUE AND SAMPLE SIZE

According Amin (2005), sampling is the process of selecting elements from a population in such a way that the sample element selected represent the population. To him, the result of the portion of the sample can be generalized to the entire population. Singh (2018, p.02), states that, while the target population is like a collection of elements in a set with common characters, sampling is a

subset of the target population. The sample based on Mugenda and Mugenda (2003) proposes that 10% - 30% of the target population is recommendable for a sample size.

The researcher purposefully sampled public primary schools in Yaounde VI municipality and used simple random sampling for selection of participating schools by writing the name of the schools on pieces of papers, folding them, placing them in a bowl and mixing them well, then randomly selected six schools from the bowl. The sample population for the quantitative study was 210 pupils, chosen proportionately to the target population of 408 pupils as recommended by Krejcie and Morgan in 1970), while the sample population for the qualitative study was all the six head teachers given their small number.

**Table 3.1:**Sample Matrix

No	Name of Schools	Number of pupils	Head teachers		
1	GBPS Mvog Betsi group 1A	43	1		
2	GBPS Mvog Betsi group 1B	34	1		
3	GBPS Mvog Betsi group 2A	34	1		
4	GBPS Mvog Betsi group 2B	36	1		
5	ETOUG EBE GEPS group 1	29	1		
6	ETOUG EBE GEPS group 2	34	1		
	Total	210	6		

Source: Researcher (2022)

## **INSTRUMENTATION**

Instrumentation is the process of constructing research instruments that could be used appropriately in gathering data on the study. A research instrument is a tool used to collect, measure and analyse data related to the study. Commonly used instruments are questionnaires, interview guides, observation and others. This research will warrant the use of questionnaires to collect information from pupils and an interview guide to collect information from the head teachers.

# Questionnaire

A questionnaire is the instrument for collecting the primary data (Cohen, 2013). It is a set of printed or written questions with a choice of answers, devised for the purpose of gathering information from respondents for a survey or a statistical study. They have many uses, most notably to discover what the masses are thinking about a topic or issue. According to Kombo and Tromp (2006), questionnaires facilitates the collection of information from large sample population. With questionnaires, the researcher uses less time in collecting large amounts of data, it is easy for respondents to answer the questionnaires and refund them back, the instrument offers greater assurance of data and lastly it is less expensive.

The researcher constructed an open-ended questionnaire with five sections consisting of items and proposed responses, from which the respondent was required to choose. This was done so as to tap as much information as possible from the different categories of respondents. The first section collected demographic information, related to respondents' gender, age group, class and name of school. The second section which was related to the variables of the study had nine items related to infrastructural investment. The third section had six items related to didactic material investment; the fourth section had four items related to human capital investment and the fifth and last section had six items related to pupil's performance.

The twenty-five items (25) of sections B, C, D & E were then weighted with the use of Likert Scale where the participants were required to place a tick in the boxes related to options that were in congruence with their point of view. The four options and their corresponding weights were as follows;

**Table 3.2:**Questionnaire Options and Corresponding Weights On the Likert Scale

Option	Weight		
Strongly Agree (SA)	4 points		
Agree (A)	3 points		
Disagree (D)	2 points		
Strongly Disagree (SD)	1 point		

Source: Researcher (2022)

#### **Interview Guide**

An interview is a conversation between two people (the interviewer and the interviewee) where questions are posed by an interviewer to obtain information from the interviewee to get more information concerning the particular study (Rampur, 2010). Interviews provide in-depth information pertaining to participants' experiences and viewpoints of a particular topic (Grey, 2014). Thus, it is very suitable for this study to get rich and detailed information about the effect of various government educational expenditures and on the performance of primary school pupils from the viewpoint of experts in the field which are head teachers. More specifically, the interview guide was constructed to capture supplementary information and for triangulating information that was obtained from pupils. Besides, the information from the interview is used to justify and explain some of the relationships in the quantitative result. As common with quantitative analyses, there are various forms of interview design that can be developed to obtain thick, rich data utilizing a qualitative investigational perspective (Creswell, 2007). These include the three fundamental types of research interviews: structured, semi-structured and unstructured. In this study, interview questions are designed to be semi-structured as they allow the study to benefit from both the structural and unstructured approach. The structured nature provides key questions that help to define the areas to be explored, hence, ensuring cross-case comparability (Bryman, 2004). On the other front, the unstructured approach allows the researcher and/ or the interviewee to diverge constructively in order to pursue an idea in more detail (Gill et. al., 2010). The variables adopted in the quantitative model will be qualitatively explored and used to formulate the interview questions.

#### **VALIDITY OF RESEARCH INSTRUMENTS**

Validity is the ability of the research tools to measure what is required to measure. It is the extent to which a measure adequately represents the underlying construct that it is supposed to measure (Drost, 2011). To establish the validity of an instrument, Cresswell (2012) recommends the use of professional experts in the field of research who scrutinizes the content validity of the research instruments of the study. This study sought to establish the validity of the instruments by seeking the opinions of colleagues, supervisors, head teachers and experts by discussing with them as they crossed checked and scrutinised the instruments. The experts made recommendations and suggestions for further improvement of the instruments so as to enable it be reader friendly, easily

understandable and do away with ambiguous questions. Some questions were equally added to make the instruments more comprehensive in covering the aspects the researcher intended to cover in the study.

Face validity refers to the likelihood that a question was misunderstood or misinterpreted, thus helps to iron out ambiguity. To ensure validity of research instruments; pilot testing of the copies of questionnaires and interview guide was done at Peace Home Academic Complex. This helped to assess the language clarity, acceptability in terms of length and ethical consideration. Ambiguous items found in the instruments were corrected thus increasing face validity.

Content validity of an instrument refers to whether an instrument provides adequate coverage of the topic. The researcher ensured content validity of the said instrument by ensuring that the questions in the instruments really conformed to the study's conceptual framework. Hence the instruments were concerned with the entire variables which were; the independent variable (government educational investment) and the independent variable (performance of primary school pupils). Content validity was also improved through expert judgment.

In order to establish content validity, results from the ratings were computed using the following formula:

Content Validity of Instrument (CVI) = Number of items rated as relevant/ total number of items in the questionnaire.

 $CVI = 22/25 \times 100\%$  CVI = 88%

This resulted to a content validity index of 88%, meaning that the instrument was valid.

#### RELIABILITY OF RESEARCH INSTRUMENTS

Reliability is the extent to which measurements are repeated when different people perform the measurement on different occasions, under different conditions, supposedly with alternative instruments which measure the construct or skill. It is the degree to which the measure of a construct is consistent or dependable (Drost, 2011). Reliability of quantitative items in the questionnaires was established by computing Cronbach alpha coefficient which is an estimate of internal consistency by determining how items on a questionnaire relate to all other items and to the total test (Simon, 2012). According to Creswell (2012), in social sciences, a reliability coefficient of 0.6 and above is satisfactory for any research instrument. The reliability of the

instrument in this study was done by use of test-retest method. This is a method that involves the administration of an instrument to a group of individuals on two different occasions (Onancha & Okpala,1995). The instruments were administered to 15 pupils in Peace Home Academic Complex, selected for pilot study. After two weeks, the same instruments were administered to the same participants to obtain two set of scores from same group which does not form a part of the sample population. Correlation coefficient and descriptive analysis was computed using SPSS data analysis program version 23 and interpreted to provide an estimate of reliability. The questions for the pupils had a coefficient of 0.8 and thus they were satisfactory according to Creswell (2012). The correlation co-efficient was used in order to establish the extent to which the content of the questionnaire was consistent in producing the same responses when the instrument is administered.

