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**THE IMPACT OF PROFESSIONAL  
DEVELOPMENT ON TEACHERS'  
EFFECTIVENESS IN SELECTED PRIMARY  
SCHOOLS IN YAOUNDÉ VI MUNICIPALITY**

**Dissertation presented and defended on the 30<sup>th</sup> march 2026**

*Specialty: Inspection of School Life*



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We hereby certify that this dissertation entitled ‘The Impact of Professional Development on Teachers’ effectiveness, in selected primary schools in Yaounde VI municipality was carried out by **TAKA Mercy Mangwi, Matricule (14Z3497)** in the Department of Curriculum and Evaluation (Educational management), in the Faculty of Education, at the university of Yaoundé I.

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This is to certify that this dissertation entitled “*The Impact of Professional Development and Teachers’ Effectiveness in Selected primary schools in Yaoundé VI municipality*” and submitted by TAKA Mercy Mangwi is the original research project for an award of a master’s in Educational Management in the Department of Curriculum and Evaluation (Educational Management), Faculty of Education at the University of Yaoundé I. Also, it is certified that the dissertation represents an independent research work of the student and has not been submitted for an award of any other degree.

**Professor**

**YARO LOVELINE**

.....

**Date**.....

I dedicate this project to the entire **TAKA** and **WANJAH'S** families

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## ABBREVIATIONS

NDS	: National Development Strategy
CESA	: Continental Education Strategy for Africa
SDGs	: Sustainable Development Goals
SWSE	: Sector Wide Strategy for Education
(NQFs)	: National Qualification Frameworks
(RQFs)	: Regional Qualification Frameworks
GESP	: Growth and Employment Strategic Paper
MDGs	: Millennium Development Goals
GBPS	: Government Bilingual Primary School
PPS	: Private Primary School
SPSS	: Statistical Package for the Social Sciences
P D	:Professional Development
P S	:Pedagogic Supervision
I T	:In-service Training
P C	: Peer Collaboration
RVA	: Recognition Validation and Accreditation
ECCE	: Early Childhood Care and Education
EFA	: Education For All
EST	: Education Science and Technology
SET	: Social Exchange Theory

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## ABSTRACT

The main objective of this study is to examine the impact of professional development on teaching effectiveness in selected primary schools in Yaounde VI. The conceptual framework of this study constituted six main concepts, which were professional development, In-service training, allocation of resources, peer collaboration and effective pedagogic supervision on teaching effective. These concepts give an understanding of the role professional development play in the transmission of knowledge and competences to learners in the primary sub sector of education in Cameroon. For the research methodology, the study adopted a quantitative deductive approach with a Correlation research design. This was to determine predictability and categorisation of the different variables in relation to the dependent variable. A close-ended Likert scale questionnaire was constructed for data collection. This questionnaire contained the four variables selected for the study. The data was analysed using descriptive and inferential statistics. Multiple regression was used as the statistical model to test the hypotheses. The SPSS version 20 was used as statistical tool for data analysis. The theoretical framework was made up of three theories, which are absorptive capacity theory, social exchange theory and the improvement theory. The significant values on the coefficient table were classified or categorized according to their degree of predictability. Pedagogic supervision is a variable with the higher predictability of 0.000 calculated value, followed by in-serviced training 0.044, third peer collaboration 0.007 and the four resources allocation with 0.008 calculated. Based on this finding we therefore concluded that school management use pedagogic supervision, in-service training, peer collaboration and resources allocation as means to improve on teaching effectiveness in Cameroon primary schools. The adoption of professional development strategies will have a significant impact on teaching effectiveness in primary schools in Cameroon.

**Key words:** *Professional Development, Resource Allocation, In-service Training, Peer Collaboration, Pedagogic Supervision, Teaching Effectiveness*

## RESUME

L'objectif principal de cette étude est d'examiner l'impact du développement professionnel sur l'efficacité de l'enseignement dans les écoles primaires sélectionnées à Yaoundé VIème. Le cadre conceptuel de cette étude est constitué de cinq axes à savoir : le développement Professionnel, la formation continue, l'allocation des ressources, la collaboration entre les pairs et un encadrement pédagogique efficace. Sur l'enseignement efficace, les concepts permettent de comprendre le rôle de la professionnalisation de savoir les compétences à transmettre aux apprenants du sous-secteur primaire de l'éducation au Cameroun. Pour la méthodologie de recherche, l'étude a adopté une approche déductive quantitative avec une conception de recherche corrélacionnelle. Il s'agissait de déterminer la prévisibilité et la catégorisation des différentes variables par rapport à la variable dépendante. Un questionnaire ferme à l'échelle de Likert a été construit pour la collecte des données. Ce questionnaire contenait les quatre variables retenues pour l'étude. Les données ont été analysées à l'aide de statistiques descriptives et inférentielles. La régression multiple a été utilisée comme modèle statistique pour analyser des données. Le cadre théorique était composé de trois théories qui sont : la théorie de la capacité absorption, la théorie d'amélioration, et la théorie d'échange sociales. Les valeurs significatives du tableau des coefficients ont été classées or catégorisées selon leur degré de prévisibilité. La supervision pédagogique est la plus élevée de 0.000 valeur calculée, suivie par la formation continue 0.044, la troisième collaboration entre pairs 0.007 et la quatrième allocation des ressources avec 0.008 valeur calculée. Sur la base du constat, nous avons donc conclu que les directions doivent renforcer la supervision pédagogique, la formation continue, la collaboration entre paires et allocation des ressources comme moyen d'améliorer l'efficacité de l'enseignement dans les écoles primaires camerounaises. L'adoption des stratégies développement professionnel aura un impact significatif sur l'efficacité de l'enseignement dans les écoles primaires au Cameroun.

**Mots clés** : *développement professionnel, allocation des ressources, formation continue, collaboration entre pairs, encadrement pédagogique efficace, efficacité de l'enseignement*

## CHAPTER ONE: GENERAL INTRODUCTION

This chapter is made up of a background justification of the study, statement of the research problem, objectives, questions, hypotheses significance, and the scope of the study.

### **1.1. Background of the study**

Educational achievement in terms of quality and performance in any given country of the globe is based on the professional development of the teaching and administrative staff. Teaching staff is the central human capital that its recognition, reward and valorisation is significant in boosting institutional competitiveness and potential.

#### **1.1.1. Historical background**

Cameroon's educational system has seen shifts since independence (1960). Early focus was on expanding access and quality. By the year 2000s, teachers training / professional development emerged as key to boosting outcomes. In 1995, government launched educational reforms and stressed on teachers professional development. In 2005 the government emphasized on strategy for growth prioritizing in service training. In 2010, professional development was linked to teacher certification and upgrading. Recently the government is focussed on context-fit professional development based on rural needs and technological integration.

Furthermore Primary education across the world has undergone tremendous change since the 1990s with different international conferences ranging from the Jomtien 1990, Dakar 2000 to Incheon 2015 declarations. These international conferences or frameworks have reshaped the primary education systems across the world in terms of access, quality and equity, content and teaching techniques. These characteristic indicators of global education strategies have enable the transformation of the global society. Therefore, Professional development of teachers' competence and knowledge is key in improving quality and ensuring teachers' effectiveness. This development facilitates and bridges the inadequacies of the primary education sector in the various countries of the world.

The global agenda on education for sustainable development is critical wherein professional development in the educational sector across the world is continually cycle which will maintain

productivity and relevance. Professional development improves teachers' effectiveness in fine-tuning pedagogic approaches and skill acquisitions especially in the primary schools (SDGs 2015). Education in the 21<sup>st</sup> century is marked by major dimensions which are relevant to contextual realities. These dimensions are building socio-economic and environmental paradigms. Capacity building is an important professional development strategy which helps in improving teacher's effectiveness in the teaching-learning process, but it is still a serious challenge in our schools today. Education can be understood as a universal principle of human rights which the various countries of the world must ensure its universal implementation in terms of access (enrolment), quality, equity and inclusion. For these human principles to be a reality to every country of the globe the government and educational institutions especially at the primary level must determine the potential of professional development of teachers from the policy perspective and fields operation programmes in this direction (Alberta Education 2006). Teachers are the main human resource better still human capital of the educational sector. Therefore, improving on their professional competence is ensuring a sustainable development and building human capital for the new economic and promoting universal coverage that will solve the problem of inequalities (SDGs 4 2015).

Also, the concept of lifelong learning is crucial to education for sustainability in the sense that for teachers to be effective they have to continually improve on their teaching competence approaches to enable the students to perform well.

*“SDG4-Education 2030 aims to ensure equitable opportunities to education in a holistic and lifelong learning perspective. It aims to ensure universal pre-primary and secondary education leading to effective and relevant learning outcomes for all children, youth and adults as a foundation for lifelong and life-wide learning. In addition, SDG4 also aims to ensure equal opportunity in access to further learning opportunities for youth and adults throughout life.”*

This global agenda is evident of the fact that incentive and collaboration among education stakeholders are indispensable in improving the potential of teachers at the school level. This collaboration can help improve the working condition of teachers especially in the local communities that are quite deplorable like in the sub Saharan African and in Cameroon in particular where there are inequalities or disparities in the provision of education and the

limitations of training due to the resources. Learning opportunities can be improved through lifelong as means of professional development.

In this way, effective learning can be ensured through effective and sustainable teacher professional development. This also entail the deployment of managerial and governance frameworks, in teacher training and continually development in the career path. These educational management strategies will enhance effective learning and the acquisition of relevant knowledge, skills and competencies for the 21<sup>st</sup> century. This is the main form of global agenda that will ensure prosperity. These are indicators for measuring the performance of primary education across the world.

New focus on relevance of learning is a criterion for professional development in education. Question of relevant knowledge transmitted to students at various stages of the education system is always a serious challenge to school heads who struggle with policy implementation which may not be suitable to contextual reality. Therefore, SDG4-Education 2030 focuses “*on the relevance of learning, both in terms of vocational and technical skills for decent work as well as for ‘global citizenship’ in a plural, interdependent, and interconnected world*” (SDG4-Education 2030).

Global education perspective is also based on Collaboration, cooperation and partnerships, these institutional indicators that will boost professional development of teachers and school administration must be significantly integrated in the school system. Collaboration and partnership between government, non-governmental organisations, civil societies organisational and other educational stakeholders can contribute greatly to improve the quality learning and teaching approaches in the Cameroon primary school. This goes in line with the universal relevant agenda, SDG 4-Education 2030 which is to ensure collective commitment of all countries regardless of their level of development to improve quality education for all especially at the primary level.

*Recognition, validation and accreditation of learning: A lifelong learning approach requires a system of recognition, validation and accreditation (RVA) of learning and competencies acquired outside formal education and training institutions. RVA is essential for the establishment and facilitation of pathways between formal and less formal learning opportunities, as well as between education, training and work.*SDG4-Education 2030

This system will permit the already trained teachers to go for further studies. These studies will improve their teaching approaches and make them more effective in their job. Providing these opportunities, both the teaching and school management will be able to provide quality education.

The development of Monitoring mechanisms can or will help improve teacher effectiveness in the primary education section. In Cameroon monitoring is still ineffective in the educational sector. This explains why some teachers or administrators are not committed to improving the quality and performance. This disengagement by some teachers tends to affect their effectiveness. This has a serious effect on the learners who are not taught what was intended. Monitoring as a professional development strategy will ensure quality teaching-learning process and will contribute in achieving the progress towards educational development which is the commitments of the member's states to ensure sustainable education. From an equity lens this will require having access to more reliable, timely and aggregated data. It will also require strengthened capacity to analyse data on participation and learning outcomes at all levels. This involves state and non-state actors in sourcing data for planning and policy development in the educational sector SDG4-Education 2030.

Professional development also focuses on the constant innovation of the Curriculum of teacher training schools. The objective of effective and relevant learning will require a continuous review of existing curricula structure; teaching and learning contents, pedagogical approaches, materials and classroom teaching practice; assessment structures; as well as teacher training and professional development. A holistic and coherent curricular approach will demand congruence between curriculum content, assessment, teacher training, as well as school leadership and management. These indicators will go a long way to improve quality education:

*Assessment of learning outcomes: Focus on effective and relevant learning requires fairer and more balanced mechanisms for measuring and validating knowledge, skills and competencies across a broader spectrum of users and of competences and thus greater flexibility in assessment practice. Focus on the effective acquisition of competencies and the relevance of learning for the world of work and civic life requires the establishment or the strengthening of national quality assurance and qualification frameworks.* SDG4-Education 2030

These will be effective and efficient strategies in ensuring professional development in the educational section. Education today is not education for education sake, but creating skills and competences that are ready to respond to the need of the job market or that of the economy. Therefore, teachers who are the guarantors of this knowledge should be professionally equipped to transmit relevant knowledge to the pupils. When they fail to do so, the society has failed and we will continue in the cycle of underdevelopment. In order to change the status quo, we have to improve on teacher quality. This improvement is based on professional development and consequently teachers' effectiveness which will replicate on the pupils.

Public funding for education oriented towards the deployment of resources for professional development will enhance the quality of teaching and learning as well as the satisfaction outcome to stakeholders: This call for diversification or outsourcing new sources of funding, widening subvention schemes, preventing tax evasion and increasing the share of the national budget allocated to education. SDG4-Education 2030.

Quality education can also be improved at the primary sector through the Improvement of aids, harmonization and better coordination of educational programmes and activities and creating partnership and cooperation among stakeholders. The donor agencies can engage themselves in professional development of teachers in middle income countries by monitoring and financing Educational projects. In this light, the commitment to improve teacher capacity and priorities depends on countries reality but developing countries still face a lot of challenges in this direction as there is lack of available resources both human and material to address the impending situation. The challenge of seeking to leverage domestic and external finance is also evident. Therefore, strategizing through diversification and positioning of educational programmes to mitigate this professional development is key to the impending quality performance.

#### **1.1.1.1. Contextual background**

Cameroon's educational system post independence (1960) with bilingual structure (English and French) led to the decentralisation efforts which is ongoing. Professional development seen as key to improving teacher quality and students outcome faced some challenges; limited fund, uneven access (rural/urban) and the need for context-fit approaches. Professional development in some cases does not align with classroom realities. There are inadequate incentives needed for teacher

professional development update. Evaluating the impact of professional development on teaching learning outcome is key.

The continental education strategy for Africa 2016-2025 stress on the equity, access and quality of education at all levels complementing the global agenda for education. Therefore, continuous professional development of teacher's competence will help boost the performance out of teacher for the continental development vision. It is evident that sub Saharan African is still facing a lot of challenge when it comes to teacher training. This is also informed by the allocation of resources which are fundamental to educational relevance (Plecki, Alejano, Knapp and Lochmiller 2006).

The continents policymakers underscored that primary education is the bedrock on which future learning and training are grounded. However, it is a neglected area in terms of policy and investment. The sub-sector is marked by inequalities, poor management and absence of coherent curriculum which needs relevant skills. The continent has work tremendously to improve the sub sector of education. It is a sub-sector that deserves a special attention in terms of capacity building, deployment of resources and incentives and norms that boost school performance, teacher's effectiveness is also guaranteed by the professional development which is more holistic in all dimensions CESA 16-25

It is evident that many African children attend primary school unprepared and so discontinuities between the home and classroom environments are prevalent. Reason why some cry so much when asked to go to school. Even while in class some cry and disturb the whole teaching learning process thereby penalizing those who were even willing to learn. We believe professional development of both school administrators and that of teachers will help mitigate this longstanding problem plaguing African for so long. Reinforcing the capacities through conferences and seminars could be strategies to savage the situation CESA 16-25.

Africa is the only continent where the language of instruction is most often than not a foreign language, this make it difficult for children to cope with a new linguistic structured approaches to teaching and learning. "*Early Childhood Care and Education*" (ECCE) is based for Africans to achieve sustainable quality education and training. Therefore, educational stakeholders should consider this concept in professional development. This will help teachers develop skill that will enable them handle some complex contextual problems CESA 16-25. The children's preparedness

to learn in school, the school's preparedness to accommodate children with different abilities and the capacity of families and communities to collaborate with schools (to enhance learning) is an essential ingredient for a successful educational journey CESA 16-25. This inclusive education can only be achieved when teachers are instilled the knowledge skill and attitude necessary to manage children with different learning abilities. This has been a serious challenge in Africa. Many African children are still out of school because of some of these challenges. Addressing some of these impediments through professional development will be ameliorating quality and equity situation in African primary education.

In the CESA 16-25, African leaders note that *“In the last two decades, Africa has made tremendous progress in expanding access to primary education as well. From 1999 to 2012, the adjusted net enrolment ratio jumped from 59% to 79%. In terms of numbers of children enrolled, this translates into 144 million school-age children accessing primary education.”* This is a consequence of global mobilization of impetus and resources made by national governments and other stakeholders under the supervision of EFA, MDGs and policies of free primary education enacted by African governments CESA 16-25. However, these efforts are still far from solving the contextual challenges of the day. More so, governmental actions in this direction as well as other actors at the grassroots are highly needed. To ensure quality learning, access and equity in education, professional development must be one of the central indicators at the implementation level of management.

Despite the progress in quality and equity, the challenges are still evident in terms of disparities in gender, regional location, minority groups, pastoral communities and the poverty stricken communities CESA 16-25. In this light, completion rates in many countries are very low. The CESA 16-25 notes that *“On average, only 70% of children entering primary education in Sub-Saharan Africa complete it against 95% in North Africa and the Middle East. Quality of education as measured by learning outcomes has been a concern.”* Some of the children going through the system are not acquiring the knowledge and skills expected at each stage. May be the knowledge transmitted does not meet the needs of these children. In some cases, data on learning achievements point to more than two-thirds of the children failing to read competently at the grade levels they are in (Adams and Van der Gaag, 2013). This failure is as a result of sporadic capacity building, lack of incentive and information flow that can enable teachers pass on right knowledge to pupils

using the right approaches. This is a result of poor quality of teaching facilities and dire lack of learning materials. Moreover, leadership, school management and quality assurance in this sub-sector have been ineffective in bringing about meaningful reforms. CESA 16-25.

The main challenge in Africa is the sustainability of access and improvement in the learning outcomes. There is need to bring in more than 30 million children currently out of school while at the same time ensuring that those who are enrolled acquire relevant competencies and knowledge at the end of basic level of education. This signifies giving attention to the teaching, training, deployment, professional development as well as working and living conditions of teachers (CESA 16-25). This is crucial in the primary school for there to be relevance in the transmission of skills.

This should be accompanied by accountability and transparency in the improvement of the quality of teaching and learning in our school. There is also need to uphold the commitment to move from universal primary education (UPE) of 6 to 7 years to a basic education of 10 to 12 years as reassuring by African ministers at their conference on education post-2015. Investment to improve school infrastructures in the remote and marginalized communities, the provision of learning materials in quantity and quality, reinforcing school feeding and health programmes will be significant in school achievement in Africa. There should be measures to ensure the continuous maintenance of girls in schools. This seems to be a major challenge that involves improving their performance especially in the sciences. There is prospect by African government to improve on the ICTs. This is expected to find effective lasting solutions to some of these challenges.