## DATA COLLECTION PROCEDURE

The researcher started by applying for a research permit from the Faculty of Education of the University of Yaoundé 1. This was done to give the study a legal backing and to authorize the researcher to conduct the study in the identified primary schools in Yaoundé IV subdivision. Once granted, the researcher personally visited the sample schools and administered the questionnaires emphasizing on how the questions will be answered. Questionnaires for each selected schools were filled and returned after 1 day, even thou most returned theirs on the spot. A total of 250 questionnaires were administered and information gotten was trust worthy since it was obtained directly from the field without secondary aid. Interviews were done at the leisure time of the head teachers strictly on appointment. The researcher asked for informed consent from respondents and guaranteed their confidentiality. The researcher abode to research conduct and ensured that there was no negative effect to respondents. Also cultural differences and gender aspects were considered.

## Dependable variable

This refers to the variable that depends on other factors that are measured. Performance of primary school pupils is the dependent variable of this study which depends on factors such as the level of governments educational investment.

## **Independent variable**

The Independent variable is unaffected and stable and does not depend on other variables. Government educational investment is the independent variable in this study, and will affect the survival of the dependent variable positively or negatively. From it, the working variables for this study were derived which include: Infrastructural investment, Didactic material investment and Human capital investment

# DATA ANALYSIS TECHNIQUE AND PRESENTATION

Data analyses involved the organization and interpretation of all the collected data so as to simplify and present it in the best way possible for easy interpretation and understanding. All data collected from the field were first of all checked and cross checked to ensure conformity. Data was verified, compiled, coded and summarized prior to analysis. Univariate analysis was used to determine the distributions and magnitude of individual variables among respondents which included percentages and frequencies. The version 20.0 Statistical Package for Social Science (SPSS) computer program was used to analyse both quantitative and qualitative data. Descriptive statistics (including percentages, frequencies, figures etc.) determined where the implication of the results would lead to recommendation.

## **Dissemination of Results**

The results of the study shall be defended as a master's thesis and a corrected copy shall be submitted to the library of University of Yaoundé I. Manuscript will also be prepared for publication in reputable journal.

**Table 3.3:** Synoptic Table

General hypothesis	Specific hypothesis	Independent variable	Indicators	Dependent variables	Indicators	Measuring scale	Modalities	Statistical analysis tool	Number of questionnaire items
Government educational investment influences the performance of primary school pupils.	Ha1: Government's infrastructural investment influences the performance primary school pupils.  Ha2: Government's human capital investment influences the performance of primary school pupils	Infrastructural investment  Didactic material investment	classrooms libraries science lab computer lab sports field roads water electricity  -Minimum package -Textbooks -Teaching materials -Sports equipment -Pharmacy	Performance of primary school pupils	-Enrolment -Skills acquired (reading, writing and mathematics skills) -Success (promotion rate, proportion of repeaters and results in official exams)	Likert scale	-strongly agree -agree -disagree -strongly disagree	SPSS 20.0	5
	Ha3: Government's investment in didactic material influences the performance of primary school pupils.	Human capital investment	Teachers Administrators Inspectors		Completion				

Source: Researcher (2022)

#### ETHICAL CONSIDERATION

Generally, ethical requirements in research emphasised on exhibiting high standard of professionalism when conducting research works of any kind and as such, research endeavours must be guided by research ethics in the planning, conducting and reporting Guthrie, (2010). Throughout the period of this study, the researcher observed ethical procedures by ensuring that respondent's dignity was respected. All participants were treated with respect and their confidentiality maintained. The process of conducting this study started with the approval of the topic by the supervisor from the University of Yaoundé 1. Before engaging in data collection, the researcher sought permission from the Faculty of Education and from the school heads of the sampled schools. This was done through an advance letter informing the relevant authorities about the study.

An informed consent was used to ensure that the respondents understand their rights and obligations before participating in the research study. This was represented by an introduction letter attached to the questionnaire. Consequently, selected respondents were consulted before they participated in the research study as they were briefed on the research objectives and aims before they could make their own informed consent. Also their confidentiality was ensured as the researcher avoided elements that could indicate or reveal respondent's identities.

## CHAPTER FOUR

# DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

This chapter presents the analysis and interpretation of the data gathering from the closed-ended questionnaires for pupils and the interviews from head teachers. This chapter is divided in two parts, with the first part presentation of the qualitative data from the interviews conducted with the head teachers, while the second part presents the quantitative data obtained from the questionnaires administered to pupils. The summary of the data has been presented with the use of tables with frequencies and percentages that incorporates the use of the Statistical Package for Social Science (SPSS) with the Pearson product moment correlation test on each hypothesis of the study. The analysis presented in this chapter were performed using data collected by the researcher in the Yaoundé VI municipality in September 2022.

# **QUALITATIVE DATA**

The above findings were supplemented by findings from a qualitative research where the researcher continued to interrogate head teachers during interviews by asking them "How do you access the level of infrastructural investment done by the government in your primary school?" In answering the question, a moderate number of the respondents between the ages of 31 years to 40 years and who had spent more than ten years indicated that the government is trying to provide necessary infrastructures, but her efforts are not enough due to the large inflow of pupils from crises affected areas, thereby increasing the populations accommodated by schools. One responded said;

"We expected that the government would have even done something like increasing the infrastructural development by adding some structures. What he has done is increasing the number of schools as in my school here we are four: he has increased the number by two more schools in one structure, meaning one building accommodates four schools. So how is it really helping? That's the problem we are facing here; when it comes to infrastructure we have a problem. When you go to the classroom you will see how the children are full there but we will manage as we were only told to do the shift system but still it's not still ok"

Another head teacher revealed that:

"The government is doing her best as when you look around you see the renovations that is in this school, the government is actually doing her best. We know there are always challenges, but I think what we are seeing now is better".

Head teachers were asked if the provision of infrastructures affected pupil's performance, and the question was given as: "In your view, does the provision of this necessary infrastructures affect your pupil's performance?" In answering, most of the teachers responded saying yes it affects their performance as for effective learning to take place the learning environment must be conducive. One respondent revealed that;

"The school must be conducive for learning to take place effectively. If the classrooms cannot carry the number of pupils that have come, how will the children really learn? It really affects their performance! There are some children that have comfort at home but when they come here the benches are not enough. You will see four – five children on a bench because the number of pupils in the classroom are more than the classroom. So the infrastructural development of the school is too low and its really affecting performance".

## Another head teacher said:

"It affects to an extent because when you see this our provided classes, you see that the infrastructures are not enough. So it is our wish if the government could put in some more effort with what they are already doing".

Head teachers were asked; "How do you access the level of didactic material provided by the government for your school?" In answering, most head teachers responded saying the didactic materials provided are not up to expectation as the minimum package provided is insufficient and at times not given, while majority of pupil's didactic materials are provided by parents who most at times are unable to afford them. However, a good proportion of pupils benefit from the textbooks provided by the government, and PTA funds go a long way to assist schools and teachers with basic required didactic materials such as chalk, lesson note books, pens and first aid material. One head teacher revealed;

"They started a project last year called the PAREC, they started by giving us books we appreciate that one, but like Oliver Twist we will still ask for more because when they go to a class of 60 they can give 20 books but if they can come to a class of 60 and give out about 40 - 50 books, we will know that those parents that are able can

buy for the remaining 20, let the ratio be around 1:2 not 1:3 or 1:4 like that. But for our minimum package we are still waiting for it, since school started they have not given it so we are still waiting although the PTA is trying to support us in one way or the other by giving us pens, chalk for teachers to start but we are still waiting for our minimum package".