The continental agenda believes that Harmonization needs to be undertaken at national, regional and continental level to define a common range of skills and knowledge according to age and grade. This will build a consensus in skills development across countries in the continent (CESA 16-25).

The continental agenda for education highlight some Guiding principles, these principles are:

*“1- Knowledge societies are driven by skilled human capital as stipulated in the Agenda 2063.*

*2- Holistic, inclusive and equitable education with good conditions for lifelong learning is sine qua non for sustainable development.*

*3- Good governance, leadership and accountability in education management are paramount.*

*4- Harmonized education and training systems are essential for the realization of intra-Africa mobility and academic integration through regional cooperation.*

*5- Quality and relevant education, training and research are core for scientific and technological innovation, creativity and entrepreneurship.*

*6- A healthy mind in a healthy body-physically and socio-psychologically-fit and well-fed learners revitalize the teaching profession to ensure quality and relevance at all levels.” (CESA 16-25).*

These lofty principles can only be achieved when the educationists value professional development of the various education stakeholders like teachers. These are priorities strategic principle cannot be realised with clear vision at the state level. Therefore, the interpretation of these principles institutional frameworks is key to effective school management performance in Africa.

This continental initial also focuses on; Recruitment, training, and deployment of well qualified teachers as well as promote their continuous professional development with emphasis on instilling core values, results and accountability to learners. The Provision of good working and living conditions to teachers in order to enhance their status and value in society, the development quality and relevant teaching and learning material; the enhancement quality assurance and assessment mechanisms for learning outcomes, strengthening curricula to include life skills and other key competencies such as civics. Identify and reward dedicated and innovative teachers (CESA 16-25). The effective implementation at the country level will help improve quality education in Africa. (CESA 16-25).

Another aspect of the continental strategy for quality and equity education is Establishment and institutionalisation of assessment of classroom learning outcomes at various stages. It also looks at capacity building of teachers in formative assessment and continuous assessment, their implication in the improvement and remediation of learning outcomes. It equally focuses, on Setup national qualification frameworks (NQFs) and regional qualification frameworks (RQFs) to facilitate the creation of multiple pathways to acquisition of skills and competencies as well as mobility across the sub-sector. Develop continental qualifications framework linked to regional qualifications and national qualification frameworks to facilitate regional integration and mobility of graduates. Establish and strengthen quality assurance mechanisms, monitoring and evaluation

systems. All these are to improve on quality education and continuous professional development in Africa (CESA 16-25).

The recognition of the strategic position of education in the development of the continent by heads of states and governments was established following the decision by the African Union summit. Its mission is to defend and promote the development of education, science, technology and innovation on the continent. They are therefore responsible to actively engage their peers in their respective regions for Education, Science and, Technology (EST). They will undertake to invite heads of enterprises from the public and / or private sector, members of the civil society and philanthropists on the continent and abroad to get involved in the development of EST. These continental initiatives at the governmental level is promising a better future of the African education but there are still challenges due to poor information flow, lack of effective collaboration and incentives to stimulate engagement at grass level. These discrepancies explain why the African continents still have much to meet up with the global expectations in education (CESA 16-25).

### **National Context of Education**

An assessment of the teacher pedagogic professional productivity at the end of each term brings serious problem at the level of teacher's competence and teaching-learning process in Cameroon. The implementation of teacher professional development policy at the school plant is still a serious challenge to many school heads in Cameroon. Especially at private sector where most of the proprietors and school management run schools with little or no understanding of government policy vision as it concerns professional development and teachers 'effectiveness (SWSE 2013-2020).

Primary education is the second level of formal education. The duration of the primary cycle is six years which substantial skills are to be developed at this level. The statutory admission age is 6 years and this is the only admission requirement, regardless of whether the child attended nursery school or not. The end-of-cycle diploma is the First School Leaving Certificate (FSLC) for the Anglophone sub-system Primary school certificate and the Certificat d'Études Primaires (CEP) for the Francophone sub-system. (SWSE 2013- 2020)

In adopting the Growth and Employment Strategy Paper (GESP 2010-2020), Government opted for an economic policy that can promote strong growth, source of job- and wealth-creation and prerequisite to income redistribution and poverty reduction. Training of human capital that can meet these challenges demand a more holistic approach in professional development.

Quality may be analysed in an initial approach via teaching and training resources made available to a school. An additional perspective takes into account the type of organisation and how available resources are used. However, both approaches are inadequate since some schools with moderate means compared to others, perform better. This performance does not mean that professional development ensures teachers' effectiveness. There is need to build capacity, offer incentive and ensure information flow in order to determine quality and equity in the primary education sectors (SWSE 2013- 2020)

Therefore, an assessment of resources and how there are used should be supplemented by another approach which measures learning, cognizant that whereas many itineraries may lead to the same result, the best route cannot be determined from the outset. Assessing resource should also go along with more allocation to performance at all levels. *“It should also be noted that student results depend primarily on their inherent capabilities and their socio-economic and family settings. School environmental variables which we examine here are only an addition to this parameter.”* Therefore, to boost these capacities teachers have also to be reinforced in this direction in order for them to have understanding on how to improve on pupils' autonomous learning competences (GESP 2010-2020).

Some resources used by a school may have an impact on teaching or training quality. Among factors which may influence student performance, we shall focus on those of them which officials can act upon: learning environment logistics (quality of the buildings, availability of water, electricity, latrines), availability of a school canteen and teaching tools. The table below presents some of these factors for primary and secondary school. The focus on these and neglect on the resources for the development of teacher competence is failure in the side of policymakers. The development of human resources is key to the development of education.

Equity and resources allocation in education is crucial to teachers' effectiveness in the primary sector of education in Cameroon. Many schools especially in the private sector face this challenge.

*“Two major issues need to be addressed here:*

*I) efficiency in the distribution of resources between schools and their internal management (administration) and*

*II) the manner in which the schools transform the resources they have into results (learning in the lower part of the system and professional integration in the upper parts)*

*”(SWSE 2013- 2020)*

Sometimes, there is poor management of these resources because some school heads lack competence in resource management and there is also no effective follow up from the state to ensure the implementation in education.

The law on orientation of education which was enacted in 1998. This law prescribes the degree of involvement of the education community in managing education. To this effect, in 2001/2002, Government introduced school council. The school council supervises, advises, controls and monitors the running of the school. These educational actors can help improve on professional development of teachers. This development will go a long way to improve on quality teaching and learning. But we notice there is little involvement of community in educational management in Cameroon especially in the private school. The community seems sometimes not even to understand the role it has to play in this light.

The purpose of schools is to transform the resources at their disposal into results for students and learners. These resources can only be effectively transformed when effective professional development in terms of capacity building in resource management at the school level is assure. This is taking concrete actions and programmes that enhances efficiency in resource allocation and management. In fact, there is the lack of pedagogical management of schools yet; there are significant differences in the situations when it comes to performances. You will note that Some schools and training facilities with only limited resources perform well, whereas others which are allocated many resources, perform poorly. Therefore, the problems are at level of the resources allocation where some educational actors lack the competences which are necessary to ensure performance at the school plant. With the prevalence of this challenge, policymakers think *that “A*

*broad-based overhauling is needed to increase both the efficiency and efficacy of schools.” They believe that to attain this, there are two avenues to be explored:*

*“social development, with the participation of relevant national structures and socioprofessional milieu, in particular regarding the designing of courses and organisation of theoretical lessons, tutorials, conferences, seminars and internships. Wishing to create a more conducive incentives-based environment, the Government will forge wider, effective and better-organized partnerships with stakeholders and partners, including local/regional authorities, religious bodies, local communities, NGOs, businesses, private individuals and TFPs.”*

These initiatives can be achieved when schools become involve in the looking of partnerships and the state follow up activities of the educational actors. Some of these educational stakeholders do have the competences that enable them to search for collaboration with others. A decentralised national structure integrating all stakeholders will facilitate the implementation of this policy

The Government has taken the option to establish “quality core teaching covering the primary cycle and the first cycle of secondary education open to the greatest number of children aged 6 to 15 years, and making it possible to carry the average level of instruction along a path consistent with Cameroon’s emergence by 2035.”<sup>11</sup> In fact, the demand for enrolment of adolescents aged 12 to 16 years is high and this is desirable. There are projections that this demand will grow in the coming years due to higher primary school completion rates and high and rapid urbanisation of the country. This exponential increase in the social demand for enrolments is consistent with Cameroon’s Growth and Employment Strategy (SWSE 2013). This strategy, based on industrial production, generates significant needs in terms of level of qualification that a mere completion of primary school by the greatest number can no longer satisfy; hence, the option for core teaching.

To support efforts centered on textbooks, schools and teachers will be granted core teaching aids managed by school councils pursuant to procedures manual prepared for that purpose. Furthermore, textbooks will be bought on a competitive basis for the primary cycle (three books per child in reading, calculation and science) and placed at the disposal of schools. School councils will make local arrangements for the management of these allotments. For other textbooks (SWSE 2013). The provision of these resources will also enhance professional development of teachers and in turn their effectiveness will increase. This effectiveness is significant in quality education

pupils' performance. These will also prepare for the society where the knowledge acquired is relevant to their daily situations.

Also, in the advent of information and communication technologies, there is great need for professional development in education. Teachers have to adapt their teaching approaches and method to the modern technologies. The development of distance learning at the basic level of education also demands professional development for teachers. This will keep abreast with technological innovations in education.

Pedagogic supervision structures are responsible for reawakening teaching practice so as to further professional development in teaching and improve the learning of pupils. Among novelties to be introduced, the following are prioritised: the use of ICTs and analysis of class practice. The government focuses on apprenticeship and on pedagogy of success that will strive to consolidate achievements and consider error as a factor of learning. Teachers have to make evaluation work for learning. New practices are encouraging the learner's autonomy since he is the centre of the learning process. But these teachers who are expected to adopt this do not actually have professional competences to guide students in the area. They are expected to better prepare children for practical life activities which focus more on problem situations, not leaving out fundamental learning. The Government struggle to equip specialized rooms (data-processing, laboratory) and mobilize for practical training (office automation, science experiments).

Building the capacities of teachers and supervisory staff focus on the use of computer hardware and digital pedagogic resources; the promotion of new opportunities and training tools (E-learning, distance education, didactic software, etc.); the government is lagging in this area as most of the teachers have insufficient computers especially in this areas of study. The state has to step up and improve in this dimension in order to better ensure quality teaching and learning in our primary school. It also focuses on improving the learning environment in schools (multimedia centres, providing schools with computers, etc.) Setting up an operational system for preventive and curative maintenance of computers. At the level of the primary school this is inexistent. Therefore, you cannot talk of teacher professional development in the 21th century without talking about the ICTs. The government has to improve on the provision of ICTs infrastructures at the primary sector

to boost the development of teacher quality in education in Cameroon. This also makes the Cameroonian pupil competitive with the global ones.

Government at the policy level ensures that the actors in the sector implement an effective training policy that meets institutional, collective and individual needs. But the present challenges indicate that governments efforts are far from improving the situation on the ground. The identified weaknesses have been handled thoroughly and compiled and consolidated at school, sub-divisional inspectorate, divisional delegation, regional inspectorate, regional delegation, central services) and finally fed into a general information system to facilitate the drafting and implementation of national and devolved training plans. There is still ineffectiveness in the development of information system. This hinders information flow. Therefore, professional development cannot be effective without effective access and flow of information.

*Curriculum reform, preparation and delivery of core education will culminate in widespread upgrading. Supervisory staff (head teachers, pedagogic advisers and inspectors) will identify training needs thanks to an ascending approach documented by field observation during pedagogic visits and class observation. This field data will inform the management of the sector. All stakeholders will work to encourage and multiply a variety of training types in order to broaden the training response (auto-training, presence-based, devolved training, distance learning, mentoring). Special attention will be paid to the poor (school-leavers, isolated teachers). Sector ministries will create education synergy (initial and continuing) through collective/joint management of all actors and partners in order to make arrangements more consistent, complementary and efficient. (SWSE 2013- 2020).*

The need for educational relevance even at basic level of professional development is important. Also, the foundation for quality in vocational training is built at the primary level. This consist forging multiple collaborative strategies and incentive mechanisms between the public authorities and actors of the productive private sector. The Government have development of partnership approach as a central instrument education training policy but there are still very limited as they are still far from meeting the need of the targeted pupil in real time. The Prime Minister's Office has a Partnerships Support Council (CARPA) whose mission is to support sector ministries to implement public-private partnerships. Support council to help improve quality education is still a

serious problem on how this Professional development of teachers at this level will ensure quality training for teachers.

### **1.1.2. Theoretical background**

This work was analysis on the basis of the following theoretical underpinning:

#### **1.1.2.1. Absorptive Capacity Theory**

The theory of absorptive capacity was first proposed by (Cohen & Leventhal, 2003). In this work "absorptive capacity: a new view of learning and innovation", their definition of absorptive capacity is the ability of enterprises or organisations to identify new external information, absorb and apply them to the business list, and the ability to create a business. New is crucial. The theory holds that enterprises or institution with the ability to absorb knowledge can not only improve the innovation ability and agility of the organization, but also improve the performance of the enterprises. (Cohen& Leventhal 2003) believes that the competitive advantage of enterprises with higher absorptive capacity is more obvious than those with low absorptive capacity (Wu and Qu 2018).

Zahra and George (2004) expand the theory of knowledge absorptive capacity and considers that knowledge absorptive capacity consists of four parts. They are the ability to acquire, digest, transform, retain and utilize. Acquisition mainly refers to the enterprise's previous expenditure, the previous knowledge base, the intensity and speed of the enterprise's acquiring new knowledge and its direction. It needs to be explained that absorbing new knowledge needs to be based on existing knowledge, so the ability to acquire is mainly the knowledge that the enterprise has and the way it can be used to acquire knowledge before it absorbs new external knowledge. Digestibility mainly refers to the existing practices and processes within an enterprise that enable enterprises to Assess, Interpret, Understand and Learning new knowledge.

Transformation ability mainly refers to the Add, Delete, Recombine, and Reconfigure for the enterprise to use in the enterprise. The ability to use mainly refers to the ability of an enterprise to change its routines and processes and use new knowledge. Combining Cohen & Leventhal's definition of absorptive capacity, this paper argues that absorptive capacity should be composed of five parts. In addition to the above four abilities, the ability to judge the value of new external

knowledge, mainly refers to the ability (Wu and Qu 2018). this approach contributes to professional development and teachers' effectiveness in the school setting and the improve teaching-learning performance.

#### **1.1.2.2. Theory of Improvement**

This was developed by (Benthum, Gulikers, and Mulder 2011) the Theory of Improvement describes how characteristics of a professional development program contribute to teachers' learning. In this Theory of Improvement, the characteristic elements of the professional development will be mentioned and explained and it will be justified how the elements contribute to teachers' learning. This Theory of Improvement leads to the most suitable approach for this specific professional development. The Theory of Improvement is applied in the educational project the theory articulates around the following: Assessment practice, Personal inquiry, Approach in professional development. Conditional features of the improvement theory: Dialogue, Feedback on practice, Safe learning environment.

#### **1.1.2.3. Social exchange theory**

Social exchange theory and organizational justice influence Employee commitment. As an incentive theory it underpinned by social exchange theory, which views the employment relationship as a process of resource exchange governed by the norm of reciprocity (Shore & Wayne, 1993; Coyle-Shapiro et al., 2004), encompassing both ongoing conferment of benefits and continual re-balancing of expectations and obligations (Coyle-Shapiro & Morrow, 2006). Exchange = Trade something of value (cost) for something needed/valued (reward). Rewards – Costs = Positive Outcomes (profits) or Negative Outcomes (net loss). Inequity = Cost > Reward or My Costs > Your Costs or My Rewards < Your Rewards and Value of a Reward; Social Rewards, Costs, Profit Equity and Distributive Justice this theory has the following principles: (Redmond 2015)

Our primary concern in reviewing this theory is its specific applications to human; communication so we have omitted less relevant principles. Our decisions to communicate with; others are often influenced by our assessment of the costs and rewards of such interactions; Your decision to visit a teacher after class probably involved some weighing of the costs (such as time and potential embarrassment) against the potential rewards (learning information that will improve your grade

or developing a positive relationship); Social behavior can be explained in terms of costs, rewards, and exchanges; Social interaction involves two parties, each exchanging a reward needed by the other person; Social exchange theory can be used to explain the development and management of interpersonal relationships; and Social exchanges affect the relationships among members of groups and organizations (Redmond 2015)&&&1

## **1.2. Communication framework**

### **1.2.1. Conceptual background**

This study will focus on the background to the concepts of professional development, sustainable capacity building, allocation of resource, collaboration and mentoring, incentives and norms; information flow and teachers' effectiveness.

### **1.2.2. Professional development**

Since the emergence of human resource managements in the 1940s, professional development as organisational concept came to force. The improvement of worker's skills and competences is key to organisational performance and competitiveness. In the modern era professionalism is a drive towards production and organisational management.

The definition of professional development indicate, beliefs about the purpose and focus of professional development have evolved from a conceptualisation focus on training teachers to become familiar with, or experts in, a particular strategy or program, to an approach that emphasizes critical thinking and reflective decision making (Alberta Education 2006). Up to the mid-1990s, the role of professional development in supporting school reform was an important focus. During the mid to late 1990s, questions were raised about the link between professional development and student learning and achievement, and increasingly critical issues of accountability sparked more questions about effectiveness. In the past decade, the focus has shifted to discussions of the role that professional development plays in affecting teacher quality as an important indicator of student achievement (Alberta Education 2006).

In this way professional development in education play central role in ensuring quality, equity, management and governance. Some scholars think that "*The professional development of teachers go beyond a merely informative stage; it implies adaptation to change with a view to changing*

*teaching and learning activities, altering teacher attitudes and improving the academic results of students. The professional development of teachers is concerned with individual, professional and organisational needs”* (Heideman, 1990, p. 4) quoted in (Marcelo 2009).

Therefore, professional development entails resource allocation, in-service training, peer collaboration and pedagogic supervision as per this study.