Head teachers were also asked if the provision of this didactic materials affected pupil's performance, and the question was given as: "In your view, does the provision of this didactic materials affect your pupil's performance?" In answering, most of the teachers responded saying yes it affects their performance as the availability of this didactic materials will facilitate the teaching—learning process and permit children whose parents can't afford textbooks get to learn how to read and write with provided English and literature textbooks. Here, one head teacher actually is quoted to have said;

"Yes if the materials are there, then the children are bounded to perform better than what the teacher's initiative alone would do. So if the materials are there I would think the performance will be far more better; it affects the children when the materials are not there as is the case now".

## While another head teacher emphasized that;

"Of course when they are not sufficient, it must definitely affect the children's performance".

Head teachers were further asked; "How do you access the level of human capital provided by the government for your school? In answering this question, most of the head teachers said they were satisfied with the human capital supplied to their schools, as they have sufficient teachers, administrators and pedagogic supervisors. However, a few of them still need teachers, as one head teacher said;

"Although I still need teachers but at least there are teachers in all the classes. I have still applied for teachers, but all the classes have teachers".

## Another head teacher said;

"As for that one the government is doing well in that aspect. In the case of our school we really have enough teachers, I can bear witness because even the neighbouring school like the one over there, I've been there and there're teachers. Even for administrators and inspectors its ok".

## While another head teacher said;

"With that one we have no problem, the government supplies teachers to use. When we fill our end of term reports complaining that we don't have, when the year is coming by they make sure that they can send you about one or two. And there is this aspect that the government has done this year that I give them a plus. It has been two years ago they will transfer teachers to schools, they will come, go to the inspectorate, find their way and stay there and avoid the classroom. But this year around, the government has redeployed all those teachers back to the classroom and we are so happy. Our pedagogic animators when they come they make sure they update us if we are lacking in one way or the other".

Head teachers were also asked if the provision of this human capital by the government affected pupil's performance, and the question was given as: "In your view, does the provision of this human capital affect your pupil's performance?" In answering, most of the head teachers responded saying yes their presence affects their performance positively as the teaching-learning process takes place effectively and the school can be administered smoothly. One respondent said;

"It is a plus to the learners because learning goes effectively".

## While another head teacher said;

"Yes, it affects. When I started working here I had just three teachers and it was so difficult. The school was still new so it was very difficult. So if I want to compare that time and now; at first our percentages used to be very low but now we are scoring a 100% in our exams, so it is proof that the teaching is effective".

Further still, during the interview sessions, the study sought to establish if the provision of these necessary infrastructures, didactic materials and human capital had a major effect on the pupil's performance, and the question asked was; "Do you think the provision of infrastructure, didactic materials and human capital by the government has a major effect on pupil's performance?" One of the respondents answered;

"You know what makes a child to study is when there are good teachers, secondly when the environment is conducive, when they have their texts books, and the government is trying to supply these things. It affects their performances positively. This are major factors that affect their performance".

### Another head teacher said:

"It has a major effect on the children's performance. When children are accommodated well and they study freely it is good".

Finally, head teachers were asked if there were other factors aside those investigated in the study that could influence pupil's performance, and the question was given as; "What other factors can significantly influence their performance?" Here, one head teacher actually said;

"This are the major factors, but however teacher's motivation and head teacher's leadership styles in school can equally affect pupil's performance".

#### Then another one added:

"I don't think at our level we have gone beyond this. If we go beyond this that will be maybe asking too much. For now, I think if we can make better use of what is available, I think we can do best".

## **QUANTITATIVE DATA**

## **Frequency Tables**

## **Demographic Information**

**Table 4.1:**Sex Distribution of Correspondent

Gender	Frequency	Percent
Male	95	45.2
Female	115	54.8
Total	210	100.0

Source: Researcher (2022)

The table above shows the sex distribution of correspondents of both male and female. The female respondents were greater than the male respondents with a percentage rate of 54.8% and male 45.2%. Out of 279 correspondents, 142 were female while 137 were male.

**Table 4.2:**Age Distribution of Correspondents

Age	Frequency	Percent
6-10 years	82	39.0
11-15 years	117	55.7
15+years	11	5.2
Total	210	100.0

Source: Researcher (2022)

According to the above table, the age group from 11-15 years carried the greater percentage of age distribution with 55.7%, the age group from 6-10 years followed with 39.9%, while those above 15 years were the least and carried 5.2% of the study. Out of 210 pupils, 82 were between 6-10 years, 117 were between 11-15 years and 11 were above 15 years. This indicates that the researcher was dealing with pupils who have a certain degree of awareness of their school environment and their academic performance.

**Table 4.3:** Frequency Based On Name of School

School	Frequency	Percent
GBPS Mvog Betsi group 1A	43	20.5
GBPS Mvog Betsi group 1B	34	16.2
GBPS Mvog Betsi group 2A	34	16.2
GBPS Mvog Betsi group 2B	36	17.1
ETOUG EBE GEPS group 1	29	13.8
ETOUG EBE GEPS group 2	34	16.2
Total	210	100.0

Source: Researcher (2022)

The researcher decided to use six schools in carrying out the research. Due to the fact that all the questionnaires were not return, the researcher got 43 from GBPS Mvog Betsi group 1A representing 20.5%, GBPS Mvog Betsi group 1B 34 questionnaires were return with a percentage rate of 16.2%, GBPS Mvog Betsi group 2A 34 respondents with 16.2%, GBPS Mvog Betsi group 2A 34 correspondent representing 16.2%, GBPS Mvog Betsi group 2B 36 respondents carrying 17.1%. ETOUG EBE GEPS group 1 with 29 correspondents representing 13.8% of the accessible population, while ETOUG EBE GEPS group 2 had 34 correspondents representing 16.2%.

**Table 4.4:** Frequency Based On Class

Class	Frequency	Percent
Class 6	210	100.0
Total	210	100.0

Source: Researcher (2022)

The table above reveals that all the data collected was from class six pupils.

## RESPONDENTS VIEWS ON THE STUDY VARIABLES

**Table 4.5:**Respondents View On Infrastructural Investment

No.	Item		SA		A		D	;	SD
		f	%	f	%	f	%	f	%
1	There are enough classrooms in school	53	25.2	112	53.3	30	14.3	15	7.1
2	Classrooms are large enough to	41	19.5	112	53.3	43	20.5	14	6.7
	accommodate all pupils								
3	We sit 2 per bench in class	34	16.2	103	49.0	56	26.7	17	8.1
4	No classroom leaks during the raining	36	17.1	101	48.1	55	26.2	18	8.6
	season								
5	There is always water and electricity in	23	11.0	92	43.8	72	34.3	23	11.0
	school								
6	There is an infirmary/pharmacy in school	18	8.6	97	46.2	62	29.5	33	15.7
7	There is a built canteen and toilets in	45	21.4	129	61.4	26	12.4	10	4.8
	school								
8	There is a sports field and playground in	46	21.9	129	61.4	28	13.3	7	3.3
	school								
9	The road coming to school is tared	51	24.3	124	59.0	24	11.4	11	5.2
	MEAN							1	7.8862
	Standard Deviation							2	2.38035

Source: Researcher (2022)

The above table represents the respondent view on infrastructural investment. The first item which was to determine if there were enough classrooms in school had 53 with 25.2% strongly

agree, 112 carrying 53.3% agree, 30 disagree 14.3% and 15 strongly disagree 7.1%. The second question was to determine if classrooms were large enough to accommodate all pupils, 41 students stood for strongly agree, with a percentage rate of 19.5%, 112 stood for agree with 53.3%, 43 disagreed carrying 20.5% while 14 strongly disagreed for 6.7%. Item 3 determine if pupils sat 2 per bench in class, 34 strongly agree, 103 agree, 56 disagree, and 17 strongly disagree. The fourth item was to inquire if no classroom leaked during the raining season, 36 strongly agree, 101 agree, 55 disagreed and 18 strongly disagree. The fifth item was to inquire if there was always water and electricity in school, 23 strongly agree, 92 agree, 72 disagreed and 23 strongly disagree. The sixth item was to inquire if there was an infirmary/pharmacy in school, 18 strongly agree, 97 agree, 62 disagreed and 33 strongly disagree. The 7th item was to inquire if there was a built canteen and toilets in school, 45 strongly agree, 129 agree, 26 disagreed and 10 strongly disagree. The 8th item was to inquire if there was a sports field and playground in school, 46 strongly agree, 129 agree, 28 disagreed and 7 strongly disagree. The last item was to inquire if the road coming to school was tarred, 51 strongly agreed, 124 agree, 24 disagree and 11 strongly disagree.

**Table 4.6:**Respondents View On Didactic Material Investment

No.	Item	i	SA		A	]	D	,	SD
		f	%	f	%	f	%	f	%
1	I always have all required textbooks	22	10.5	89	42.4	80	38.1	19	9.0
2	We usually receive free textbooks from school	14	6.7	61	29.0	81	38.6	54	25.7
3	Teachers come to class with their textbooks and	50	23.8	118	56.2	30	14.3	12	5.7
	teaching materials								
4	There is library in school containing textbooks of	22	10.5	60	28.6	92	43.8	36	17.1
	all subjects								
5	There is a computer lab in school	22	10.5	47	22.4	105	50.0	36	17.1
6	There are sports and leisure equipment in school	32	15.2	99	47.1	60	28.6	19	9.0
	MEAN							1	3.1095
	Standard Deviation							2	.14485

Source: Researcher (2022)

The table above contains respondents view on didactic material investment. The first item sort to inquire if pupils always had all required textbooks, 22 pupils responded strongly agree, 89 agree, 80 disagree and 19 strongly disagree. Item 2 sort to inquire if pupils usually received

free textbooks from school, 14 strongly agree, 61 agree, 81 disagree and 54 strongly disagree. In the third item, pupils were asked if teachers came to class with their textbooks and teaching materials, 50 strongly agree, 118 agree, 30 disagree and 12 strongly disagree. In the 4th item was to inquire if there was a library in school containing textbooks of all subjects, 22 strongly agree, 60 agree, 92 disagree and 36 strongly disagree. The fifth item was to inquire if there was a computer lab in school, 22 strongly agree, 47 agree, 105 disagreed and 36 strongly disagree. The last item in this section sort to inquire if there were sports and leisure equipment in school, 32 strongly agree, 99 agree, 60 disagree, and 19 strongly disagree

**Table 4.7:**Respondents View On Human Capital Investment

No.	Item	;	SA		A		D	,	SD
		f	%	f	%	f	%	f	<b>%</b>
1	We have 2 teachers per class	42	20.0	79	37.6	64	30.5	25	11.9
2	Teachers are always present and come to class	38	18.1	140	66.7	27	12.9	5	2.4
3	We have a pedagogic inspector in school	42	20.0	131	62.4	33	15.7	4	1.9
4	There is a headmaster/headmistress and a	57	27.1	140	66.7	10	4.8	3	1.4
	discipline master in school								
	MEAN								6.7845
	Standard Deviation								1.31778

Source: Researcher (2022)

Table 10 above is showing pupils view on human capital investment. The first item sort to inquire if there were 2 teachers per classroom in school, 42 pupils responded strongly agree, 79 agree, 64 disagree and 25 strongly disagree. Item 2 sort to inquire if teachers were always present in school and came to class, 38 strongly agree, 140 agree, 27 disagree while 5 strongly disagree. In the third item, pupils were asked if there was a pedagogic inspector in school, 42 strongly agree, 131 agree, 33 disagree and 4 strongly disagree. On item 4 the researcher asked if there was a headmaster/headmistress and a discipline master in school, 57 strongly agree, 140 agree, 10 disagree and 3 strongly disagree.

**Table 4.8:**Respondents View On Pupil's Performance

No.	Item		SA	1	A		D	\$	SD
		f	%	f	%	f	%	f	%
1	I always pass mathematics	27	12.9	88	41.9	79	37.6	16	7.6
2	I have never repeated a class	57	27.1	100	47.6	40	19.0	13	6.2
3	Since class one I have attended school every academic year	43	20.5	63	30.0	83	39.5	21	10.0
4	I can use a computer to type and navigate the internet	23	11.0	63	30.0	98	46.7	26	12.4
5	I always score above 12 average	47	22.4	90	42.9	57	27.1	16	7.6
6	I have no difficulties to read and write	38	18.1	89	42.4	69	32.9	14	6.7
	MEAN							12	2.0183
	Standard Deviation							2.	42726

Source: Researcher (2022)

From the table above, we can observe that it represents the respondent view on their academic performance The first item sort to inquire if the pupils always passed mathematics, 27 pupils responded strongly agree, 88 agree, 79 disagree and 16 strongly disagree. Item 2 sort to inquire if the pupils had never repeated a class throughout primary school, 57 responded strongly agree, 100 agree, 40 disagree and 13 strongly disagree. Furthermore, item 3 sort to inquire if since class one pupils had attended school every academic year, 43 strongly agree, 63 agree, 83 disagree and 21 strongly disagree. Item 4 sort to inquire if the pupils could use a computer to type and navigate the internet, 23 strongly agree, 63 agree, 98 disagree and 26 strongly disagree. The 5th item sort to inquire if the pupils always scored above 12 average, 47 strongly agree, 90 agree, 57 disagree and 16 strongly disagree. Lastly item 6 was to determine if the pupils had no difficulties to read and write, 38 strongly agree, 89 agree, 69 disagree and 14 strongly disagree.

### PRESENTATION OF INFERENTIAL STATISTICS BASED ON THE HYPOTHESIS

The hypotheses of this study will be verified through inferential statistics in which the Pearson correlation will be used.

Hypothesis 1: infrastructural investment and pupil's performance.

Ha1: There is a strong correlation between government's infrastructural investment and the performance of primary school pupils.

Ho1: There is no correlation between government's infrastructural investment and the performance of primary school pupils.

**Table 4.9:**Correlation on infrastructural investment and pupil's performance

		Infrastructural investment	Pupils performance
Infrastructural investment	Spearman Correlation	1	.225**
	Sig. (2-tailed)		.001
	N	210	210
Pupils performance	Spearman Correlation	.225**	1
	Sig. (2-tailed)	.001	
	N	210	210

Source: field data (2022)

The relationship between infrastructural investment and pupil's performance was investigated with the use of the Pearson product-moment correlations. From the above table, linear correlations between infrastructural investment and pupil's performance was observed to be statistically significant ( $P=0.001 \le 0.05$ ). The Pearson's correlation coefficient r=0.225 indicates that infrastructural investment and pupil's performance are strongly and positively correlated, (r=0.225,  $P=0.001 \le 0.05$ ). This confirms the alternative hypothesis, while the null has been rejected, hence confirming the first research hypothesis. This signifies that the performance of primary school pupils can be improved through an increase in government's infrastructural investment.

### Hypothesis 2: didactic material investment and pupil's performance.

Ha2: There is a correlation between government's didactic material investment and the performance of primary school pupils.

Ho2: There is no correlation between government's didactic material investment and the performance of primary school pupils.