### **1.2.2. In-service training**

In human capital or human resource management in-service training is an important factor in determining organisational performance and commitment. In education, in-service training is key in ensuring quality teaching and learning. It helps inform stakeholders of pupil’s performances, in this way, Beesley & Shebby (2010) think that in-service training is straightforward process which enabling the reinforcement of management and governance of an organization so that it can effectively achieve its objectives and fulfil its mission. They add depth to the definition by broadening what is meant by in-service training. In-service training can be looked at as an Effective Organizations strategy developed effectiveness that guarantees sustainable organisational performance. Also, it is the ability of an organization to fulfil its objective through mix of sound managerial processes, strong governance, and a sustainable rededication in the achievement of the intended results. By merging in-service training with other resources in the educational sector to determine its effectiveness, it gives a more comprehensive understanding of teacher potential and quality in the educational system (Beesley & Shebby 2010)

To outline the Stages of in-service training, we based on scholarly literature on Harsh and her colleagues at the Appalachian Regional Comprehensive Center (ARCC) who identified four stages of in-service training. These stages are: *“Exploration, Emerging Implementation, Full Implementation and Sustainability.”*

At the Exploration stage key actors identify the need for change; determine the desired outcome; and identify the knowledge, skills, structures, and processes that need to be in place to achieve the desired outcome. An important task during this stage is to evaluate the current situation of the organization, possibly including staff skills, number of staff, computer and other systems, infrastructure, and other resources. The “outcome gap” is the difference between existing outcome and needed outcome. Emerging Implementation stage is summarized in three steps: *“(1) the target*

*organization's employees participate in activities; (2) the employees build new knowledge, update technological or physical infrastructure, increase resources, or learn to use available resources more efficiently; and (3) the employees apply their new knowledge and utilize new systems".*

Full Implementation stage involves the integration of the new information and new skills and the refining of practices based on evaluation of the changes. During this stage, evaluations of the capacity building activities can help to inform key actors on the innovation's impact and consequences.

Sustainability is the final stage which involves "pervasive and consistent" use of the refined skills and practices. Also, the organisation demonstrates the capacity and ability to analyze and modify practices for continuous improvement and for any needed refinement of the innovation. (Beesley & Shebby, 2010). Professional development will be crucial to teachers' quality and effectiveness in the teacher learning process.

### **1.2.3. Allocation of resources**

Allocation of resources or resource allocation has always been a determining factor in defining organisational success. In school's management and educational resources management the allocation of resources that equity allocation of resources will improve the overall quality of the educational system. These resources will range from human, material, financial, time and informational. Teacher training effectiveness depends greatly on the effective integration of these resources at all levels of educational management to achieve better results.

Plecki, Alejano, Knapp and Lochmiller (2006) opined that the allocating and developing resources to support improvement in teaching and learning are thus fundamental leadership challenges. Although they alone are not responsible for the enduring inequities of public education, nor will they alone ensure that the schools make good on the promise of education as society's great equalizer, leaders like school's heads in Mfoundi division, their leadership team, and the groups of leaders at the central office who take these matters seriously are in a particularly good position to guide the distribution and use of resources that are a part of the solution.

To that end, they and education policymakers must be informed about emerging resource practices and cognizant of the ways incentives can be used to create conditions that support teaching and

learning. Resource allocation in education does not take place in a vacuum— instead, it often reflects policy conditions that form a context in which opportunities for effective leadership can be created. For example, effective leaders know how to use data strategically to inform resource allocation decisions and to provide insights about the productivity, efficiency, and equity of resources (Plecki, Alejano, Knapp and Lochmiller 2006).

The roles, responsibilities, and authority of leaders at each level of the education system also impact whether and how they are able to allocate resources to particular division, schools, programmes, teachers, and students. Further, the type of governance structure that is in place also affects decisions about resources and incentives. Governance issues arise as leaders become involved in raising revenue and distributing educational resources. These activities are shared by multiple entities, including the voting public, country's laws, local school boards, delegates and inspectors, principals, and teachers' associations. Each of these connections can provide insights into how to allocate resources and provide incentives that powerfully and equitably support learning, for both students and education professionals (Plecki, Alejano, Knapp and Lochmiller) 2006

### **1.2.5. Peer Collaboration**

Collaboration is an ongoing process where teachers become involved in various educational phases that together facilitate the progress of the student with special needs. For instance, Lingo, Barton-Arwood and Jolivette (2011) in Amr, Al-Zboon and Alhambra (2015) in recommend six steps through which collaboration between special and regular teachers can take place: “(1) *defining the student's behaviour to be monitored*, (2) *determining method for measuring progress*, (3) *designing data collection form*, (4) *determining roles*, (5) *collecting data*, (6) *analyzing data*. The authors argue that if collaboration is achieved during the previous steps, decisions regarding the appropriate instructional methods can be made which leads to positive students' outcomes.”

The idea of collaboration is highly recognized and valued, however, reality check seems to tell a different story. Collaboration faces various challenges and constrains that limit the implementation of a successful inclusive programs. For example, Eldar, Talmor, and Wolf-Zukerman (2010) reported that one of the different barriers toward successful inclusion was the issue of collaboration, which included imperfect relationships among professionals, lack of cooperation

and disagreement among them regarding best strategies and forms of action. Similarly, Smith and Leonard (2005) reported that general and special education teachers experience intrapersonal and interpersonal value conflicts when collaborating together. Another constraint on collaboration between special and general teachers, in relation to lesson planning and instruction, is the depth of content knowledge for special education teachers. McHatton and Daniel (2008) noted that while many special education teachers in the United States are certified for K-12 grades, their preparation programs predominately focus on elementary stage. Hamilton-Jones and Vail (2013) highlighted further challenges to collaboration, including: the struggle of power within the classroom dynamics, lack of school recognition for collaboration, schedule and time allocated for collaboration and failure to share responsibility. (Amr, Al-Zboon and Alkhamra 2015)

Collaboration may build the knowledge base among teachers in a school or professional network, adding value to the education students receive. But precisely how much value does that peer learning have, measured in terms of student outcomes? Studies show that students perform better on tests of mathematics and reading when they attend schools characterized by higher collaboration (Ostovar-Nameghi & Sheikahmadi 2016)

levels of teacher collaboration, creating a tipping point for sustained school quality management performance. Drawing on very sophisticated analyses, the researchers found that peer learning among small groups of teachers seemed to be the most powerful predictor of student achievement over time. Fully 20 percent of a teacher's "value added" effects, as measured by student test score gains, was attributable to shared expertise. Education Week, in reporting on this ground-breaking study, concluded, "Teachers raise their games when the quality of their colleagues improves." (Center for Teaching Quality, 2009).

#### **1.2.6. Effective Pedagogic Supervision**

In broad terms, an incentive is the promise of a reward for doing a good job, and accountability is the acceptance of the rewards and sanctions that come with measuring and reporting the results obtained. Since accountability implies the evaluation of the results obtained, incentives and accountability are just different expressions of the same concept. In principle, producing student learning is the default purpose of a teaching job, and regardless of incentives, the evaluation of performance leading to accountability is the norm. That said, every institutional framework has

built-in incentives and disincentives. The application of additional incentives above and beyond will contribute tremendously to school quality and equity training and learning in education (Arcia, 2014)

What exist at the school level is, in the end, a simple recognition that the inherent inducements are insufficient to spark teacher and student effort. «incentives for learning can be defined as an inducement or supplemental reward that serves as a motivational device for intended learning” (Grove and Hadsell, 2014)

Human capital, especially teacher quality, is believed to be one of the most important inputs into education production. (Fryer **2011**). These initiatives have included teacher rewards for student performance (e.g., test scores or graduation rates)for acquiring skills and certification and for assuming additional professional responsibilities, as well as differentiated compensation for teachers of high-need subjects and in hard-to-staff schools. Proponents of teacher incentives argue that they can drive improvements in student outcomes through multiple channels: “(1) by providing financial incentives for teachers to focus or increase their effort (2) by encouraging the development of stronger teaching skills, (3) by increasing incentives for high performing teachers to enter or remain in schools subject to the incentives, and (4) by altering the selection of individuals into teaching towards those who are more able to benefit from such a reward system.”(Wyckoff, 2013)

### **1.2.7. Teachers Effectiveness**

According to Popoola and Haliso (2009) and Adeoye and Popoola (2011) Teachers effectiveness is seen as the ability of a teacher to inculcate knowledge and skills in students, as well as change their behaviour for better living. Teachers’ effectiveness has been accepted as a multidimensional construct since it measures a variety of different aspects of teaching such as; subject mastery, effective communication, lesson preparation and presentation.

### **1.3.Justification of the study**

The study is a motivation of the research experience in the field where there are some discrepancies when it comes to professional development of teachers and their teaching effectiveness in the primary sub sector of education. The private sector is highly neglected in this light.

This work is also to fill the gap of limited literature on professional development and teacher's effectiveness in the primary school in Cameroon and specifically in Yaounde VI which seem to be neglected. Therefore, the adoption of effective resources allocation, sustainable capacity built, information flow and incentives will go a long way to improve quality education and equity in this sector of education.

More to this, generating theoretical perspectives for teacher's effectiveness will be remarkable for this investigation. This will lens more impetus into school management at the primary level and will turn to replicate in the secondary sector and a great contribution to societal development.

This will help to bring development in teachers' knowledge and skills and as a result ameliorate the educational system. The congruence of these resource create a better environment and conditions for students and teacher and as such create educational achievement at the school level.

#### **1.4.Statement of the research problem**

The policy orientation demand in education at all sectors expects teachers to be highly qualified and effective in the transmission of knowledge, skills and competences to the pupils at all levels of education. These competences and knowledge are replicated in the countries socio-economic development. Also, Classroom teaching has undergone several stages of innovation aimed at transforming teaching methods for efficiency to facilitate sound educational development. Innovations in teaching strategies which attracted a lot of previous researches have not significantly led to the improvement in educational standards as students' performance over the years keeps fluctuating as data on students' consecutive performance in class and national exams call for a review of professional development and teacher's effectiveness in primary school in Cameroon. It was noticed that pupils can not effectively read or write by the time they complete primary education. The quality and achievement challenge is real in our education system and need redress.

Teacher effectiveness is determined by a cross-section of strategic indicators, these are motivation (incentives), resources, the communication strategies and methods that must be adopted by the actors. Collaboration and mentoring are also significant expectations that will greatly improve on teacher quality and effectiveness in the teaching-learning process. The effective realisation of these factors at the school level depends on school management and governance structures.

However, the primary sector of education in Cameroon especially in the Mfoundi division experience discrepancies and challenges when it comes to teacher's effectiveness. These challenges turn to affect pupils learning abilities, teaching approaches, ineffective learning environment, demotivation and disagreement of teacher due to absence of effective professional development at the school level which is a common phenomenon in the private sector especially lay privates schools. Some of the proprietors and administrators lack educational management competences when it comes to mentoring other teachers, creating collaboration frameworks that can not boost teacher's confidence. The lack of effective incentive and norms in ensuring accountability and transparency is also evident.

The limitations of capacity building in terms of conference, seminars, and professional coaching turn to affect teacher's effectiveness. Schools do not organise these programmes regularly. If they do organise them regularly, they will stimulate professional engagement. This engagement is needed in efficient and quality learning. But institutions turn to neglect these because of limited resources or escape of expenditure. The consequences of this neglect turn to affect students' performance.

The unpreparedness of teachers for the challenges of ICTs applications in this ICTs era is a serious challenge in our schools today. This means most teachers lack competences in the ICTs which is the determining indicators for knowledge in the society. Building teachers capacity in this area will enhance their effectiveness. There is also poor communication within schools and staff in terms of modes and channels. It seems that in most schools the channels do not exist at all. This discrepancy creates distortion of information flow between administration and teachers. The inadequacy of information tools such as computers, projectors and teaching material turn to make teachers to be ineffective in their practices. It is evident that the provision and capacity building of teachers in information and communication technologies at the primary school will boost their effectiveness.

The continuous declining in academic performance and fallen standards in the Cameroonian primary schools has generated much interest among stakeholders in the education sector to question teachers' effectiveness in terms of teacher training and continuous professional development through their career. This Poor academic performance of pupils in Cameroon has

been linked to poor teachers' performance in terms of accomplishing the teaching task, negative attitude to work and poor teaching habits which have been attributed to poor motivation.

Therefore, this study seeks to understand to what extent can professional development, in terms of resources allocation, in-service training, peer collaboration and effective pedagogic supervision can influence the quality and equitable teaching and learning process in the Cameroon primary school.

### **1.5. Research objectives**

This work is developed around general and specific objectives

#### **1.5.1. General research objective**

The main objective of this study is to examine the impact of professional development on teachers' effectiveness in the selected primary schools in Yaounde VI.

#### **1.5.2. Specific research objectives**

- In-service training influences teachers' effectiveness in the selected primary schools in Yaounde VI.
- Allocation of resources influences teachers' effectiveness in the selected primary schools in Yaounde VI.
- Peer Collaboration influences teachers' effectiveness in the selected primary schools in Yaounde VI.
- Effective pedagogic supervision influences teachers' effectiveness in the selected primary schools in Yaounde VI.

### **1.6. Research questions**

This research is built around the follow research objectives

#### **1.6.1. General research question**

What is the impact of professional development on teachers' effectiveness in the selected primary schools in Yaounde VI?

#### **1.6.2. Specific research questions**

- What is the impact of in-service training on teachers' effectiveness in the selected primary schools in Yaounde VI?

- What is the impact of Resource allocation on teachers' effectiveness in the selected primary schools in Yaounde VI?
- What is the impact of peer Collaboration on teachers' effectiveness in the selected primary schools in Yaounde VI?
- What is the impact of effective pedagogic supervision on teachers' effectiveness in the selected primary schools in Yaounde VI?

### **1.7. Research hypotheses**

This work has the follow hypotheses

#### **1.7.1. General research hypotheses**

**H<sub>0</sub>**: Professional development has no significant influence on teachers' effectiveness in selected primary schools in Yaounde VI.

**H<sub>a</sub>**: Professional development has significant influence on teachers' effectiveness in selected primary schools in Yaounde VI.

#### **1.7.3. Specific research hypotheses**

**H<sub>01</sub>: In-service training** has no significant influence on teachers' effectiveness in selected primary schools in Yaounde VI.

**H<sub>a1</sub>**: In-service training has significant influence on teachers' effectiveness in selected primary schools in Yaounde VI.

**H<sub>a2</sub>**: Resource allocation has significant influence on teachers' effectiveness in selected primary schools in Yaounde VI.

**H<sub>a3</sub>**: Peer Collaboration has significant influence on teachers' effectiveness in the selected primary schools in Yaounde VI.

**H<sub>a4</sub>**: Effective pedagogic supervision has a significant influence on teachers' effectiveness in the selected primary schools in Yaounde VI.

### **1.8. Significance of the study**

**Scientific significance:** this work will improve student learning outcomes, enhance teacher retention and satisfaction, address educational inequalities and advance the field of education research. By researching on professional development and teacher effectiveness, scientist and educators can work together to improve educational outcomes, address inequalities and enhance the teaching profession as a whole.

**Significance to Teachers:** Teachers are indispensable actors of human resource in education. The pupil's performance and achievement depends on the effectiveness of teachers. This study will provide a guide for teacher on how to build their professional development in order to ensure effectiveness in the teaching process. It will give strategies on how to improve on their teaching method and quality education. Professional development is a crucial aspect of human resource management in any organisation whether in business or education. They can reinforce the capacities of each other at the school plant.

**To School administrators:** It outlines the role of school administrators in professional development and how they contribute to teacher's effectiveness. The school administrator is in charge of translating national educational policy into action at level of the school. Therefore, their administrative strategies will determine the performance of their teacher. The failure or the success of each school depends on their managerial and governance skills and competences. Therefore, this work will provide indicators for school administrators to ensure continuous professional amelioration of the working condition both physical and psychological needs of teachers.

**To Pedagogic inspectors:** This work creates awareness and help the national and regional inspectors on the current challenges and discrepancies in the primary school in Cameroon and how to tackle them as the way to ameliorate quality and equity of knowledge and skills transmission at this sector of education. This will enable them to see how they can intervene and help school administrators and teachers in ensuring effectiveness through professional development. It will also help them to work on important pedagogic issues like methodology, evaluation, planning of lessons, seminars, workshops and school visits.

**To Policy makers:** This work wills policy makers at basic education to revisit programmes and frameworks of professional development in terms of planning, implementation, monitoring and

evaluation of teachers' effectiveness, redesigning capacity building strategies and methods as well as the flow of information. Revisit the efficiency or resources allocation as means of teachers' effectiveness; incentive and norms as ways of improving quality and efficiency of education.

**To head teacher/teachers:** The first beneficiaries of this work are the classroom teachers to improve on their services and perfect their performance. It will increase the scope of professional growth to meet institutional objectives and modern challenges in education in order to collaborate with the administration.

**To pupils:** This research will help the pupils to improve their results because they will appreciate the complementary role played by the teachers which can act as an intrinsic and extrinsic motivation to them.

**To parents:** As stakeholders they stand to profit the professional competency of the teachers as will be reflected in the performance of their children. They will not have to spend extra money in the same class due to repetition.

### **1.9.Delimitation of the study (scope)**

Here the researcher specifies the restrictions and the limitations imposed on the study, to determine the boundaries of the project by providing answers to questions like who, what, when, how and many others.

**Geographical delimitation:** This study is carried out in Yaounde VI sub division of the Mfoundi Division of the centre region of Cameroon. Within this scope 10 schools were selected for the study. Both government and private schools.

**Conceptual/thematic delimitation:** The study centres on resource allocation, sustainable capacity building, peer collaboration and mentoring, incentive and effective information flow.

**Theoretical limitation:** This study is limited to theories of improvement, social exchange and absorptive capacity. These theories will explain the phenomenon of professional and teachers' effectiveness in primary school in Yaounde VI sub division.

**Methodological limitation:** The study is a mono-quantitative analysis and data sources is limited to questionnaire survey operationalized using five independent specific latent construct relating to

the professional development and teacher's effectiveness in the learning process and measured using the five Likert scales ranging from strongly agree to strongly disagree. The philosophical underpinnings supporting this analysis are limited to positivism epistemology, objectivism ontology, biased-free axiology and deductive approach. Developed hypotheses will be tested based on the goodness fit of structural model analysis. Descriptive analysis will be used for demographic data.

### **Professional development**

Professional development refers to the process of improving and enhancing the skills, knowledge and practices of an individual. Professional development is an on-going and continuous learning process, focusing on improving practices, tailored towards individual needs, involves reflection and self-assessment which also involves collaboration and networking. This professional development can be done through workshops and conferences, coaching and mentoring, online courses, action research and inquiry, peer observation and feedback.

### **Teachers' effectiveness:**

This refers to the extent to which a teacher is able to achieve their instructional goals, promote student learning and foster a positive learning environment. This is seen in student learning outcomes, classroom management, instructional quality, communication and interpersonal skills, professionalism and reflection.

### **Conclusion**

This chapter examine the background of the study justification and the problem. All of these aspects lay a ground work of the understanding of professional development and teachers' effectiveness in the Yaounde 6 municipality of the Mfoundi division of the Centre region of Cameroon.