**Table 4.10:**Correlation on didactic material investment and pupil's performance

		Didactic material	Pupils
		investment	performance
Didactic material investment	Spearman Correlation	1	.148*
	Sig. (2-tailed)		.032
	N	210	210
Pupils performance	Spearman Correlation	.148*	1
	Sig. (2-tailed)	.032	
	N	210	210

Source: field data (2022)

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The relationship between didactic material investment and pupil's performance was investigated with the use of the Pearson product-moment correlations. From the above table, linear correlations between didactic material investment and pupil's performance was observed to be statistically significant ( $P=0.032 \le 0.05$ ). The Pearson's correlation coefficient r=0.148 indicates that didactic material investment and pupil's performance are strongly and positively correlated, (r=0.148,  $P=0.032 \le 0.05$ ). This confirms the alternative hypothesis, while the null has been rejected, hence confirming the second research hypothesis. This signifies that the performance of primary school pupils can be improved through an increase in government's investment in didactic materials.

Hypothesis 3: human capital investment and pupil's performance.

Ha3: There is a correlation between government's human capital investment and the performance of primary school pupils.

Ho3: There is no correlation between government's human capital investment and the performance of primary school pupils.

**Table 4.11:**Correlation on human capital investment and pupil's performance

		Human capital investment	Pupils performance
Human capital investment	Spearman Correlation	1	.261**
	Sig. (2-tailed)		.000
	N	210	210
Pupils performance	Spearman Correlation	.261**	1
	Sig. (2-tailed)	.000	
	N	210	210

Source: field data (2022)

The relationship between human capital investment and pupil's performance was investigated with the use of the Pearson product-moment correlations. From the above table, linear correlations between human capital investment and pupil's performance was observed to be statistically significant ( $P=0.000 \le 0.05$ ). The Pearson's correlation coefficient r=0.261 indicates that human capital investment and pupil's performance are strongly and positively correlated, (r=0.261,  $P=0.000 \le 0.05$ ). This confirms the alternative hypothesis, while the

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

null has been rejected, hence confirming the second research hypothesis. This signifies that the performance of primary school pupils can be improved through an increase in government's investment in human capital.

To test the previously established hypotheses with the help of a simple linear regression analyses, Saunders et al. (2016) state that the collected data has to meet the precondition that is concerned with the linearity of relationship between the separate IVs (independent variable) and the DV (dependent variable). Therefore, the researcher has produced correlation tables showing the relationships between the different IVs, namely, infrastructural investment, didactic material investment, and human capital investment towards the academic performance of primary school pupils. From the tables below, it can be detected that the relationship between the different IVs and the DV in all cases is linear.

Table 4.12: Correlation Among Variables

	Infrastructural Investment	Didactic Material Investment	Human Capital Investment	Pupils Performance
Infrastructural Investment				
Didactic Material Investment	.015			
Human Capital Investment	.242**	.033		
Pupils Performance	.225**	.148*	.261**	
Mean	17.8862	13.1095	6.7845	12.0183
Standard Deviation	2.38035	2.14485	1.31778	2.42726
N	210	210	210	210
Source: field data (2022)				

Source: field data (2022)

\*\*. Correlation is significant at the 0.01 level (2-tailed).

To be more precise and fully test the assumption of the linearity and strengths of relationships between the separate IVs and the DV, the researcher has conducted a correlation analysis whose main results are displayed in the Table above. Outcomes show that Infrastructural Investment, Didactic Material Investment and Human Capital Investment are significantly correlated with Pupils Performance.

Concerning the strength of relationship, the IVs of Infrastructural Investment and Didactic Material Investment, (Pearson's r (210) = .015, p < .05), Infrastructural Investment , and

Human Capital Investment (Pearson's r (210) = .242, p < .05), Infrastructural Investment and Pupils Performance (Pearson's r (210) = .225, p < .05), Didactic Material Investment, and Human Capital Investment (Pearson's r (210) = .0.33, p < .05), Didactic Material Investment, and Pupils Performance (Pearson's r (210) = .148, p < .05), Human Capital Investment, and Pupils Performance (Pearson's r (210) = .261, p < .05). Hence, from the correlation analysis, it can be concluded that all three measured IVs are significantly correlated. Moreover, due to the confirmed linearity of relationships between the separate IVs and the DV the precondition to run regression analyses to actually test the previously developed hypotheses is met (Saunders et al., 2016).

**Table 4.13: Summary Table of Results** 

Hypotheses	Alpha Degree of significance	Correlation Coefficient	Decision
RH1	0.001	0.225 **	Confirmed
RH2	0.032	0.148 **	Confirmed
RH3	0.000	0.261 **	Confirmed

Source: field statistics (2022)

### CHAPTER FIVE

# DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

The general objective of this study is to assess the effect of Cameroon's government educational investment on the performance of primary school pupils. This chapter deals with the discussion of findings, which were carried out under predetermined hypotheses. The discussions will be done with reference to the hypotheses, theories, results obtained from the field and related literature. It will propose perspective for further research drawn from the shortcomings of the present work, and recommendation will be made to various stakeholders of the Ministry of Basic Education, Non-Governmental Educational organizations, inspectorates of basic education and community leaders on how to ameliorate or improve the academic performance of primary school pupils, as primary education is the first stage of basic education, and a single phase where programs are typically designed to provide fundamental reading, writing, and mathematics skills and establish a solid foundation for learning.

### DISCUSSION OF MAJOR FINDINGS

### Findings related to research hypothesis 1(HR1)

Government's infrastructural investment influences the performance primary school pupils. This hypothesis was formulated in response to the first research question, which sought to verify how government's infrastructural investment influence the performance of primary school pupils in public primary schools in Yaoundé VI municipality. Data was collected with the use of a closed-ended four modalities Likert scale questionnaire and an interview guide. The quantitative data was treated and analysed with the use of SPSS, and the hypothesis were tested using the Pearson correlation. The linear correlations between infrastructural investment and pupil's performance was observed to be statistically significant ( $P = 0.001 \le 0.05$ ). The Pearson's correlation coefficient r = 0.225 indicates that infrastructural investment and pupil's performance are strongly and positively correlated, (r = 0.225,  $P = 0.001 \le 0.05$ ). This is equally based on the fact that the significance level is 0.001, which is largely less than 0.05, (p), which is the standard error margin: r = 0.225,  $P = 0.001 \le 0.05$ . This confirms the alternative hypothesis (Ha) while rejecting the null (Ho). Thus at an error margin of 5%, HR1 is confirmed. This signifies that the performance of primary school pupils can be improved through an increase in government's infrastructural investment.

In relation to the above information collected through interviews with head teachers or qualitative data, the findings corroborated with the fact that majority of the respondents indicated that the government is trying to provide necessary infrastructures, but her efforts are not enough due to the large inflow of pupils from crises affected areas, thereby increasing the populations accommodated by schools. This turns to negatively affect the performance of this pupils as the school environment is not conducive for the teaching-learning process to take place effectively with overcrowded or insufficient classrooms, insufficient hygiene and sanitary facilities such as canteens, toilets and infirmaries, as well as unstable supplies of portable water and electricity.