## CHAPTER TWO: LITERATURE REVIEW

The main objective of this study is to examine the impact of professional development on teachers' effectiveness in the selected primary school in Yaounde VI municipality. This chapter focuses on the conceptual literature, theoretical framework and related empirical literature review. This is to present the clarity of various concepts which are selected for this study and the theoretical framework which is suitable for the examination and exploration of the area of research. The empirical literature gives an insight into the professional development and places the work into perspective of school management especially educational inspection.

### 2.1. Conceptual literature

This section deals with conceptualisation of the selected variables for this study. The aim is to place within the context of primary teachers' effectiveness as means of ensuring quality and achievement in education

#### 2.1.1. Professional development

Professional development of teachers in education play central role in ensuring quality, equity, management and governance instructional practices. In the Cameroonian primary school professional development is indispensable in ensuring educational achievement of teachers and learners. Some scholars think that

The professional development of teachers goes beyond a merely informative stage; it implies adaptation to change with a view to changing teaching and learning activities, altering teacher attitudes and improving the academic results of students. The professional development of teachers is concerned with individual, professional and organisational needs (Heideman, 1990, p. 4) quoted in (Marcelo 2009, p 11.)

Bringing changes in teaching methods and improving on the academic performance of pupils is a central strategic preoccupation of professional development in education especially at the primary which is the foundation of formal education that prepare citizens for harmonious and dynamic society. To Borko (2004) and Desimone et al. (2002) see professional development of teachers as an importance mechanism improving teachers' knowledge and instructional practices. These

knowledge and practices will lead to changes in teachers' attitudes and beliefs (Bautista& Ortega-Ruiz, 2015)

Teachers' professional development is *“about teachers learning, learning how to learn, and transforming their knowledge into practice for the benefit of their students' growth.* «The aim in this direction is to make more relevant the knowledge and skills that are transmitted to learners so as to create an impact on them. Professional development can be personally motivated or collectively motivated by a good number of institutional factors which establish school management teams and inspectors in charge of improving on quality education. In this light, context and resources will play an essential role in determining teachers' professional development in that the actors may understand the impact of ameliorating the teacher quality and its subsequent implication in output of learners in the school establishment.

*“Teacher professional learning is a complex process, which requires cognitive and emotional involvement of teachers individually and collectively, the capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change.”* (Avalos, 2010; p.10) cited in (Bautista& Ortega-Ruiz, 2015, p. 223)

The stakeholders involved in developing teachers' competences must be aware of the dynamic that underlies this activity. The psychological implications in relation to perceptions of each teacher of his role as an educationist are crucial to educational achievement in primary education. The sentimental attachment individual and collective members have in capacity building also makes professional development a complex venture by the school management. Therefore, more skills and intelligence are needed in promoting the development of teachers' 'skills for a quality primary education. Considering and integrating the holistic socio-cultural patterns in professionalism is an important way in building a strong mechanism for professional development.

Knapp (2016) thinks of professional development from the policy perspective wherein he outlines a number of policy orientations in professional development. Professional development policies have to focus on investment level in professional learning, it should be evidence based, there should be norms guiding the implementation of professional development activities with the school environment. Considering these factors will be important in building quality and relevant

education system where a performance outcome in results and its corresponding social effect is felt in the society.”

Effective professional development as structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes. We conceptualize professional learning as a product of both externally provided and job-embedded activities that increase teachers’ knowledge and help them change their instructional practice in ways that support student learning (Darling-Hammond, Hyler, Gardner & Espinoza, 2017, p.2)

Professional development should be an organised system within and outside of the school environment. This means each school must have an internal framework of professional development of its staff. The external comes to create more impact and boost the effective performance of the internal strategies. The knowledge and skill development aims principally in improving students’ learning out coming. Therefore, professional development as a strategy of teachers’ effectiveness cannot be over emphasized.

### **2.1.2. Resource Allocation**

Teachers’ effectiveness also relies on resource allocation which is an important component of professional development in education. Quality teaching and learning demands resources which are both financial and non-financial. Poor allocation will mare the effectiveness of school management this can greatly influence negatively the teachers’ effectiveness and pupils ‘performance. This means poor knowledge and skills acquisition, hence poor educational achievement and fallen standards in the educational systems.

A systematic analysis in forecasting resources allocation is highly needed at the macro, meso and micro levels. At the macro level educational planning and policymakers must carry out a comprehensive analysis in relation to resource in terms of availability and equitable allocation. At the meso level the educational inspectors have to supervise the deployment and the effective implementation of the resources allocation policies. The micro level is the school establish. The school heads and school management board must determine the quantity and quality of resource to be allocated in various subjects and various sections of the school set up. They should be capable of devising mechanisms of resources generation. These will go a long way to improve teacher quality and competence.

According to Picus (2004) Resource allocation in education does not take place in space for, it often reflects policy conditions of each country and the educational landscape that form a context in which opportunities for effective managerial potentials can be created for better institutional management.

Also, Resource Allocation in educational management or school management refers to Decision-making process which regards the assignment or deployment of budgetary resources in the school establishment as means of ensuring quality and effectiveness in the teaching-learning processes.

This objective of the resource allocation serves as a strategic way to meet desired outcomes. Resources include a range of elements beyond just funding, such as staff talent and expertise, staff time, student learning time, and outside services offered by community partners. These resources must be carefully identified, analysed for there to be teachers' effectiveness. Willis, Krausen, Caparas, & Taylor (2019) think that Effectiveness of resource allocation strategies must consider the quality, quantity and variety of existing investments in people and programs. This idea supports the point that situational analysis is also needed in the planning phase. This should not only be based on per-pupil quantity of investments but the allocation should consider the alignment of those resources with turnaround priorities. They believe that the resources allocation has to go beyond thinking solely about funding, however, the Talent Development domain will discuss resource strategies considering how to most effectively use teachers' non-instructional time to build their capacity (Willis, Krausen, Caparas, & Taylor, 2019, p. 3)

### **2.1.3. In-Service Training**

Here, the researcher notice that the concept of capacity has many different meanings and interpretations depending on who uses it and in what context. In the first instance, capacity building as a concept is closely related to education, training and human resource development. This is very common in the human resource planning. In organisational management to maintain organisational performance and the competitive advantage, capacity building is a continuous process. The vision and missions of the organisation has to direct the orientation in the human resource capacity development. In the educational sector, teachers are the key human resource that drives the quality and the performance of the system. This conventional concept has changed over

recent years towards a broader and more holistic view, covering both institutional and country base initiatives

Capacity building can also be looked as *«The development of knowledge, skills and attitudes in individuals and groups of people relevant in design, development, management and maintenance of institutional and operational infrastructures and processes that are locally meaningful.»* The emergence of modern technologies and innovative approaches demand an incessant building of capacity for the worker to up-date in terms of infrastructural management, adopting to the disruptive change in the educational and organisational environment. Effectiveness and efficiency in school management is measured in terms of the competences, knowledge and skills the teachers possess. This involves the understanding of institutional processes in relation to its objective and goals.

UNDP (1998) says *“Capacity can be defined as the ability of individuals and organizations or organizational units to perform functions effectively, efficiently and sustainably.* *«Education for sustainable development can only be achieved when teacher capability or capacity is sustainable. This can be through instructional strategies that promote self–capacity development, institutional collectives as professional group. The departments or school head can instil this culture in his teachers for them to be effective.*

Capacity building can be looked at as an Effective Organizational strategy to develop effectiveness that guarantees sustainable organisational performance. Also, it is the ability of an organization to fulfil its objective through mix of sound managerial processes, strong governance, and a sustainable rededication in the achievement of the intended results. By merging capacity building with other resources in the educational sector to determine its effectiveness, it gives a more comprehensive understanding of teacher potential and quality in the educational system (Beesley & Shebby 2010). Also, Capacity building is the ability of individuals, groups, institutions and organizations to identify and solve developmental problems over time (Peter Morgan, 1996) in (Stig Enemark 2003)

Capacity development is construction of any system, effort or process which includes among its major objectives strengthening the capability of elected chief executive officers, chief administrative officers, department and agency heads and programme managers in general purpose

government to plan, implement, manage or evaluate policies, strategies or programs designed to impact on social conditions in the community. Cohen, (1993). In Stig Enemark (2003, p.) says

Reinforcing the knowledge, competence and skills of teachers is a great way of making them more effective in career. This capacity building can take place at all levels of management. This means integrating elements of corporate level management, middle level and operational level so as to translate in the implementation of organisation objective in more dynamic holistic way. The organization's work in promoting policies that improve the quality and effectiveness of education systems worldwide (OECD) has defined Capacity Development as "... *the process by which individuals, groups, organisations, institutions and societies increase their abilities to: (i) perform core functions, solve problems, define and achieve objectives; and (ii) understand and deal with their development needs in a broad context and in a sustainable manner.*"

It is evident from the forgoing conceptual orientations that capacity building or capacity development as professional development indicator is very important in teachers' effectiveness. The correlation of this conceptual framework will ameliorate quality teaching and learning and as such educational achievement.

#### **2.1.4. Peer Collaboration**

Teacher's collaboration was broadly defined as a style of direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal. Collaborative mentoring can be subject base professional development that teachers acquire skills and knowledge necessary for quality teaching and learning. The head school management at the basic level must endeavour to build in the teachers the culture of collaboration. Collaborative mentoring can stimulate organisational commitment which help the employees feel more devoted and satisfied with their job. This professional development indicator can help new teachers to gain more experience in the shortest time possible and it can also go a long to sustain good social relations with other colleagues. As such, collaborative mentoring can entail "a spontaneous, unstructured, peer-to-peer coaching relationship that emerges when optimal conditions are created"

Lingo, Barton-Arwood and Jolivette (2011) in Amr, Al-Zboon and Alhambra (2015) recommend six steps through which collaboration between special and regular teachers can take place: "(1)

*defining the student's behaviour to be monitored, (2) determining method for measuring progress, (3) designing data collection form, (4) determining roles, (5) collecting data, (6) analysing data.* Integrating these stages in teachers' professional development influence their effectiveness.

Cook & Friend, (1992, 5) say Collaboration is also perceived as sharing information among experts. Ideally, the involved parties should communicate openly, demonstrate mutual respect for one another, and work together toward the common goal of a child's educational program (Murata & Tan, 2009) in (Muna Amr, Al-Zboon & Alkhamra, 2015). Collaboration is an on-going process where teachers become involved in various educational phases that together facilitate the progress of the student with special needs (Muna Amr, Al-Zboon & Alkhamra, 2015). Collaboration enhances participatory and constructive learning strategies. This strategy will facilitate the effective implementation of school programmes, so school heads and teachers should always work to promote this as an institutional objective so as to achieve quality education and good performance by students.

#### **2.1.5. Effective Pedagogic Supervision**

This is guidance of operation and co-ordination of pedagogic activities. It also entails the cultivation of good relationship among the staff. The major aim of supervision is to ensure the good organizational planning.

Supervision could be defined as a day to day guidance of all education operations, coordination of the detailed work and cultivation of good working relationships among all the people involved in the teaching-learning process. Supervision is in a case the back bone of educational improvement. Supervision is provided by the pedagogic chain of the ministry of basic education to help educators and pedagogic supervisors to do better jobs.

Supervision is necessary in education to ensure uniformity and effectiveness of educational programmes. It is required to promote teaching and learning in schools. It incorporates checking, inquiry fact-finding, keeping watch, survey, correction, prevention, inspiration, guidance, direction, diagnosis and improvement. The National Policy on Education (NPE) under the broad heading planning, administration and supervision of education, contains precise objectives of educational supervision. It is to ensure quality control through regular inspection and continuous supervision of instructional and other educational services (NPE, 2004:55).

Mbiti (1974) saw supervision as the center piece of pedagogy. Educational supervision is not a uni-dimensional concept. It is not the concerns of superiors or ministry officials alone; it arises from collaborative activities between designated pedagogic supervisors and the teachers. Indeed, there would be no supervision if there are no people to be supervised. Therefore, it appears that there four important elements associated with the concept of supervision. They are supervisors, set tasks and objectives, resources (human/ material), and cooperative action. While it is clear that the concept of supervision embraces the first three elements, the element of cooperation is often neglected. This makes the supervisor to become autocrat with the perception that his main role is to prescribe procedures to subordinates rather than cooperate to fashion out alternative approaches to solving critical problems. According to Owoeye (2002) supervision is that part of pedagogic activity which has particular pertinence for the appropriateness of instructional expectations of educational programs. By this definition, supervision can be viewed as the supervision of teachers to carry out purpose of pedagogy. Ajayi (2002) opined that supervision is a helping relationship whereby the supervision guides and assists the teachers to meet targets. Knice (1974) summed it all when he defined supervision as the art of selecting, developing, coordinating and directing assistants to secure desired results.

Education as a sector of a nations economy has objectives, programs, resources and budgetary allocations to meet educational needs. Supervision is necessary in order to relate the objectives of educational programs to actual and observed performance. Pedagogic supervision is a control mechanism that reduces variance between standard policies and procedures and the interpretation and implementation of educational programs.

Pedagogic supervision in schools is very necessary to inform and discuss with teachers new alternative methods of teaching. It is to make available for teachers didactic materials which are useful for effective teaching and learning in education.

Some of the purposes of pedagogic supervision include:

- helping the teachers to improve their status, skills and knowledge
- To ascertain the standard of educational performance
- To check the available resources in each school.
- To ascertain whether guide lines on specific government policies have been followed.

- To evaluate the success of new methods and theories.
- To motivate and encourage the teachers to develop healthy attitudes towards work.
- For fact finding in times of crisis in schools.

#### **2.1.6. Teaching Effectiveness**

According to Popoola and Haliso (2009) (Adeoye and Popoola2011) Teaching effectiveness is seen as the ability of a teacher to inculcate knowledge and skills in students, as well as change their behaviour for better living. Teachers' effectiveness has been accepted as a multidimensional construct since it measures a variety of different aspects of teaching such as; subject mastery, effective communication, lesson preparation and presentation

Teachers' effective is defined by their teaching. Teaching skills are those "micro-behaviours" that the effective teacher constantly exhibits when teaching a class. They include behaviours like: involving all pupils in the lesson, using differentiation appropriately to challenge all pupils in the class, using a variety of activities or learning methods, applying teaching methods appropriate to the national curriculum objectives and using a variety of questioning techniques to probe pupils' knowledge (McBer, 2000). Professional development is a tool through which teacher's skills and effectiveness can be ameliorated for better results and quality education.

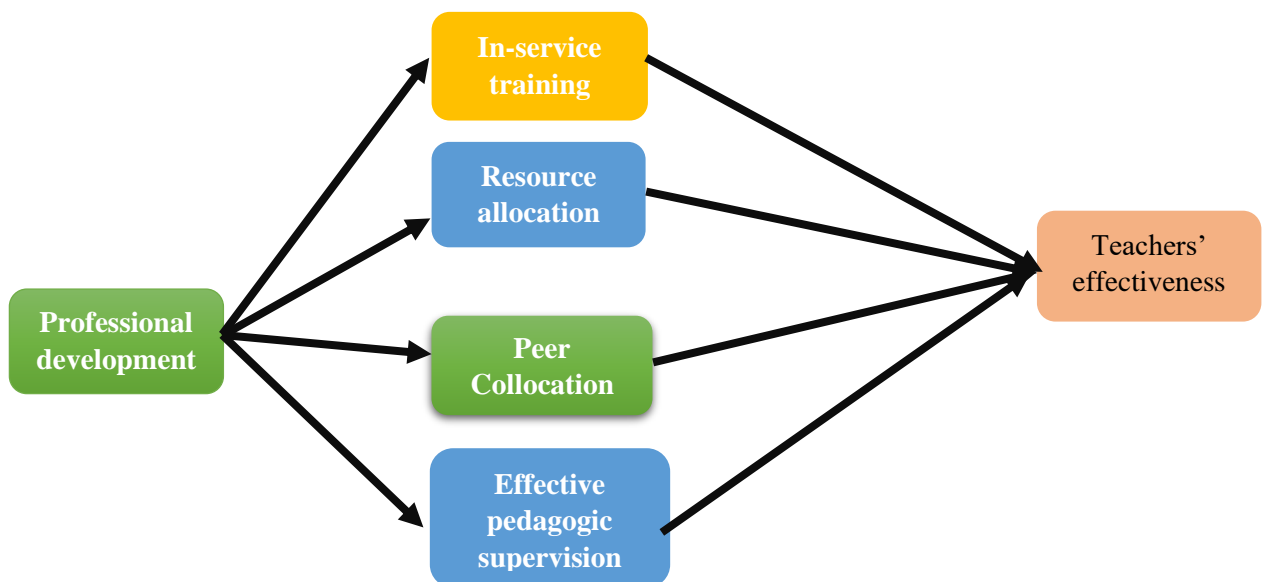
Effective teachers set High expectations for the pupils and communicate them directly to the pupils. They challenge and inspire pupils, expecting the most from them, so as to deepen their knowledge and understanding (McBer, 2000). This can come to reality if there are institutional incentive and team work that permit to perform in their activities. Therefore, collaborative mentoring is another dimension for teacher to achieve their high expectation in their students. Also capacity building framework will be an effective indicator.

More so, Effective teachers are good at Planning, setting a clear framework and objectives for each lesson. The effective teacher is very systematic in the preparation and execution of each lesson. The lesson planning is done in the context of the broader curriculum and longer-term plans. Effective teachers create the time to review lesson objectives and learning outcomes at the end of each lesson. This effectiveness comes as a result of continual professional development especially within the school establishment.

Effective teachers employ a Variety of teaching strategies and techniques to engage pupils and to keep them on task. In our observations we saw effective teachers doing a great deal of active teaching. Effective teachers have a clear strategy for Pupil management. A sense of order prevails in the classroom. Pupils feel safe and secure. This pupil management strategy is a means to an end: allowing maximum time for pupils to be focused on task, and thus maximising the learning opportunity (McBer, 2000)

Effective teachers manage time and resources wisely. The effective management of pupils, time, resources and support promotes good behaviour and effective learning. It is evident that effective teachers employ a range of Assessment methods and techniques to monitor pupils' understanding of lessons and work. These could be tests, competitions, questioning or regular marking of written work. The effective teachers look for gains in learning, gaps in knowledge and areas of misunderstanding through their day-to-day work with pupils (McBer, 2000). It is incumbent on the educational stakeholder to ensure that professional development is an institutional strategy for the scarce human resources in education. Teachers should also play a central role in improving their knowledge, competences and skills so as to instil in learners relevant knowledge and skills that will lead to educational achievement.

*Figure 1: Professional development - teachers' effectiveness Conceptual framework (resource: Research 2021)*



## 2.2. Theoretical framework

This section of the literature present the various theories adapted to the interpretation and explanation of the concept of professional development and teachers' effectiveness.