When we look at field statistics in table 05, this is equally shown there as the first item which was to determine if there were enough classrooms in school had 30 disagree (14.3%) and 15 strongly disagree (7.1%). The second item which was to determine if classrooms were large enough to accommodate all pupils had 43 disagree (20.5%) and 14 strongly disagree (6.7%). Item 3 determined if pupils sat 2 per bench in class had 56 disagree (26.7) and 17 strongly disagree (8.1%). The fourth item sort to inquire if no classroom leaked during the raining season and had 55 disagreed (26.2%) and 18 strongly disagree (8.6%). The fifth item which was to inquire if there was always water and electricity in school had 72 disagree (34.3%) and 23 strongly disagree (11.0%). The sixth item which was to inquire if there was an infirmary/pharmacy in school had 62 disagree (29.5%) and 33 strongly disagree (15.7%). The 7th item which was to inquire if there was a built canteen and toilets in school had 26 disagree (12.4%) and 10 strongly disagree (4.8%). The 8th item which sort to inquire if there was a sports field and playground in school had 28 disagree (13.3%) and 7 strongly disagree (3.3%). The last item which was to inquire if the road coming to school was tarred had 24 disagree (11.4%) and 11 strongly disagree (5.2%).

The results of the current study were referenced with other studies done by other scholars. The quality of infrastructure has strong influence on the academic standard which is an index of quality assurance in school. Earthman (2002) revealed that, comfortable classroom temperature and smaller classes enhance student's effectiveness and provides opportunities for participation more fully in discussions, reduce discipline problems and thereby enhanced better performance than students in schools with substandard buildings by several percentage points. Duarte et al. (2011) showed that, the lack of basic services such as electricity, potable water, sanitary drains, telephone or proper ways to dispose garbage and waste in schools is strongly associated with

violence, discrimination, and limited opportunities to learn. They pointed out that investments in school infrastructure and the physical conditions for learning are not a luxury but a need. The Sustainable Development Goals (SDG4), which are defined by the United Nations and scope the development agenda for all countries in the world, require countries to "build and upgrade education facilities that are child, disability and gender sensitive, and provide safe, non-violent, inclusive, and effective learning environments for all."

## Findings related to research hypothesis 2(HR2)

Government's didactic material investment influences the performance of primary school pupils.

This hypothesis was formulated in response to the second research question, which sought to verify how government's investment in didactic material influences the performance of primary school pupils in public primary schools in Yaoundé VI municipality. Data was collected with the use of a closed-ended four modalities Likert scale questionnaire and an interview guide. The quantitative data was treated and analysed with the use of SPSS, and the hypothesis were tested using the Pearson correlation. The linear correlation between didactic material investment and pupil's performance was observed to be statistically significant (P=  $0.032 \le 0.05$ ). The Pearson's correlation coefficient r = 0.148 indicates that didactic material investment and pupil's performance are strongly and positively correlated, (r = 0.148,  $P = 0.032 \le 0.05$ ). This is equally based on the fact that the significance level is 0.032, which is largely less than 0.05, (p), which is the standard error margin: r = 0.148,  $P = 0.032 \le 0.05$ . This confirms the alternative hypothesis (Ha) while rejecting the null (Ho). Thus at an error margin of 5%, HR2 is confirmed. This signifies that the performance of primary school pupils can be improved through an increase in government's didactic materials investment.

In relation to the above information collected through interviews with head teachers or qualitative data, the findings corroborated with the fact that most of the head teachers responded saying; yes, it affects their performance as the availability of this didactic materials will facilitate the teaching—learning process and permit children whose parents can't afford textbooks get to learn how to read and write with provided English and literature textbooks. Here, one head teacher actually is quoted to have said;

"Yes if the materials are there, then the children are bounded to perform better than what the teacher's initiative alone would do. So if the materials are there I would think the performance will be far more better; it affects the children when the materials are not there as is the case now".

This results were referenced with other studies done by other scholars, as Mwiria (1995) supports that student's performance is affected by the quality and quantity of teaching and learning resources. This implies that the schools that possess adequate teaching and learning materials such as textbooks, charts, pictures, real objects for students to see, hear and experiment with, stand a better chance of performing well in examination than poorly equipped ones. Todd & Kuklthau, (2004) Confirmed a significant correlation between the presence and the use of library materials by students and teachers with better performance. Also Emma & Ajayi, (2004) asserted that "teaching equipment and materials have changed over the years, and do not only facilitate the teaching-learning situation but also addresses the instructional needs of individuals and groups." Okendu (2012) asserted that regular instructional supervision has a significant bearing on students' academic performance. He also, affirmed that adequate supply of instructional resources has significant effect on students' academic performance. Onasanya & Omosewo (2011) confirmed that both standard and improvised instructional materials have the same positive effects on students' academic performance.

## Findings related to research hypothesis 3(HR3)

Government's human capital investment influences the performance of primary school pupils. This hypothesis was formulated in response to the third research question, which sought to verify how government's human capital investment influence the performance of primary school pupils in public primary schools in Yaoundé VI municipality. Data was collected with the use of a closed-ended four modalities Likert scale questionnaire and an interview guide. The quantitative data was treated and analysed with the use of SPSS, and the hypothesis were tested using the Pearson correlation. The linear correlations between human capital investment and pupil's performance was observed to be statistically significant ( $P = 0.000 \le 0.05$ ). The Pearson's correlation coefficient r = 0.261 indicates that human capital investment and pupil's performance are strongly and positively correlated, (r = 0.261,  $P = 0.000 \le 0.05$ ). This is equally based on the fact that the significance level is 0.000, which is largely less than 0.05, (p), which is the standard error margin: r = 0.261,  $P = 0.000 \le 0.05$ . This confirms the alternative hypothesis (Ha) while rejecting the null (Ho). Thus at an error margin of 5%, HR3 is confirmed. This signifies that the performance of primary school pupils can be improved through an increase in government's investment in human capital.

In relation to the above information collected through interviews with head teachers or qualitative data, the findings corroborated with the fact that majority of the respondents indicated that yes the presence of human capital affects their performance positively as the teaching-learning process takes place effectively and the school can be administered smoothly. One respondent said;

"It is a plus to the learners because learning goes effectively".

While another head teacher said;

"Yes, it affects. When I started working here I had just three teachers and it was so difficult. The school was still new so it was very difficult. So if I want to compare that time and now; at first our percentages used to be very low but now we are scoring a 100% in our exams, so it is proof that the teaching is effective".

This results were equally referenced with other studies done by other scholars, as Nzarirwehi et al. (2019) who conducted a study to compare the academic achievements of students learnt from trained and untrained teachers found that pupils who learnt from the trained teachers got high academic achievements and the other students learnt from the untrained teachers got low academic achievements. Behroz-Sarcheshmeh et al. (2017) investigated in a study that trained teachers have better communication, teaching and critical thinking skills. They also concluded that students' academic achievement and interest improve when a trained teacher apply the teaching methods according to the classroom environment and situations. Özüdogru (2020) conducted a research to check the responses to the questions raised by students from trained and untrained teachers. The conclusion of the study indicated that the teachers who have done trainings responded the students in a better way as compared to the untrained teachers. While a study from the Global Poverty Research Group, looking at student performance in India, finds that pre-service teacher training and having a Masters' level qualification together raise student's achievement by a small, but significant, amount (Kingdon, 2006). Teachers with good knowledge significantly influence the teaching and learning processes (Johannes et al., 2010). This goes a long way to show the importance of human capital in the teaching-learning process.

### **GENERAL CONCLUSION**

In conclusion we can say that the academic performance of pupils is a key feature in education as it is considered to be the center around which the whole education system revolves. It is known that the academic performance of students determines the success or failure of academic institution (Abdullah, 2016), likewise the fact that academic performance of students have a direct impact on the socioeconomic development of a country. Pupils' academic performance serve as a bedrock for knowledge acquisition and the development of future skills. Thus the top most priority of all educators should be the academic performance their pupils. From the study findings and discussion on the effect of governments educational investment on the performance of pupils in public primary schools in Yaoundé VI municipality, conclusions are presented in line with the study research questions which were:

- ➤ How does government's infrastructural investment influence the performance of primary school pupils?
- ➤ How does government's investment in didactic material influences the performance of primary school pupils?
- ➤ How does government's human capital investment influence the performance of primary school pupils?