### 2.2.1. Absorptive Capacity Theory

The theory of absorptive capacity was developed by (Cohen & Levinthal 2003) as cited in (Wu & Qu 2018). In this study "*absorptive capacity: a new view of learning and innovation*", they define absorptive capacity as the ability of enterprises or organisations to identify new external information, absorb and apply them to the business list, and the ability to create a business. They also said it's the ability of an organisation to acquire, assimilate and apply new knowledge to improve its performance. Educational institutions also operate in environment influenced by the external factors like, knowledge, information and policies from government and research findings. These factors turn to affect the evolution of the educational system. Therefore, institutions have to develop absorptive power as strategies for professional development of its human resources. The theory holds that enterprises or institution with the ability to absorb knowledge can not only improve the innovation ability and agility of the organization, but also improve the performance of the enterprises. From this thesis it is evident that knowledge absorption and innovation through capacity building will improve the teachers' effectiveness in the school environment. (Cohen& Leventhal 2003) as cited in (Wu & Qu 2018) believes that the competitive advantage of enterprises with higher absorptive capacity is more obvious than those with low absorptive capacity (Wu and Qu 2018).

This theory was further developed by Zahra and George wherein they examine the knowledge absorptive capacity and considers that knowledge absorptive capacity consists of four parts (2004). These five components of knowledge absorptive capacity are: *They are the ability to acquire, digest, transform, retain and utilize.*

**Acquisition ability** mainly refers to the enterprise's previous expenditure, the previous knowledge base, the intensity and speed of the enterprise's acquiring new knowledge and its direction. This also can be measured in the educational establishment. It needs to be explained that absorbing new knowledge needs to be based on existing knowledge, so the ability to acquire is mainly the knowledge that the enterprise has and the way it can be used to acquire knowledge before it absorbs

new external knowledge. This is indicative of the fact that there must be environmental analysis to determine the knowledge of the institutions in a way of ascertaining which knowledge and innovation to integrate into the professional development of teachers. (Wu & Qu 2018).

**Digestibility ability** mainly refers to the existing practices and processes within an enterprise that enable enterprises to Assess, Interpret, Understand and Learn new knowledge (Wu & Qu 2018). The school system also has many knowledge assessment approaches which enables them to carry interpretations and understanding of the knowledge capacity of teachers as means of ensuring effectiveness. The outcome of this digestibility is to have a competitive edge with other schools.

**Transformation ability** mainly refers to the Add, Delete, Recombine, and Reconfigure for the enterprise to use. This is a smart way of improving organisational performance. In the new knowledge society where there is rapid growth of knowledge as a results of innovation in educational technologies, educational establishment ought to have the transformative power through it human resource reconfiguration which is a veritable mechanism for teachers' effectiveness. (Wu & Qu 2018).

**The utilisation ability** refers to the ability of an enterprise to change its routines and processes and use new knowledge. This also means improving the organisational behaviour and culture to better suit the needs of the changing times and respond to teachers' professional need as way of making them more effective. Combination of Cohen& Leventhal's definition of absorptive capacity, (Wu & Qu 2018) argues that absorptive capacity should be composed of five parts. In addition to the above four abilities

**Judgement of the value of new external knowledge:** This ability simply refers to evaluating the value of knowledge from the outside world, to judge whether the new knowledge is valuable to the company or organization or not. Bring value added or benefit to the company. At present, most of the research on absorptive capacity is about the absorptive capacity of enterprises, and less attention is paid to individual absorptive capacity. (Wu and Qu 2018) focuses on individual absorptive capacity, and the main content is how to improve individual absorptive capacity mainly refers to the ability. This approach contributes to professional development and teachers' effectiveness in the school setting and improves teaching-learning performance.

Wu and Qu (2018) further expand on this concept of training management where they identify four components of training management. They are demand analysis, training plan, training implementation and training effect evaluation.

**Demand analysis** is the basis of training work by analysing the current performance information of organization and employees, comparing target performance, analysing performance gap, and finding out the problems that can be solved through training, (Wu & Qu 2018).

**The training plan** is a record in a logical sequence. It is a pre-system setting of learning content, time, field, lecturer, trainee, training mode and training cost based on the strategy of organization, (Wu & Qu 2018).

**Training implementation** is the implementation of a well-done training program. The main contents are: making and printing training materials; inspecting training teachers' qualifications and hiring trainers suitable for the organization; visiting and inspecting training sites, arranging training sites ahead of time; preparing appropriate teaching equipment, such as microphone, loudspeaker, projector, electricity. Brain, pens and whiteboards, and so on; consult with the leaders of the trainee department, determine the training time, arrange the personnel of the Department to take part in the training; the training organizers need to supervise the execution of the training program all the way, and begin to evaluate the training project until the end of the training, (Wu & Qu 2018).

**The evaluation of training** refers to the evaluation of the whole process from the beginning of the training project to the training content, the advantages and disadvantages of the training, the timely recording of relevant information, and the improvement in the next training project. If digital measurement can be carried out, it is best to carry out the digital evaluation and even to analyse the income of the investment, (Wu & Qu 2018).

### **2.3.1.1. Limitations of the theory**

This theory is an organisational theory in business where the enterprise develops the capacity innovation and knowledge for the competitive advantage. There never focused on individual absorptive capacity.

### **2.3.1.2. Relevance of the theory to the present study**

This sustainable capacity building deals with the absorption of new knowledge and innovations, it focuses also on the ability to acquire, transform, digest and utilise information which are very important elements of professional development of teachers' competency leading to effectiveness.

### **2.2.2. Theory of Improvement for teachers' professional development in assessment for learning**

This was developed by (Benthum, Gulikers, and Mulder 2011) the Theory of Improvement describes how characteristics of a professional development program contribute to teachers' learning. In this Theory of Improvement, the characteristic elements of the professional development will be mentioned and explained and it will be justified how the elements contribute to teachers' learning. This Theory of Improvement leads to the most suitable approach for this specific professional development. The Theory of Improvement is applied in the educational project, the theory articulates around the following: *Assessment practice, Personal inquiry, Approach in professional development. Conditional features of the improvement theory: Dialogue, Feedback on practice, Safe learning environment.*

**Conceptions on assessment:** Conceptions are mental representations of phenomena in reality and are a product of educational experiences. The educational system built on the competency based will reap the teachers' conceptions of the improvement in this system.

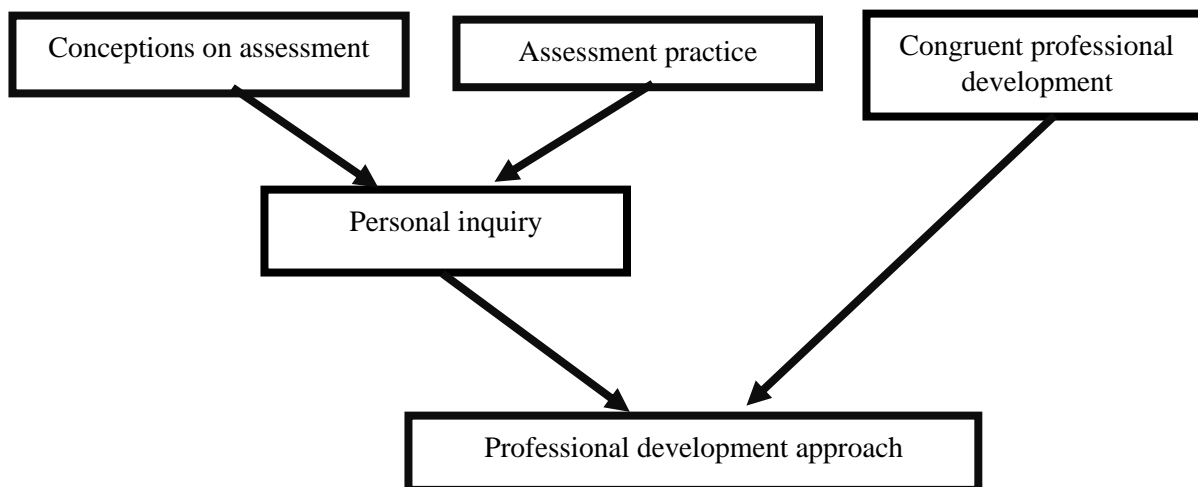
**Assessment practice:** In educational reform assessment for learning, importance should be given to external support, involvement and input, shared teacher knowledge and beliefs, professional experimentation and shared reflection. This is practically collaborative, collective and participatory style to teachers' professional development. This demand involvement is very significant in ameliorating teacher quality and learning within the school system (Benthum, Gulikers, and Mulder 2011). This assessment makes teachers to challenge their practices, developed innovative and enhance learning in the pupils.

**Personal inquiry:** According (Benthum, Gulikers, and Mulder 2011) an inquiry is a process of five phases. Planning (setting goals, defining objectives and intended outcomes, and planning action strategies); Evidence collection; Interpretation (estimating gaps between intended and

obtained outcomes); Utilization (implementing interventions to close the gaps) and Evaluation (assessing the effectiveness of the interventions in closing the gaps). This personal inquiry with colleagues is collective and collaborative inquiry and stimulates professional development and teacher's practices. This can be achieved through networking, coaching and collaborative mentoring

**Congruent professional development of teachers and middle management:** knowing the first three elements of the Theory of Improvement and the approach in the professional development, the fourth element of the Theory of Improvement is congruent professional development of teachers and middle management. (Benthum, Gulikers, and Mulder 2011).

*Figure 2: The Theory of Improvement is summarized*



*Authors conceptualisation 2026; The theory of improvement.*

### **Limitations of the theory**

The theory is more or less limited in scope of networking relation to knowledge, integrating coaching and mentoring into the improvement could better teachers' professional development and in turn to enhance their effectiveness.

### **Relevance of the theory to the present study**

This theory help improves the professional development practices and strategies in an organisation. Understanding conceptions on professional practices and assessment through collective and

collaborative personal inquiry is a veritable approach to innovation and improvement knowledge in the learning process in the school system.

### **2.2.3. Social exchange theory**

In this study the researcher adopted Mark V Redmond social exchange theory. The theory is drawn from the streams of strand to explain the communication context and incentive in social exchange process. This theory influences economic, psychology and sociology. In the communication context, he talks of interpersonal exchange, small group exchange and organisational exchange. This communication context is motivated by the number of factors which influences organizational justice and employee commitment and underpinned by social exchange theory, which views the employment relationship as a process of resource exchange governed by the norm of reciprocity (Shore & Wayne, 1993; Coyle-Shapiro et al., 2004), encompassing both on-going conferment of benefits and continual re-balancing of expectations and obligations (Coyle-Shapiro & Morrow, 2006).

The principle element of social exchange theory

**Exchange** = Trade something of value (cost) for something needed/valued (reward)

**Rewards** – Costs = Positive Outcomes (profits) or Negative Outcomes (net loss).

**Inequity** = Cost > Reward or My Costs > Your Costs or My Rewards < Your Rewards and Value of a Reward;

**Social Rewards**, Costs, Profit Equity and Distributive Justice (Redmond 2015)

Our primary concern in reviewing this theory is its specific applications to human communication so we have omitted less relevant principles. Our decisions to communicate with; others are often influenced by our assessment of the costs and rewards of such interactions; Your decision to visit a teacher after class probably involved some weighing of the costs (such as time and potential embarrassment) against the potential rewards (learning information that will improve your grade or developing a positive relationship); **Social behavior** can be explained in terms of costs, rewards, and exchanges; Social interaction involves two parties, each exchanging a reward needed by the other person; Social exchange theory can be used to explain the development and management of interpersonal relationships; and Social exchanges affect the relationships among members of

groups and organizations (Redmond 2015). Therefore, effective communication and incentive can be catalysts for professional development that influence teachers' effectiveness.

### **Limitations of the theory**

The social exchange theory pays much attention to interpersonal and organisation communication without talking about intrapersonal characteristics will help to foster social exchange. Intrapersonal motivation or intrinsic will be one of feature of effective communication that facilitates professional development of teachers in the school environment. Therefore, school management should also endeavour to map out these intricacies in order to build a strong network of relation in the organisation.

### **Relevance of the theory to the present study**

Social exchange of methods skills and knowledge in the school establishment is an effective way of communicating. Interpersonal relationships are indispensable as professional ground help to improve on the knowledge and competence of colleagues especially novice in the field. The organisational social exchange builds a culture of interactions between the employer and the employees. The reward or incentives that are gained in these social exchange turns to inform organisational justice and committe

### **2.3. Review of Related Empirical Literature**

Bautista & Ortega-rutz (2015) examine teachers' professional development and approaches. They underscored that government invest tremendously in professional development of teachers but there seems to be inefficiency and ineffectiveness in teaching and learning practices. The study is a monograph which examines the perspectives and approaches in teachers' professional development. The study discussed five articles reflections ameliorating teachers' professional development across nations and Spain in particular.

Makovec (2018) addresses concept of professional development and the factors that influence teachers' perceptions. The information in the work is built from the literature and empirical data. The study was conducted in 16 primary schools both public and private with a sample of 250 teachers. This study was carried out using questionnaire for data collection and the data was analysed using SPSS 22,0. Anon-parametric statistical testing was used where the Mann- Whitney

test and the kuskalwalis test, structural modelling equation. The findings showed that teachers with several years of service experience feel better qualified to perform task related to planning a teaching, followed by educational disciplinary behaviour and teachers, regarding of the years of experience feel at least qualified to write professional articles.

Vries, Jansen & van d Grift (2013) examines the relationship between teachers continuing professional development (CPD) and their beliefs about learning and teaching. The study was conducted in four secondary in the northern Netherlands. This was web- based survey where questionnaires are administered to primary school administrators through their e-mails. The questionnaire was filled by 260 respondents. They found no relationship between CPD profiles and their subject matter oriented beliefs whether positive or negative.

Kennedy (2016) seeks to understand how professional development improves teaching; the study is based on the premise that teachers should also learn a strategy for helping teachers enact ideas within their own on-going system of practices. This work examines the experimental studies of professional development carried out in K- 12 general education within the United States and published since 1975. This study is limited to K- 12 teachers teaching core academic subjects (language, arts, mathematics, the sciences and the social sciences).

Moulakdi & Bouchamma (2020) examine Professional Development for Primary School Teachers in Cameroon through the Cascade PD Model Effectiveness. The study was conducted in the department of Diamaré in Cameroon's Far North region. The participants were 68 primary school teachers in level 2 (class 3 and 4) and level 3 (class 5 and 6) as well as 10 head teachers from 10 public-sector primary schools. The participants were responsible for a total of 4041 pupils. Data collection was performed using a questionnaire based on the professional development evaluation and their data analysis was performed using SPSS 20.0 statistical software. Descriptive and inferential statistics (t-test and correlations) were used to analyse the professional development activities. They found that the majority of the participating teachers were not satisfied with how these professional growth activities were organised. Their findings also demonstrate that the cascade model of teacher professional development did not promote the improvement of pupil achievement. This in essence implies that the stakeholders in the professional development should

change the model or improve upon in order to make relevance to teachers' professional competences in knowledge transmission.

Haris (2016) looked at Capacity Building Activities for Educational Stakeholders for Improving the Quality of Education. In this study he underscores that a series of capacity building activities during the project has positively impacted on individual, institutional, and societal level. These achievements relate to key UNDP policies on capacity building goals such as the goal of capacity building to tackle problems related to policy and methods of development, while considering the potential, limits and needs of the people (in this context, school principals, school supervisors in District Education Office, staff and school committee members) of the count have to be more involving in ensuring the professional development of teachers through capacity building.

Janssen & Wubbels (2018) examined Collaborative learning practices: teacher and student perceived obstacles to effective student collaboration. This was qualitative study based on interviews with teachers and students meets the requirements, principles and procedures of the institution where the research was conducted. In addition, because this study is part of the doctoral research at Utrecht University, their study followed the ethical guidelines of the Netherlands Educational Research Association. They applied a grounded theory approach to analyse the interview. Their findings seem to imply that there are reciprocal interactions between these three antecedents. The low attention for collaborative goals of CL may cause teachers to ignore training students in collaborative skills and then teachers might not want to or be unable to assess the collaborative process because of a lack of training.

Hilliard & Newsome (2013) examined Effective Communication and Creating Professional Learning Communities. They highlight that superintendents and school leaders must work together with various stakeholders including school personnel, leadership team and the broader community to ensure successful professional development initiatives. Effective communication is crucial at this level as it enables leaders to share their vision, build trust and foster a sense of community among stakeholders. By promoting open and honest communication, leaders can create a safe and supportive environment where educators feel comfortable sharing their concerns, ideas and experiences. It is necessary too, that the superintendent model high expectations, motivate stakeholders and support the establishment of professional learning communities with needed

school resources that is technology, adequate personnel. These facilities and support from community resources for school programs will help learners and leaders who plan and implement strategies that improve teaching skills and promote higher student achievement. Some key aspects of effective communication include

- clear and concise messaging: leaders should communicate their goals clearly.
- active listening: leaders should listen attentively to the concerns of educators.
- Feedback and reflection: leaders should provide regular feedback and opportunities for reflection which will improve student's outcomes.
- collaborative problem solving: leaders should foster a collaborative environment where educators work together to address challenges and develop innovative solutions.

Macartney, McMillan & Petronijevic (2015) looked that the incentive design in education based on the empirical analysis where they proposed a new semi-parametric method for uncovering this relationship in an education context, using exogenous incentive variation and rich administrative data. Building on the descriptive evidence in the previous section, the strategy they follow makes use of the new performance requirements under NCLB (no child left behind) as an exogenous shock to the school decision process. They are examining how the exogenous incentive variation they have uncovered can be used to shed light on the nature of the underlying production technology in education. Building on their strategy for recovering unobservable effort, they explore how various education inputs, including teacher effort can affect student's outcome.

Mascitti-Miller (2012) examined Resource Allocation and practices in Urban Elementary Schools. This was a quantitative study which examined practices that exist in the allocation of discretionary funds made by urban elementary principals. The study used a matched sampling methodology to provide an analysis of resource allocation in four schools in Good Standing and four schools not in Good Standing. The study found that principals in Good Standing primarily use their discretionary spending in the strategy Create Individual Attention as the primary means to create a high performing school. Further findings suggest that in order to create a highly individualized school environment, flexibility in spending provides principals with an opportunity to tailor the needs of their school more strategically thereby improving student's achievement.

Pilten (2016) investigated the evaluation of effectiveness of reciprocal teaching strategies on comprehension of expository. The research was designed with mixed method. The quantitative dimension of the research was designed in accordance with pre-test-post-test control group experiment model. The quantitative dimension of the t research was designed in accordance with descriptive case study. The work group of the p research consists of 54 students of a primary school in the Konya province in 2014-2015. Experiment group teacher stated that comprehension of expository texts by students was more difficult than narrative texts. These findings of the teacher are considered as correct and sound.

### **Conclusion**

This chapter handle issues ranging from the conceptual literature, theoretical and empirical. This various literature enables us to give a perspective to the present study. It also revealed theoretical, conceptual, contextual and methodological challenges and discrepancies related to the professional development and teachers' effectiveness. Therefore, research study in the Cameroon primary school and specifically in the Yaounde VI municipality is indispensable in order to create awareness in human resource development which is central to quality education and educational achievement in Cameroon.

## CHAPTER THREE: RESEARCH METHODOLOGY

This chapter presents methods and procedures used in the study. It is made up of the research design, area of study, population of the study, sampling procedures and sampling techniques, sample size, research instrument, data collection plan, validity of the instrument, piloting of the instrument, reliability of the instrument, administration of the instrument and statistical techniques for data analysis, the operationalization of the variables and the synoptic table.

### 3.1. The Research Design

Burns and Grove (2003) define research design as "a blue print for conducting a study with maximum control over factors that may interfere with validity of the findings". Amin (2005) defines research design as a blue print, methodology or plan of activities that the researcher uses in carrying out investigation in a given area of problem. In other words, research design refers to the researcher's plan on how to proceed in his or her study. From the above definitions, we deduce that research design as a plan and strategy put in place to carry out the research project. Amin (2005) noted that a research design is necessary because it guides the entire research process so as to yield maximum fruits and reduce cost or expenditures in terms of effort, time and money. Without a research design, it will be difficult to set meaningful limitations to the study. Furthermore, research design can be defined as the overall method that a researcher chooses to integrate the different component of the study in a coherent and logical way. There exist different types of research designs such as descriptive research design, experimental research design, causal comparative research design and correlation research design.

The quantitative nature of the variables under study permits the researcher to use the correlational research design. The correlational research design explores the relationship between two or more variables through a correlational analysis. This is intended to determine the degree in which the variables are related to each other. It does not imply one cause the other. In this way, the design was used to investigate the situation in the field and to generalize the findings to the target population.

### 3.2. Area of the study

This study was carried out in Yaoundé VI municipality of the Mfoundi division of the centre region of Cameroon. Yaoundé VI subdivision forms one of the seven municipalities of Mfoundi. Mfoundi

division which covers an area of 297 km<sup>2</sup> as of 2005 had a total population of about 1,881,876 and it is one of the 10 divisions that make up the Centre region. The division forms the Yaoundé capital and cover greater area. The Centre Region occupies 69,000 km<sup>2</sup> of the central plains of the Republic of Cameroon. It is bordered to the north by the Adamawa Region, to the south by the South Region, to the east by the East Region, and to the West by the Littoral and West Regions. It is the second largest of Cameroon's regions in land area. Major ethnic groups include the Bassa, Ewondo, and Vute. Yaoundé, capital of Cameroon, is at the heart of the Centre, drawing people from the rest of the country to live and work there. The Centre's towns are also important industrial centres, especially for timber. Agriculture is another important economic factor, especially with regard to the region's most important cash crop like cocoa. Outside of the capital are the plantations zones, with most inhabitants being sustenance farmers.

This area was chosen for this study because there exist a good number of primary schools. Cost considerations were made in line with the fact that a study of this type requires primary data and its collection requires a lot in terms of time and financial cost.

### **3.3. Population of the study**

Amin (2005) holds that a population is the aggregate of items or objects from which sample is drawn, constituting the entire collection of observations to which results are generalized. The population of this study is primary school teachers in Yaounde 6 municipality. There are 30 government schools with 328 teachers and 134 private schools with 794 teachers. Therefore, total number of teachers is 1122 teachers.

### **3.4. Target population**

The target population of this study was made up of all teachers of all the primary schools in the Yaounde VI municipality having a total number of 1122teachers.

### **3.5. Accessible population**

The accessible population refers to the population that was within the reach of the researcher and is often drawn from the targeted population. In this study, the accessible population comprised of all primary schools (public, private and lay private), teachers. Therefore, 20 schools with a total of 90 teachers was our accessible. The accessible population was used to give the sample population.

### **3.6. Sampling procedures and sampling techniques**

Lodico, Splaulding & Voegtle (2006) defines a sample as a smaller group selected from a larger population to which it represents the larger population. Sampling is a process or technique of choosing a sub-group from a population to participate in the study. It is the process of selecting a number of individuals for a study in such a way that the individuals selected represent the large group from which they were selected (Ogula, 2005). Since the whole population cannot be easily studied the need of a sample is often needed in any quantitative or qualitative research work. The sample is therefore taken from the accessible population to represent whole. This study will make use of the probability sampling procedures. In probability sampling, everyone has an equal chance of being selected. This scheme is one in which every unit in the population has a chance (greater than zero) of being selected in the sample. Under the probability sampling procedures, the Simple random sampling will be use. In simple random sampling, the samples of the same size have equal chances of being selected (Amin, 2005). To conduct a simple random sample, the researcher must first prepare an exhaustive list (sampling frame) of all members of the population of interest. From this list, the sample is drawn so that each person or item has an equal chance of being drawn during each selection round (Kanupriya, 2012). In this case each individual is chosen entirely by chance and each member of the population has an equal chance, or probability, of being selected. This will permit the results to be generalized on the basis of the population since the sample is a good representative of the population.

In order to choose the four public schools out of the primary schools in Yaoundé VI municipality, the researcher used the simple random sampling technique. In order to do this, the researcher cut out slips of paper. On each paper, she wrote the name of all the primary schools in Yaoundé VI municipality on each sheet of paper. These slips of paper were then rolled and shuffled in a small box. After she then selected four slips of paper from the slips of papers. Each paper that was drawn was then unfolded and whichever school that was labelled on the slip of paper, was automatically included in the sample of the study. The four schools drawn were

Government school Biyemassi, Etoug-ebe, Mvog-betsi and Mewoulou.

### 3.7. Determining sample size

To determine the sample, we adopted the Krejcie and Morgan (1970) table for determining sample size

Simple size

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

Based on the table our sample is 162 teachers?

### **3.8. Instruments of data collection**

Questionnaires was used for quantitative data collection

#### **Validation for data collection, Validation of the Instrument**

According to Amin 2005 validating is the ability to produce findings that agree with the theoretical or conceptual values; in other words, to produce accurate results and measure what is supposed to be measured. Amin equally adds that validity of instrument means an instrument measures what it is supposed to measure, and data collected honestly and accurately represents the respondent's opinion. To ensure that the instrument measured what it is said to measured, the instruments reliability was ascertained and later on its use was validated. The first concern of the researcher was to establish construct validity, the ability for the instrument to represent the constructs or themes under investigation. This was ensured by covering content (content validity) in the variables in such a way that the questionnaires represented a full coverage of the domains which represented these constructs. More so, to ensure validity, the researcher did a pilot testing on 10 primary school teachers. The results from the pilot testing showed that they were some questions that were difficult for teachers to answer. The researcher had to modify some questions by rephrasing them and questions that were not important were removed. The results from the teachers that were tested shows that there was a question that was not really linked to the objectives/hypotheses. This question was removed by the researcher, also there were some aspects of uncertainties and some items were not very clear for easy interpretation especially the open questions. All these were corrected.

### **3.9. Face validity**

To ensure face validity, the researcher after constructing the instrument reads through it, gave to classmates and experts to read and correct. From there, the questionnaire was then presented to the supervisor, who went through the questions to determine whether the questions are related to the objectives/hypotheses of the study as stated in chapter one. All these were to ascertain face validity of the instrument. After making the necessary corrections, the questionnaire was considered to have attained face validity.

### 3.10. Content validity

Content validity focuses upon the extent to which the content of an instrument corresponds to the content of the theoretical concept it is designed to measure. According to Amin 2005 content validity refers to the degree to which the questions items reflect the variables of the study. It shows how adequately the instrument samples the universe knowledge, skills, perceptions, and attitude that respondents are expected to exhibit.

The content validity of this instrument was determined using the formula;

$$\text{Content validity index CVI} = \frac{\text{Number of judges who declare items as valid}}{\text{Total number of judges}}$$

After receiving feedback from the judges, content validity index was computed and yielded a value of (CVI=0.85). (According to Amin (2005), when the content validity index is of an instrument has an average that's **0.85 or above**, the instrument is valid and good to be used for data collection.

### 3.11. Reliability of the instrument

Pretesting will be carried out with a sample population relative to study so as to ensure the internal consistency and objectivity. When this is done, adjustment will be made for data collection Amin M.E, (2005) defines reliability as a measure of how consistent the results from a test are. Reliability is a measure of degree to which a research yields consistent results after a repeated trial. An instrument is said to be reliable when it measures a variable accurately and consistently and obtain the same results under the same conditions over a period. What it is measuring. After the questionnaire was constructed and validated, to establish the reliability of the questionnaire, the next step was for the researcher to ensure that the instrument could consistently measure what it measured such that it was dependable and trustworthy. The researcher used the test retest method and correlated scores of respondents in two occasions to compare the degree of consistency between the two. The reliability coefficient was determined using the Cronbach Alpha formula to test the reliability of the instrument, the formula applied was:

$$\alpha = \left[ \frac{k}{k-1} \left( 1 - \frac{\sum \sigma_k^2}{\sigma^2} \right) \right]$$

The Cronbach alpha is described as;

$\sum \sigma_k^2$  is the sum of the variances of the k parts which are items of the test or instrument?

$\sigma$  = standard deviation of the test or the instrument

The researcher administered the instrument to 10 primary school teachers, and after two weeks the researcher re-administered the same instrument to the same group of people. The results were computed to obtain a coefficient stability index of 0.82. According to Lodico, Spaulding & Voegtle (2006) the stability or test retest reliability of an instrument consists of giving the same measure or result to the same group of individuals at two different points in time. The above coefficient stability is significant and shows that the instrument had a good test retest reliability.

### **3.12. Piloting the instrument**

The term pilot study is used in two different ways in social science research. It can refer to so-called feasibility studies which are "small scale version(s), or trial run(s), done in preparation for the major study" (Polit et al., 2001). However, a pilot study can also be the pre-testing or 'trying out' of a particular research instrument (Baker 1994). One of the advantages of conducting a pilot study is that it might give advance warning about where the main research project instrument could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. Moreover, pilot testing helps to point out any problem in the test instructions, instances where items are not clear, formatting issues and any other issues are identified when a pilot test is done; Piloting of the questionnaires for the study was done by taking 10 questionnaires to teachers in two different Schools that will not participate in this study. During which the researcher keenly observed the ease with which the respondent could handle the items. Areas where they had difficulties were identified and necessary corrections made. The questionnaire was equally taken to evaluation experts for corrections and suggestions. This determined the extent to which the instrument could elicit useful information in order to achieve the intended objectives of the study.

### **3.13. Data Collection Plan**

A Data Collection Plan is a well thought out approach to collecting both baseline data. The plan includes where to collect data, how to collect it, when to collect it and who will do the collecting. This plan is prepared for each measure and includes helpful details such as the operational definition of the measure as well as any sampling plans. For the purpose of the study, data was collected from primary school teachers in the Yaoundé VI municipality. The schools from where

teachers were selected were chosen at random using the simple random technique. Questionnaires were administered to teachers at their convenient time where they can fill it and this will be done by the researcher.

### **3.14. Methods of data collection**

We are going to use primary methods of data collection. According to Kothari, (2004) data collection procedure comprises of steps and action necessary for conducting research effectively and the desired sequencing of these steps. The researcher embarked on the process of collection data from the field upon a discussion of the research topic and approval of questionnaires' by the supervisor. Thus, the researcher collected an authorisation from the dean of the faculty of education, university of Yaoundé 1. This authorization permitted the researcher to collect data from the selected schools in the Yaoundé VI municipality. The researcher presented the letter to head teacher of public and private schools under study. The head teachers gave the researcher the go ahead to start administering the instrument at the researcher's convenience. This process permitted the researcher to create familiarity with the administrative staff who enormously helped the researcher during the data collection process. In the course of the data collection process, the researcher explained the objectives of the study and also assured the teacher of confidentiality. The researcher also clarified the respondents on areas that seems difficult. After data had been collected from each school, the researcher moved to the next school. At the end of each data collection session, the completed questionnaire copies were collected on the spot. The process of data collection took the researcher 2weeks on the field.

### **3.14. Methods of Data Analysis Procedure**

The researcher after completing the data collection process, the questionnaires were counted and grouped according to the schools with the name labelled on it. All these were to ensure that there was no missing questionnaire. After organizing the data, the questionnaires were numbered, and each question was codified. The next step, the researcher did was to build a typing mask in Excel. After this stage, the data was entered in the excel mask. After the researcher finished entering the data, the next step was to verify the data in order to avoid biases and errors. After verification process, the data was now imported from excel to SPSS (version 20) software to be analysed.

Data analysis is a process of inspecting, cleansing, transforming, and modelling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. The study will make use of the Ordinary Least Square (OLS) technique. The choice of the OLS technique is because of its property BLUE (Best, linear, Unbiased, Estimate). It has a number of advantages over other techniques. When added to its simplicity and easy to understand (Koutoyannis, 1971) it makes it to be preferred by the researcher. Spearman Correlation will be used to determine the degree of association. The spearman Correlation coefficient is a technique for investigating the relationship between two quantitative variables. Spearman's correlation coefficient ( $\rho$ ) is a measure of the strength of the association between the two variables. The statistical package for the social scientist (SPSS version 25) software will be used to carry out all the above-mentioned analysis.

### 3.15. Model Specification

A model is a mathematical representation of reality. This may be seen as a simplified view of reality, designed to enable a researcher to describe the essence and inter-relationship within the system or phenomenon it depicts (Yomere and Agbonifoh 1999). Model specification refers to the determination of which independent variables should be included in or excluded from a regression equation. The empirical model for this study is designed to ascertain the magnitude and direction of the relationship between professional development and teachers' effectiveness. The regression model that captures the relationship between professional development and teachers' effectiveness is of the form

$$TE = \beta_0 + \beta_1 IST + \beta_2 AR + \beta_3 PC + \beta_4 EPS \mu \dots \dots \dots (1)$$

Where

IST represents in-service training

AR Represents allocation of resource

PC Represents peer collaboration

EPS Represents Effective pedagogic supervision

$\mu$  Represent the other determinants of teachers' effectiveness success apart from professional development, which are not captured in the model. The  $\beta_i$ 's are the parameter estimators or the coefficients of independent variables of the model to be estimated.

Equation 1 above expresses the success of the teachers' effectiveness as a function of: various teachers' professional development aspect such as their capacity building, allocation of resources, teachers' incentive, collaborative mentoring and effective communication and equally acknowledge the existence of other teachers' effectiveness success determinant not capture as a result of the objective of the study.

### **3.16. Ethical Considerations**

Amin (2005) states that ethical standards support virtues of honesty, compassion, and loyalty and are element that encourages respondents to answer research questions without fear or favour. The following ethical issues were respected by the researcher in this study.

**Research subjects must be volunteers:** Respondents in this study were voluntarily asked to participate. The inquiries involving respondents' subjects was far based on the freely given informed consent of subjects; what the research is about, who is undertaking and why it is being under taken. The advantage of such information was that they gave the respondents the opportunity to be fully informed of the nature of the research and the implications of their participation at the outset.

**No harm shall result as a consequence of participation in the research:** Research that is likely to harm participants is regarded by most people as unacceptable. In this research the issue of no harm to participants was an important issue by advocating care over maintaining the confidentiality and anonymity. The respondents were given the assurance that their identity will not be disclosed in order to uphold privacy, so as to avoid negative effects that can affect the respondent's private life. They were asked not to write their names on the questionnaire. The respondents were assured that all the information obtained from them was confidential because it was only to be handled by the researcher and such information was used for research purpose. This means that records of respondents were maintained as confidential (by not storing participants' names and address or letter correspondence on hard drives).

### **3.17. Operationalization of the variables**

According to Luma (1999), a variable is a characteristic on which people can differ from one another. A variable is an element whose value can change and take other forms when we see to another. The variables are normally classified into dependent and independent variable. The two types of variables used in this study are;

#### **3.17.1. Independent variable**

According to Amin (2005), an independent variable is that “*which can be manipulated upon by the researcher*”. it may be called predictor variable because they can predict or is responsible for the status of other variables. The researcher manipulates it in order to determine the relationship with the observed state of affairs. The independent variable for this study is professional development. It involves modalities like in-service training, allocation of resources, peer collaboration and effective pedagogic supervision.

#### **3.17.2. Dependent variables**

In view of Amin (1999) a dependent variable is the characteristics that is used when the statement of hypothesis is made. According to Asutabong (1998) dependent variables are variables which receive the effect of the independent variable. The dependent variable in this study is teachers’ effectiveness; teachers’ effectiveness is made up of the following elements 1; Teaching method, Program coverage, Effective planning and delivery of lesson, Teacher application, Teacher discipline, Teacher appearance and posture.

Table 1: Synoptic table

Main hypothesis	Specific hypotheses	Independent variable	Indicators	Dependent variable	Indicators	Statistical model and tool	Scale
Professional Development Has significant Influence on teachers' Effectiveness	There is a significant relationship between In service training and teaching effectiveness in primary schools in Yaounde VI.	In service training	Professional seminar/conferences, individual teachers', skills development, further education, Continuous skill development, evaluation policy, Knowledge exchange, need analysis on teachers'' knowledge and skills Gap, proactive reactive, visionary leadership	Teaching effectiveness	Variety learning methods; Variety questioning techniques; Use of national curriculum objectives Effective transmission of skills Mastery of the subject matter, Effective lesson preparation Effective lesson presentation Effective communication skills transmission Effective time management.	Multiple regression analysis SPSS version 20	Likert scale
	The allocation of resources has significant influence teachers' effectiveness in the selected primary schools in Yaounde VI	Allocation resource	Careful planning teachers' is commensurate to the numbers of pupils available and up-to-date informational resource, infrastructure maintaining good standard, available financial resources school needs equity well organized good management approach forecasting strategy integration of the community				
	There is a significant relationship between peer	<b>Peer collaboration</b>	Peer-to-peer coaching good social relations participative learning strategies constructive				

	collaboration and teachers' effectiveness in the selected primary schools		learning strategies, consultation culture of peer mentoring, that cooperation data collection effective and interpersonal relationship, consensus				
	Pedagogic supervision has a significant influence on teachers' effectiveness in the selected primary schools in Yaounde VI	Pedagogic supervision	Instructional practices, effective curriculum implementation, effective incentive pedagogies coordination, effective monitoring, quality teaching continuous evaluation, good working relation, action research teaching equity competence and quality of its human resource				

## Conclusion

This examined the approach and strategies of data collection and data analysis which are typical based on the quantitative data. All the various components have been discussed. This is to give clarity to context and relevance of the research in education as a strategy in improving educational human resource.