In the analysis it was found that there is a positive relationship between government's infrastructural investment and pupil's performance, with r=0.225. The relationship is statistically significant (Sig. = 0.001) at 0.05 level of significance. This implies that an increase in government's infrastructural investment to provide schools with more classrooms, infirmary, canteens, toilets and access to roads, water and electricity are important to improve the academic performance of primary school pupils.

It is also found that there is a positive relationship between government's didactic material investment and pupil's performance, with r = 0.148. The relationship is statistically significant (Sig. = 0.032) at 0.05 level of significance. This implies that an increase in government's didactic material investment to provide schools with more instructional materials such as textbooks, computers, charts, pictures and equally improving on the minimum package of teachers are important to improve the academic performance of primary school pupils.

Lastly is found that there is a positive relationship between government's human capital investment and pupil's performance, with r = 0.261. The relationship is statistically significant (Sig. = 0.000) at 0.05 level of significance. This implies that an increase in government's

human capital investment to provide schools with more trained teachers, administrators and pedagogic supervisors are important to improve the academic performance of primary school pupils.

This is further confirmed from qualitative findings through interviews as all of the respondents said the provision of infrastructure, didactic materials and human capital by the government has a major effect on pupil's performance?" One of the respondents actually quoted saying;

"You know what makes a child to study is when there are good teachers, secondly when the environment is conducive, when they have their texts books, and the government is trying to supply these things. It affects their performances positively. This are major factors that affect their performance".

In the same line, Mehrotra (1998) observes that high education attainment is associated with relatively high public spending on education and a relatively high share of primary education in total education expenditures. Tafah-Edokat (1998) studying private returns to investments in education in Cameroon found that, returns to investment in education are positive and in some cases higher than returns to investment in other sectors of the economy. Primary education gives the highest returns followed by secondary and tertiary education. Thus, he concludes that investment in primary education should be emphasized and that individuals willing to pursue further education should be made to bear a higher proportion of the cost of such education. Education equally has high economic value and must be considered as a national capital. It is considered a pillar upon which other sectors of the economy are anchored upon. Improving the educational standard of people is not only a goal for a better quality of life but to impact positively on the economic development of a country. Thus, the provision of education is key and vital to promote a broad-based economic growth and socio-political will of a nation. Education ensures human capital development and leads to greater output for the society as well as enhanced earnings for the individual worker. Therefore, it is considered as one of the most significant investment in human capital.

#### RECOMMENDATIONS

Based on the findings or results obtained in this study, the following recommendation are made to the state and various stakeholders of Basic education, which will significantly lead to improvements in the academic performance of pupils in public primary schools.

- Government should increase the budget allocation to the education sector in general and the primary education sector in particular. This can be achieved by increasing the allocation to at least meet the 26 percent benchmark as recommended by UNESCO.
- Government should pay attention to policies that enhance educational attainment through adequate public social investment.
- Attention should be given to the need to provide educational facilities with more infrastructures which makes learning practical and easier, especially at the primary school level as it is the foundation to further education.
- The government should strive and set aside a reasonable amount of education budget which will be directed to improve and construct libraries and computer labs in schools.
- The government and head teachers should strive to ensure the maintenance of existing infrastructural facilities, while the pupils also need to be sensitized on the need to properly use and maintain the existing infrastructural facilities in schools.
- Head teachers should rise their voice to be heard by parents as well as the government on the importance of improving and promoting good instructional materials in schools and that success or failure of a pupil will not only depend on the content that the pupil receives in class, but also through access to materials for further review by themselves.
- The government and ministry of basic education should increase and evenly distribute trained and qualified teachers to all primary schools, as well as improve in-service teacher training.
- The government should strive to improve and regular provide teachers minimum package. In addition, Parents, well spirited individuals and corporate organizations on their part can support government by giving out some incentives to teachers in order to motivate them and enhance their productivity.

### LIMITATIONS AND DIFFICULTIES ENCOUNTERED

- ➤ This study was carried out in public primary schools in Yaounde VI subdivision. The study, therefore, confined itself only to this sample, leaving the private primary schools untouched. Also very few literatures from Cameroon was available. That's why literature reviewed was mostly taken from other countries of the world.
- > The researcher had difficulties having access to recent basic education statistics especially with respect to results and finance.
- ➤ Having access to school head teachers for interviews and classrooms to administer questionnaires was quite challenging despite having obtained research authorizations from the faculty.

#### SUGGESTIONS FOR FURTHER STUDIES

From all indications, it can be seen that one's perception or analysis cannot be sufficient enough to address a problem, and given the fact that research is continuous, it is therefore expected of the researcher to provide an open gate for further research to be carried out.

- This study can be carried out in this field but with a different population and different public primary schools in Cameroon.
- Other researchers can also investigate the problem with larger sample size and doing a longitudinal study of the selected sample.
- Researchers may also want to look at other factors that could affect or influence the academic performance of primary school pupils aside government's educational investment.

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## **APPENDICES**

**Appendix 1: Questionnaire** 

REPUBLIQUE DU CAMEROUN Paix-Travail-Patrie
UNIVERSITE DE YAOUNDE I
FACULTE DES SCIENCES DE L'EDUCATION
DEPARTEMENT DE CURRICULA ET EVALUATION



Dear pupil,

I am David NING NJUH, a Masters 2 student at the Faculty of Education of the University of Yaoundé 1, Department of Curriculum and Evaluation, specialized in Educational Management and Administration. My research topic is titled "The Effect of Government Educational Investment On the Performance of Primary School Pupils". I plead to take some of your time to answer this questionnaire, whose main objective is to assess the effect of Cameroon's government educational investment on the performance of primary school pupils. NB: Your response to this questionnaire shall be kept confidential and used for research purpose ONLY. Your identity shall remain anonymous.

## **SECTION A: Sociodemographic Data**

Tick the right box $\sqrt{}$	
Gender: Male Female	
Age group: 0-05yrs 06-10yrs 10-15yrs 15yrs +	
Class: class 5 class 6	
Name of school:	

**Instructions:** SD = Strongly Disagree, D = Disagree, A = Agree, SA = Strongly Agree.

## **SECTION B: Infrastructural Investment**

No	Items	SD	D	A	SA
1	There are enough classrooms in school				
2	Classrooms are large enough to accommodate all pupils				
3	We sit 2 per bench in class				
4	No classroom leaks during the raining season				
5	There is always water and electricity in school				

6	There is an infirmary/pharmacy in school		
7	There is a built canteen and toilets in school		
8	There is a sports field and playground in school		
9	The road coming to school is tared		

## **SECTION C: Didactic Material Investment**

No	Items	SD	D	A	SA
1	I always have all required textbooks				
2	We usually receive free textbooks from school				
3	Teachers come to class with their textbooks and teaching materials				
4	There is library in school containing textbooks of all subjects				
5	There is a computer lab in school				
6	There are sports and leisure equipment in school				

# **SECTION D: Human Capital Investment**

No	Items	SD	D	A	SA
1	We have 2 teachers per class				
2	Teachers are always present and come to class				
3	We have a pedagogic inspector in school				
4	There is a headmaster/headmistress and a discipline master in school				

# **SECTION E: Pupil's Performance**

No	Items	SD	D	A	SA
1	I always pass mathematics				
2	I have never repeated a class				
3	Since class one I have attended school every academic year				
4	I can use a computer to type and navigate the internet				
5	I always score above 12 average				
6	I have no difficulties to read and write				

THANK YOU FOR YOUR COLLABORATION.

Paix-Travail-Patrie
UNIVERSITE DE YAOUNDE I
FACULTE DES SCIENCES DE L'EDUCATION
DEPARTEMENT DE CURRICULA ET EVALUATION

REPUBLIQUE DU CAMEROUN



Peace-Work-Fatherland
UNIVERSITY OF YAOUNDE I
FACULTY OF EDUCATION

## DEPARTMENT OF CURRICULUM AND EVALUATION

Cher élève,

Je suis David NING NJUH, étudiant en Master 2 à la Faculté des Sciences de l'Education de l'Université de Yaoundé 1, Département du Curriculum et de l'Evaluation, spécialisé en Management de l'Education. Mon sujet de recherche est intitule "L'effet de l'investissement éducatif du gouvernement sur la performance des élèves de l'école primaire". Je vous demande de prendre un peu de votre temps pour répondre à ce questionnaire, dont l'objectif principal est d'évaluer l'effet de l'investissement du gouvernement camerounais dans l'éducation sur la performance des élèves de l'école primaire.

NB: Votre réponse à ce questionnaire sera gardée confidentielle et utilisée à des fins de recherche SEULEMENT. Votre identité restera anonyme.

## SECTION A: Données sociodémographiques

Cochez la bonne case √
Genre: Homme Femme
Groupe d'âge: 0-05 ans 06-10 ans 10-15 ans 15 ans +
classe 5 classe 6
Classe: CM1 CM2 CM2
Nom de l'école:
Instructions: SD = Pas du tout d'accord, D = Pas d'accord, A = D'accord, SA = Tout à
fait d'accord.

## **SECTION B: Investissement en infrastructures**

No	Éléments	SD	D	A	SA
1	Il y a suffisamment de salles de classe à l'école				
2	Les salles de classe sont assez grandes pour accueillir tous les élèves				
3	Nous sommes deux par banc en classe				
4	Aucune salle de classe ne fuit pendant la saison des pluies				
5	Il y a toujours de l'eau et de l'électricité à l'école				

6	Il y a une infirmerie/pharmacie à l'école		
7	Il y a une cantine construite et des toilettes à l'école		
8	Il y a un terrain de sport et une cour de récréation à l'école.		
9	La route menant à l'école est goudronnée		

# SECTION C: Investissement en matériel didactique

No	Éléments	SD	D	A	SA
1	J'ai toujours tous les manuels scolaires nécessaires				
2	Nous recevons généralement des manuels gratuits de l'école				
3	Les enseignants viennent en classe avec leurs manuels et leur matériel pédagogique.				
4	L'école dispose d'une bibliothèque contenant les manuels de toutes les matières.				
5	L'école dispose d'un laboratoire informatique.				
6	Il y a des équipements de sport et de loisirs à l'école				

# **SECTION D: Investissement en capital humain**

No	Éléments	SD	D	A	SA
1	Nous avons 2 professeurs par classe				
2	Les enseignants sont toujours présents et viennent en classe				
3	Il y a un inspecteur pédagogique à l'école				
4	Il y a un directeur/une directrice et un chef de discipline à l'école				

# **SECTION E: Performance des élèves**

No	Éléments	SD	D	A	SA
1	Je réussis toujours les mathématiques				
2	Je n'ai jamais redoublé une classe				
3	Depuis la sil, je suis présent à l'école chaque année scolaire.				
4	Je sais utiliser un ordinateur pour taper et naviguer sur Internet.				
5	J'ai toujours des notes supérieures à 12 de moyenne				
6	Je n'ai aucune difficulté à lire et à écrire				

## MERCI DE VOTRE COLLABORATION.

## **Appendix 2: Interview Guide**

REPUBLIQUE DU CAMEROUN
Paix-Travail-Patrie
UNIVERSITE DE YAOUNDE I

FACULTE DES SCIENCES DE L'EDUCATION

DEPARTEMENT DE CURRICULA ET EVALUATION



REPUBLIC OF CAMEROON Peace-Work-Fatherland

UNIVERSITY OF YAOUNDE I

FACULTY OF EDUCATION

DEPARTMENT OF CURRICULUM
AND EVALUATION

## INTERVIEW QUESTIONS FOR HEAD TEACHERS

- 1. How do you access the level of infrastructural investment done by the government in your primary school?
- 2. In your view, does the provision of this necessary infrastructures affect your pupil's performance?
- 3. How do you access the level of didactic material provided by the government for your school?
- 4. In your view, does the provision of this didactic materials affect your pupil's performance?
- 5. How do you access the level of human capital (teachers, administrators and pedagogic inspectors) provided by the government for your school?
- 6. In your view, does the provision of this human capital affect your pupil's performance?
- 7. Do you think the provision of infrastructure, didactic materials and human capital by the government has a major effect on pupil's performance?
- 8. What other factors can significantly influence their performance?

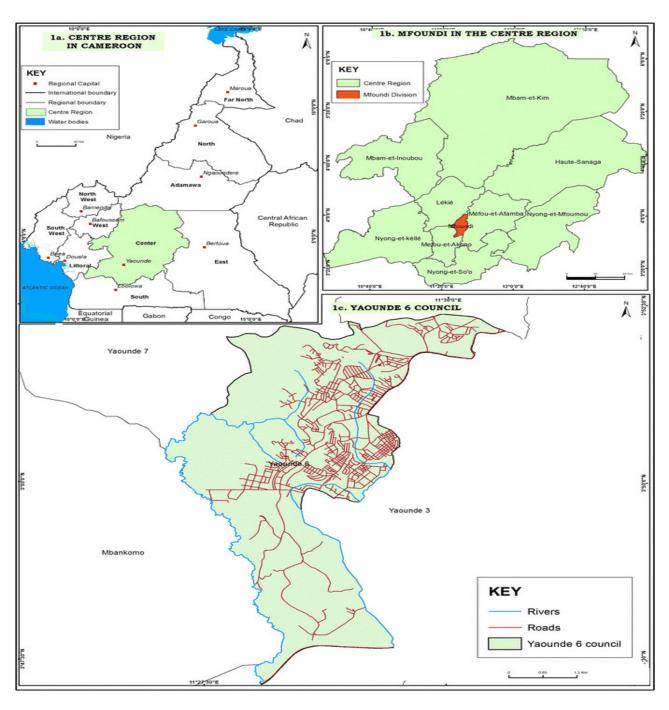
THANK YOU FOR YOUR COLLABORATION.

# QUESTIONS D'ENTRETIEN POUR LES DIRECTEURS D'ÉCOLE

- 1. Comment évaluez-vous le niveau d'investissement en infrastructures réalisé par le gouvernement dans votre école primaire?
- 2. Selon vous, la mise à disposition de ces infrastructures nécessaires affecte-t-elle les performances de vos élèves?
- 3. Comment évaluez-vous le niveau du matériel didactique fourni par le gouvernement à votre école?
- 4. Selon vous, la mise à disposition de ce matériel didactique affecte-t-elle les performances de vos élèves?
- 5. Comment accédez-vous au niveau de capital humain (enseignants, administrateurs et inspecteurs pédagogiques) fourni par le gouvernement à votre école?
- 6. Selon vous, la mise à disposition de ce capital humain affecte-t-elle les performances de vos élèves?
- 7. Pensez-vous que la mise à disposition d'infrastructures, de matériel didactique et de capital humain par le gouvernement a un effet important sur les performances des élèves?
- 8. Quels autres facteurs peuvent influencer de manière significative leurs performances?

### MERCI POUR VOTRE COLLABORATION

## The Yaoundé VI Sub-division in the MFOUNDI Division



Source: Schoolmapcm 2022