## CHAPTER FOUR: PRESENTATION AND INTERPRETATION OF RESULTS

The main objective of this study is to examine the impact of professional development on teachers' effectiveness in the selected primary schools in Yaounde VI. This chapter presents the results of the data collected through closed-ended questionnaire. This involves the various variables selected to present the study. The data was collected, organised, presented and analysed using tables and bar charts for quantitative data. The quantitative data presents the descriptive statistics of demographic information. The second will present descriptive statistics of the various variables, and the third, the inferential statistics where multiple linear regression models were used to verify the hypotheses. This was based on the theoretical perspective wherein we examine and develop models from the independent variables to know which of the variables are more predictive.

### 4.1. Descriptive statistics

This section deals with descriptive statistics on demographic information on the respondents and individual items on the selected variables of the study.

#### 4.1.1. Descriptive statistics on demographic information

These statistics involve percentages and frequencies of respondents according to level of education, sex and age of the respondents

*Table 2: sample distribution according to level of education*

LEVE OF EDUCATION			
		Frequency	Percent
Valid	A/L	65	40.1
	CAMPIEM	73	45.1
	BA	19	11.7
	MA	5	3.1
	Total	162	100.0

(Source : Field data)

This table present the statistical sample distribution of the respondents according to level of education. A/L represents 65 of the respondents with the percentage score of 40.1%, CAPIEM represents 73 with the presented of 45.1%, %, BA presents 19 of the respondents with the percentage score of 11.0% and master represent 5 of the respondents with the percentage of 3.0%. the respondents with A/L are the most represented and follow by the those with CAPIEM. There is seemingly fair distribution between the statistical according to the level of education

*Table 3: Sample distribution according to age*

		<b>AGE</b>	
		Frequency	Percent
	20-30	60	37.0
	31-40	75	46.3
Valid	41-50	24	14.8
	51-60	3	1.9
	Total	162	100.0

Source: Field data

This table shows the statistical sample distribution of the respondents according to age. There are 60 respondents within the range 20-30 year giving a percentage of 37.0%. 75 of the respondents are within the age range of 31-40 years with the percentage of 46.3%, 24 are within the range of 41-50years scoring a percentage of 14.8% and 3 of the respondent fall within the range of 51-60years scoring a percentage of 1.9%. Of all the age ranges 31-40year are the most represented of the respondents, closely followed by 20-30 years. This indicates that teacher population in these schools are of the average age groups. This equally signifies that teachers are still dynamic and energetic when comes to teaching.

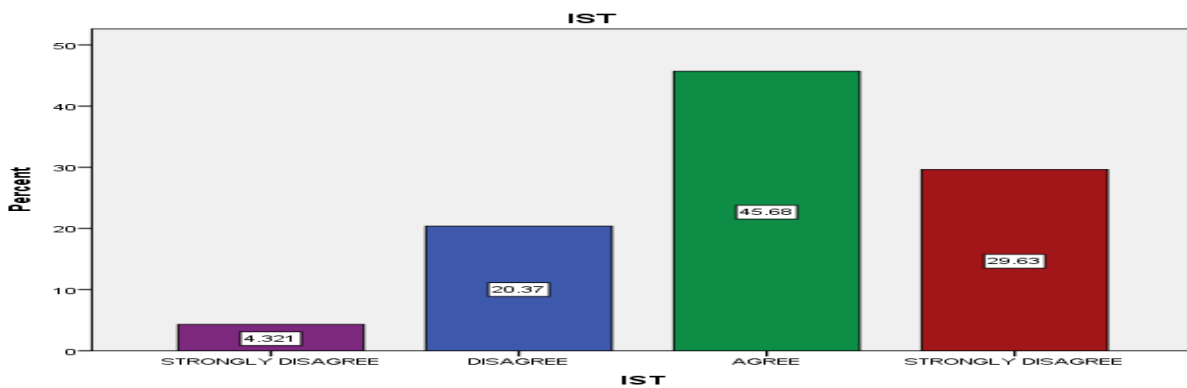
*Table 4: Sample distribution according sex*

		<b>SEX</b>	
		Frequency	Percent
	MALE	70	43.2
Valid	FEMALE	92	56.8
	Total	162	100.0

(Source: Field data)

This table presents statistical sample distribution according to sex. 70 of the respondents are males give a percentage of 43.2% of the respondents selected for the study and 92 of the respondents are females giving a percentage of 56.8 %. From the statistical sample distribution, the female is the more representative of the sample population of the study. The following tables of percentages and frequencies present the descriptive statistical results of the variables that constituted the study. The presentation of the variable is to give more comprehensive understanding of professional development and teaching effectiveness in primary schools in Yaounde VI municipality.

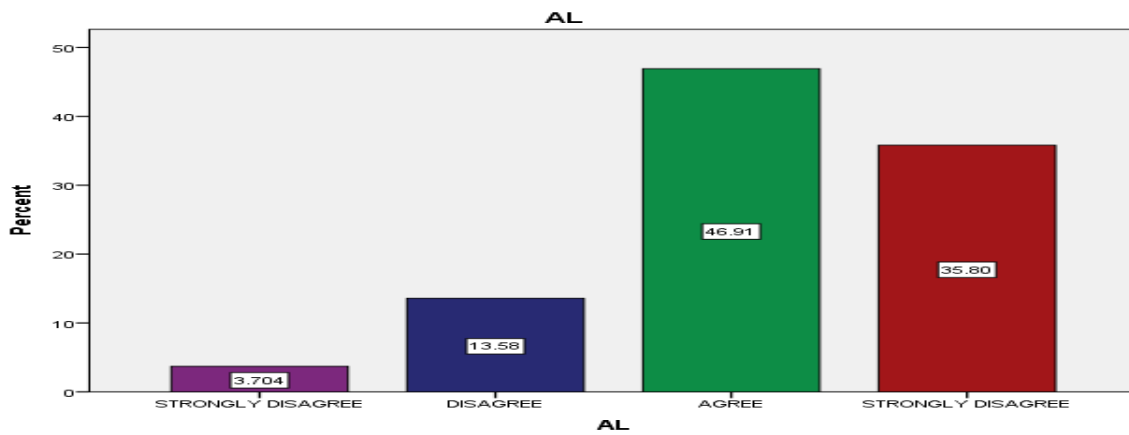
Figure 3: sample distribution according to in-service training



(Source: Field data)

This presents the statistical sample of the respondents' option on in-service training in these selected primary schools. According to the statistics, 7(4.3%) of the respondents strongly disagree, 33(20.4 %) disagree, 78(45.7%) agree and 48(29.6%) strongly agree. Based on these results 75.3% of the respondents strongly agree and agree on the view that institution regularly organised professional seminars/conferences, ensures individual teachers skills development, they send teachers on further education, continuous skill development, they have evaluation policy, they encourage knowledge exchange, they carry out need analysis on teachers' knowledge and skills gap, In-service training in school is more proactive than reactive, In-service training in school is guided visionary leadership and the training takes into consideration objective and content of curriculum as away to improve on professional development and teaching effectiveness in primary school in the Yaounde VI municipality.

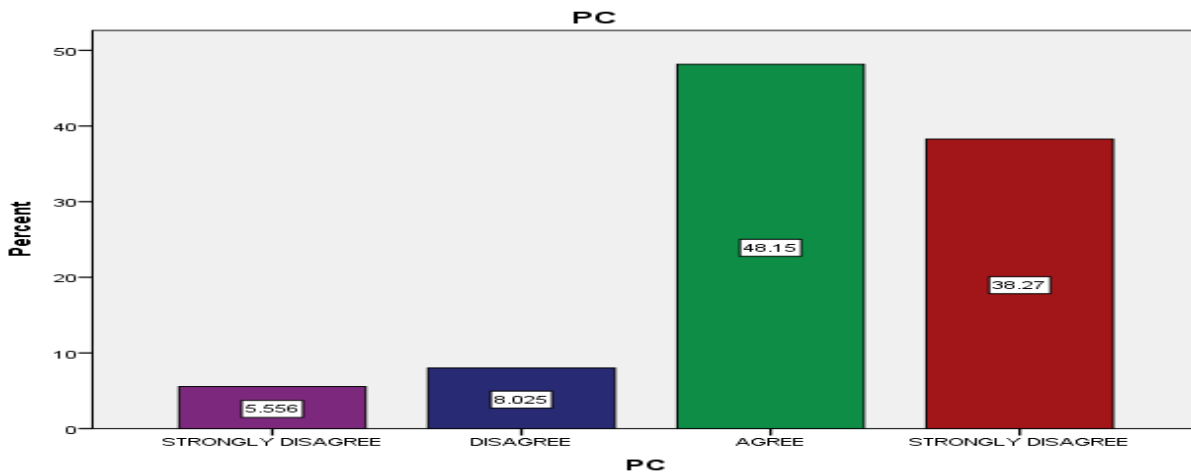
Figure 4: sample distribution according allocation of resource



(Source: Field data)

This presents the statistical distribution of the respondent’s perception on allocation resource for school programmes and activities. The following results were obtained. 6(3.7%) strongly disagree, 22(13.6%) disagree, 76(46.9%) agree and 58(35.8%) strongly agree. The respondents agree and strongly agree at 82.7% that schools carry out careful planning in the allocation of resource, the number of teachers is commensurate to the numbers of pupils, there is available and up-to-date informational resource, that infrastructural maintaining is of good standard, there are available financial resources that respond effectively to school needs the school management ensure equity in the allocation of resources , every is well organised to suit teachers and subjects, there is good management approach to allocation of resource , there is a forecasting strategy for resources allocation and school management promote the integration of the community in the allocation resources. This percentage shows only great allocation of resource for teaching effectiveness. About 17.3of the respondents disagree and strongly disagree on these views. This tellsus that resources allocation are outlined but the process is effective to greater extent for teaching effectiveness. This may explain why sometimes due to limited resource for them to improve on teaching effectiveness, they have to improve on their resource allocation planning of school activities and programmes.

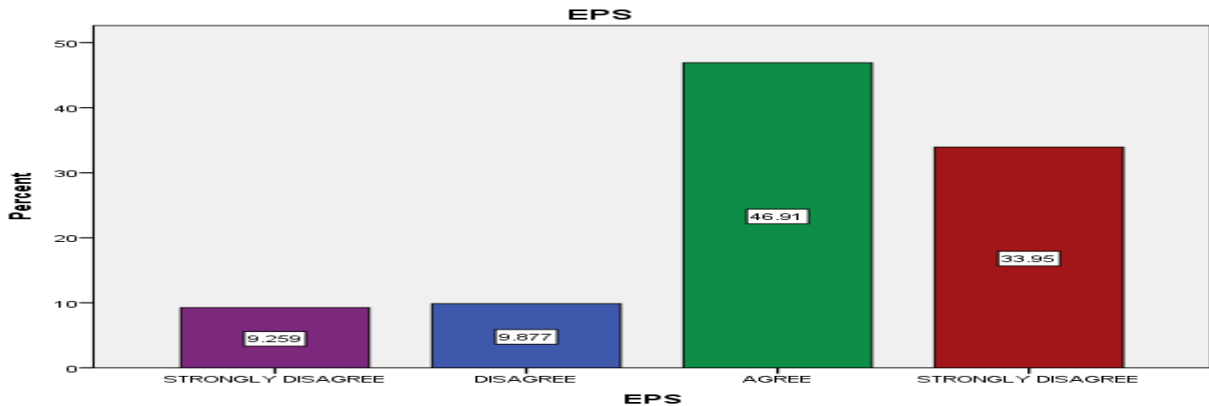
Figure 5: sample distribution according peer collaboration



(Source: Field data)

This presents the statistics on respondent's view on peer collaboration. 9(5.6%) of the respondents strongly disagree on the statement of peer collaboration, 13(8.0%) disagree, 78(48.1%) agree and 62(38. %) strongly agree. The percentage of positivity is 86.4%. This means that the greater portion of the population turn to agree or strongly agree that there is constant peer-to-peer coaching of new colleagues, that school management promote good social relations with other colleagues, the school management promote participative learning strategies, they ensure constructive learning strategies, there also ensure consultation among colleagues that the culture of Peer mentoring do exist in the school, that there exist cooperation in relation to school data collection effective and interpersonal relationship between teachers, there exist good concertation among colleagues and there is also consensus on pedagogic approaches. The about 13.6% negativity express by some respondents is indicative of the fact that peer collaboration still have issues which school management administrators have to improve upon in the Yaounde VI municipality. The school has to integrate the better peer collaboration strategies to enhance effective teaching within the school establishment.

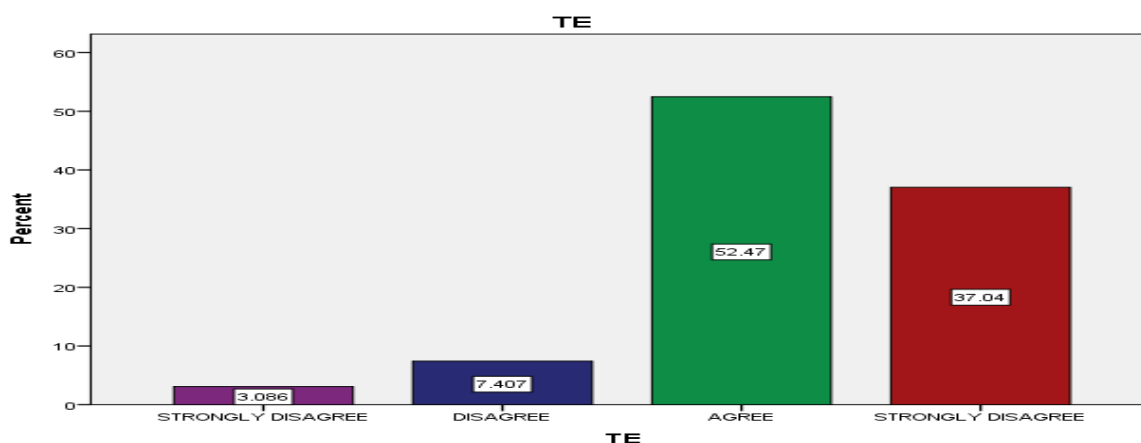
Figure 6: sample distribution according to effective pedagogic supervision



(Source: Field data)

This table presents statistical result of the respondent's perceptions on effective pedagogic supervision. According to the result, 15(9.3%) of the respondents strongly disagree, 16(9.9%) disagree, 76(46.9%) agree and 55(34.0%) strongly agree. 80.9% of the respondents are of the opinion that effective pedagogic supervision process is a way to improve on teaching effectiveness in the school establishment. From this results, it is clear that school management improves on instructional practices, school management fosters effective curriculum implementation, ensure effective incentive schemes in your school, ensure effective pedagogic coordination, ensure effective monitoring, ensure quality teaching and continuous school teacher evaluation, promotes good working relation, promote action research for the improvement of teaching equity in the teaching-learning process, ensure the competence and quality of its human resource. This is indicative of the fact that effective pedagogic supervision as a professional development indicator enhances teaching effectiveness.

Figure 7: sample distribution according teaching effectiveness



(Source: Field data)

This table examines the views of the teachers on teaching effectiveness. The results show that (3.1%) of the respondents strongly disagree, 12(7. %) disagree, 85(52.5%) agree, and 60 (37.0%) strongly agree on this statements This indicates that about 89.5 % of the respondents think that teachers integrate pupils into lesson, use a variety of activities of learning methods use variety of questioning, techniques to elicit knowledge from pupils, use teaching method appropriate to national curriculum objectives, ensure the effective transmission of skills and behaviour change in pupils, ensure the mastery of the subject matter of every lesson, rigorous in lesson preparation and objectives, effective in lesson presentation, ensure effective communication in knowledge and skills transmission and ensure effective time management. The 8. 4% negative views express accounting for the lapse often observed in the schools in teaching effectiveness. This has limited effect on over quality education. To better improve on the situation, school management has to develop more professional development strategies in the improvement of teaching effectiveness in the school milieus.

### 4.3. Inferential statistics

This section presents inferential statistics of the sample population of the study. This constitutes of a model summary, ANOVA table, coefficient table and scatter plot. All these tables present the impact or predictability potential and correlational degree of each independent variable on the dependent variable.

Table 5: Model summary table

Model Summary <sup>b</sup>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.360 <sup>a</sup>	.130	.107	6.24863	.130	5.840	4	157	.000

a. Predictors: (Constant), EPS, AR, PC, IST

b. Dependent Variable: TE

This table presents the model summary of the multiple linear regressions of four independent variables were entered into (EPS, AR PC, IST and TE) with the coefficient of the multiple determination of R square change of 13.0% variation from the dependent variable – Teaching effectiveness(TE) with the df (4, 157) significance of change of 0.000

Table 6: the ANOVA table

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	912.148	4	228.037	5.840	.000 <sup>b</sup>
1	Residual	6130.124	157	39.045		
	Total	7042.272	162			

a. Dependent Variable: TE

b. Predictors: (Constant), EPS, AR, PC, IST

From the table overall model is significantly useful in explaining the influence of F (4, 5.840-degree of freedom(df) =4,157, p< 0.005 at the significant level of 0.000 f change.

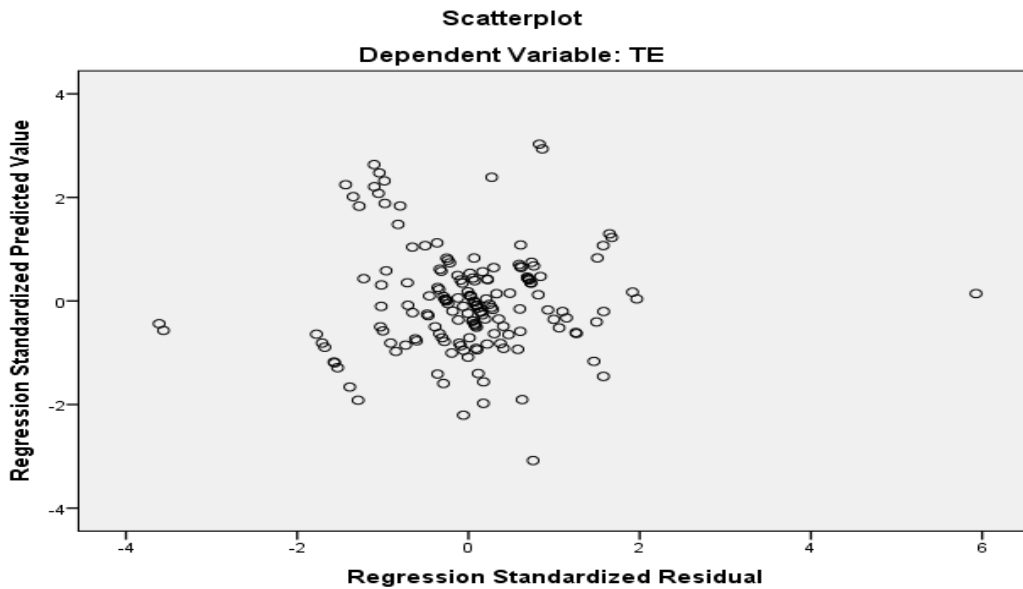
Table 7: Table of coefficients

Coefficients <sup>a</sup>													
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	10.213	4.164		2.453	.015	1.989	18.437					
	IST	.216	.106	.169	2.032	.044	.006	.427	.142	.160	.151	.804	1.244
	AR	-.024	.099	-.020	-.241	.810	-.219	.172	.050	-.019	-.018	.817	1.224
	PC	.121	.067	.137	1.806	.073	-.011	.253	.188	.143	.135	.968	1.034
	EPS	.217	.058	.285	3.769	.000	.103	.331	.283	.288	.281	.968	1.033

a. Dependent Variable: TE

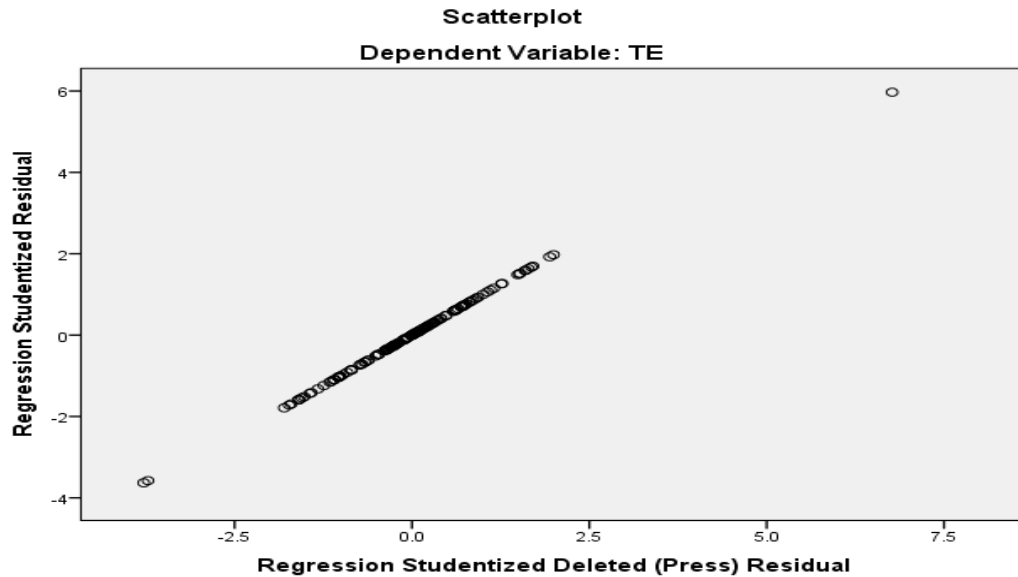
A standard multiple regression were conducted to examine the impact of professional development on teaching effectiveness, the results help in the prediction and categorisation of the variable. This table presents the standardised and unstandardized coefficient which involves the STD error and the beta, it gives the significance level indicating the predictability of the variable, it also presents the partial correlations between the variables and the co-linearity statistics which has to do with tolerance ratio and value inflated faction (VIF) which are not greater than 10(they range from 1.055 to 2.593), this signifies that there is no multi co-linearity problems. This simply means that there is no variable in the model that is measuring the same relationship/quantity as is measured by another variable or group of variables.

*Figure 8: the regression predicted value and regression standardised residual scatter plot of the dependent variable*



This figure presents the regression predicted value and regression standardised residual scatter plot of the dependent variable. From the table, most of score clustered the centre in the linear direction to the left of the table. This only confirms the fact that there exist significant statistical contribution of the independent variables; professional development on the dependent variable; teaching effectiveness. Therefore school administration should also considers the indicators like in-service training, allocation of resources, peer colloaboration and effective pedagogic supervision in designing teaching effectiveness process.

Figure 9: the regression residual and regression deleted (press) residual of the dependent variable



This figure presents the regression residual and regression deleted (press) residual of the dependent variable. From the scatterplot, there is a straight line which runs from the left to the right showing the multiple linear regressions of the independent invariables on the dependent. This signifies that professional development is a significant predictor of teaching effectiveness in primary schools in the Yaounde VI municipality.

#### 4.4. Hypothesis testing

From the coefficient table the hypotheses of the study are tested to determine their impact and degree of predictability of each of the variable. To see which of them is most predictive.

Hypotheses 1:  $H_{01}$  in-service training has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI

$H_{a1}$  in-service training has significant influence teachers' effectiveness in the selected primary schools in Yaounde

In the coefficient table the first independent variable entered was in-service training. The results are presented as follows. In-service training (IST) =B (0.216, std error (0.106),  $\beta$  (0.169). t (2.032), sig (0.044) PV < 0.005. Based on the statistics, the significance is 0.046 < 0.005 and is partially correlated at 0.142%. This signifies that there is statistical significance between the independent and dependent variables. This rejected the null hypothesis that  $H_{01}$  in-service training has no significant influence on teachers' effectiveness in the selected primary schools in Yaounde VI. In

this way, in-service training is key principle of professional development that enhances teaching effective. School administrators must work to ameliorate in-service training as means to enhance teaching and ensuring the effective implementation of school programmes and activities.

Hypotheses 2: H<sub>02</sub> Allocation of resources has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI

H<sub>a2</sub> allocation Resource has significant influence teachers' effectiveness in the selected primary schools in Yaounde VI.

The coefficient table equally present the second independent variable allocation resource, AR= B (-0.024), std error (-0.099),  $\beta$ (-0.020, t (-2.549), sig. level 0.0810 < pv 0.005 and partial correlation of -0.019. the evidence of this statistical representation confirms the null hypothesis and rejected the alternative. Allocation of Resource has a significant influence on teachers' effectiveness in the selected primary schools in Yaounde VI. Allocation of resource as professional development strategic tool has limited impact in predicting teaching effectiveness

Hypotheses 3: H<sub>03</sub> peer Collaboration has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI

H<sub>a3</sub> peer Collaboration has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI.

Peer collaboration is the third independent variable which entered into the model. PC=B(0.148), std error (0.121),  $\beta$  (0.137), stud error (0.670 t (1.806), sig. (0.073) < PV0.005 at a partial correlation of 0.0147. From these statistical presentation, 0.073s is less 0.005 PV confirm the hypothesis that peer Collaboration has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI. It affirms the alternative. Integrating peer collaboration in professional development has low predictability of teaching effectiveness. It is the responsibility of the school management to ensure good human peer collaboration in their respective establishments for quality education.

Hypotheses 4: H<sub>04</sub> effective pedagogic supervision has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI

H<sub>a4</sub> effective pedagogic supervision has a significant influence teachers' effectiveness in the selected primary schools in Yaounde VI

The fourth independent variable entered into the model was effective pedagogic supervision  $EPS=B$  (0.217), std error (0.058),  $\beta$  (0.282),  $t$  (4,276), sig. 0.000 <  $PV$  0.005 and a partial correlation of 0.29. From the standardised coefficient, calculated value and the partial correlation, there is higher degree of predictability by effective pedagogic supervision on teaching effective. Therefore, it is clear that the null hypothesis that effective pedagogic supervision has no significant influence teachers' effectiveness in the selected primary schools in Yaounde VI was rejected and the alternative retained. In this light, the school administrators have to work to improve or enhance pedagogic supervision as means of promoting teaching effectiveness and better learning and skills acquisitions.

### **Categorisation of the Variables According the Results**

Based on the above analysis, effective pedagogic supervision (EPS) is the most predictive of the variables, followed by in-service training (PD), peer collaboration is the third predictive and allocation of resources is the four and last predictive of the variable.

### **Conclusion**

On the whole, this chapter presented descriptive statistics which were made up of frequencies and percentages and were interpreted. This involves demographic information on sex, age and level of education. The variable or the indicators of professional development were also interpreted according to scales of strongly disagree, disagree, agree and strongly agree. This was immediately followed by the inferential statistics in which the model summary as presented by ANOVA table, coefficient table and scatterplot. These tables were used to test the hypotheses in terms of their predictability (impacts on the dependent variable). From the coefficient table the variables were classified or categorized according to their degree of predictability. Therefore, it can be concluded that the adoption of professional development is a strategy which result to a significant impact on teaching effectiveness in primary schools in Yaounde VI municipality.

**CHAPTER FIVE:**  
**DISCUSSION AND SUMMARY OF THE FINDINGS,**  
**LIMITATION OF THE STUDY, PERSPECTIVES FOR**  
**FURTHER RESEARCH, RECOMMENDATIONS**

The main objective of this study is to examine the impact of professional development on teaching effectiveness in the selected primary schools in Yaounde VI. This chapter deals with the discussion of findings from the quantitative data which were carried out under the predetermined hypotheses. The discussion of finding integrated view from the empirical literature, theories and results obtained from the field. It proposed perspectives for further research drawn from the shortcomings of the present work. And recommendation was made to various stakeholders of the higher education sector and knowledge society.

**5.1. Discussion of Findings**

The discussion of findings will follow the logical flow of the data presentation and will be making argument based on data and previous empirical works reviewed in the empirical literature

**5.1.1. In-service training as a professional development indication has Contributed to teaching effectiveness in the Cameroon primary school.**

The results of descriptive statistics on the field data reveal that 75.3% of the respondents strongly agree and agree on the view that institution regularly organised professional seminars/conferences, ensures individual teachers skills development, they send teachers on further education, continuous skill development, they have evaluation policy, they encourage knowledge exchange, they carry out need analysis on teachers' knowledge and skills gap, In-service training in school is more proactive than reactive, In-service training in school is guided by visionary leadership and the training takes into consideration objective and content of curriculum as way to improve on professional development and teaching effectiveness in primary school in the Yaounde VI municipality. Also, from the multiple linear regression model, in-service training was significant at 0.044 PV <0.005. The result agrees with Haris (2016) view on Capacity Building where Educational Stakeholders in order to Improve Quality Education have to integrate in-services training programmes to reinforce the capacity of teachers. In this study he underscores that a series

of capacity building activities during the project has positively impacted on individual, institutions, and societal level. From the theory of absorptive capacity of Cohen & Leventhal (2003) as cited in (Wu & Qu 2018) we think that transformation ability and utility ability of teaching can be developed through in-service training. In in-service training there is knowledge and skills between colleagues which permit other to development better approaches and methods in teaching. This goes a long way to enhance effective teaching within school system.

### **5.1.2. Allocations of resources are Contributive factor to teaching effectiveness in Cameroon primary school**

The findings in the descriptive field data show that respondents agree and strongly agree at 82.7% that schools carry out careful planning in the allocation of resource, the number of teachers is commensurate to the numbers of pupils, there is available and up-to-date informational resource, that infrastructural maintaining is of good standard, there are available financial resources that respond effectively to school needs, the school management ensure equity in the allocation of resources, every program is well organised to suit teachers and subjects, there is good management approach to allocation of resource, there is a forecasting strategy for resources allocation and school management to promote the integration of community in the allocation of resources. This percentage shows only great allocation of resource for teaching effectiveness. About 17.3 of the respondents disagree and strongly disagree on these views. This tells us that resources allocation is outlined but the process is effective to a greater extent for teaching effectiveness. This may explain why sometimes due to limited resources, for them to improve on teaching effectiveness, they have to improve on their resource allocation, planning of school activities and programmes.

In terms of prediction, allocation of resources as a professional development strategy of teaching effectiveness is predictive at  $0.0810 < p < 0.005$ . this results contradicts Mascitti-Miller (2012) who examined Resource Allocation and practices in Urban Elementary Schools and found that in order to create a highly individualised school environment, flexibility in spending provides principals with an opportunity to tailor the needs of their school more strategically. Transformation ability in resource allocation mainly refers to the Add, Delete, Recombine, and Reconfigure for the organisation to use in the organisation for effective management. This is a smart way to improve organisational performance. In the new knowledge society where there is rapid results of

innovation in educational technologies, educational establishment ought to have the transformative power through its human resource reconfiguration which is a veritable mechanism for teachers' effectiveness. (Wu & Qu 2018). Human, material and financial help the transformation of effective teaching. The utilisation ability refers to the ability of an institutional to change its routines and processes and use new knowledge. Acquiring knowledge in the allocation resource permit the organisation to be effective. Allocation of resources in education promote teaching effectiveness. This also means improving the organisational behaviour and culture to better suit the needs of the changing times and respond to teachers' professional need as way of making them more effective. (Wu & Qu 2018)

### **5.1.3. Peer collaboration is an effective professional development approach in enhancing teaching effectiveness in primary schools Cameroon.**

The percentage of positivity is 86.4%. This means that the greater portion of the population turn to agree or strongly agree that there is constant peer-to- peer coaching of new colleagues, that school management promote good social relations with other colleagues, that school management promote participative learning strategies, that they ensure constructive learning strategies, that there is consultation among colleagues that the culture of Peer mentoring do exist in the school, that there exist cooperation in relation to school data collection effective and interpersonal relationship between teacher, there exist good concertation among colleagues and there is also consensus on pedagogic approaches. The about 13.6% negativity express by some respondents is indicative of the fact that peer collaboration still have issues which school management administrator have to improve upon in the Yaounde VI municipality. The school has to integrate the better peer collaboration strategies to enhance effective teaching within the school establishment. The significant coefficient of peer collaboration shows significant of  $0.073 < P < 0.005$  which corroborate Janssen & Wubbels (2018) who examined Collaborative learning practices: teacher and student perceived obstacles to effective student collaboration in the Netherlands in which they applied a grounded theory approach to analyse the interview. Data findings seem to imply that there are reciprocal interactions between these three antecedents. The low attention for collaborative goals of CL may cause teachers to ignore training students in collaborative skills and then teachers might not want to or be unable to assess the collaborative process because of a lack of training. Hilliard & Newsome (2013) examined Effective

Communication and Creating Professional Learning Communities. The smooth deployment of organisational resources in dimensional will facilitate effective communication in the learning process; peer collaboration can be explain from the social exchange theory. The theory is drawn from the streams of strand to explain the communication context and incentive in social exchange process. This theory is influence in the communication context, he talks of interpersonal exchange, small group exchange and organisational exchange. This communication context is motivated by the number of factors organizational justice and employee commitment are underpinned by social exchange theory, which views the employment relationship as a process of resource exchange governed by the norm of reciprocity (Shore & Wayne, 1993; Coyle-Shapiro et al., 2004), encompassing both on-going conferment of benefits and continual re-balancing of expectations and obligations (Coyle-Shapiro & Morrow, 2006).

#### **5.1.4. Effective Pedagogic Supervision is a Professional Development Approach to Improve Teaching Effectiveness in Cameron Primary School**

The descriptive statistics indicate that respondents strongly agree and agree at 80.9%. This means the respondents are of the opinion that effective pedagogic supervision process is a way to improve on teaching effectiveness in the school establishment. From this results, it is clear that school management improves on instructional practices, school management fosters effective curriculum implementation, ensure effective incentive schemes in your school, ensure effective pedagogic coordination , ensure effective monitoring , ensure quality teaching continuous school teachers evaluation, promotes good working relation, promote action research for the improvement of teaching equity in the teaching-learning process , ensure the competence and quality of its human resource. This is indicative of the fact that effective pedagogic supervision as a professional development indictor enhances teaching effectiveness.

The variable is predictive at  $0.000 < PV < 0.005$  this corroborate Popoola and Haliso (2009) (Adeoye and Popoola, 2011) Teaching effectiveness is seen as the ability of a teacher to inculcate knowledge and skills in students, as well as change their behaviour for better living. Teachers' effectiveness has been accepted as a multidimensional construct since it measures a variety of different aspects of teaching such as; subject mastery, effective communication, lesson preparation and presentation.

Teachers' effectiveness is defined by their teaching. Teaching skills are those "micro-behaviours" that the effective teacher constantly exhibits when teaching a class. They include behaviours like: involving all pupils in the lesson, using differentiation appropriately to challenge all pupils in the class, using a variety of activities or learning methods, applying teaching methods appropriate to the national curriculum objectives and using a variety of questioning techniques to probe pupils' knowledge (McBer, 2000). Professional development is a tool through which teacher's skills and effectiveness can be ameliorated for better results and quality education.

Effective teachers set High expectations for the pupils and communicate them directly to the pupils. They challenge and inspire pupils, expecting the most from them, so as to deepen their knowledge and understanding (McBer, 2000). This can come to reality if there are institutional incentive and team work that permit to perform in their activities. Therefore, collaborative mentoring is another dimension for teacher to achieve their high expectation with their students. Also, capacity building framework will be an effective indicator too. Benthum, Gulikers, and Mulder (2011) help improves the professional development practices and strategies in an organisation. Understanding conceptions on professional practices and assessment through collective and collaborative personal inquiry is a veritable approach to innovation and improvement of knowledge in the learning process in the school system.

## **5.2. Recommendations to Educational Stakeholders**

Recommendations help in the amelioration of professional development and teaching effectiveness. challenges in school is a negative factor which has an impact on the effective organisation and performance of the school system in terms of results, quality learning, classroom management, professional development, human relation, knowledge and competencies transmission. Therefore, it is important for us at the end of this study to propose some processes to be adopted for better management.

- The researcher recommends more seminars to be organized with the first focus being to change the mentality of teachers when it comes to the newly implemented professional development of teachers. This will go a long way to improve on teaching effectiveness which can be viewed as an opportunity to ensure quality education.

- Equally, necessary measures should be put in place to ensure that the seminars organized come to a compromise when it comes to the understanding of human relation management as a veritable strategy for conflict resolution in primary school in Cameroon.
- The basic education authorities should provide a better environment that will ensure that teachers can comfortably and conveniently teach effectiveness.
- Equally the ministerial text should be re-examined when it comes to aspects concerning administrative coordination to help in ensuring quality education and effective transfer of competence.
- Recommended text and reference books should be examined to ensure that they are clear, content and context specific and equally void of Ambiguity. This will go a long way to communicate effectively to the teachers in the various plan and programmes.
- Teachers should be consulted when coming up with any educational approach since they are the key implementers of the curriculum. When this is effectively done, it equally reduces conflicts which may be generated as a result of misunderstanding
- Incentives should be given to primary school teachers to motivate them to remain active in service for example compensations, grants, loans, in-service training should be given to teachers. School managers should ensure that staff development programs such as in-service programs, refreshers course, seminars, workshops, equipment of school with modern libraries and information technology centres be put in place to ease teachers research and lesson preparation.
- measures should be put in place to make everyone attends these seminars.

### **5.3. Suggestion for further research**

- This study was limited to primary education; a study can be conducted on the similar topic in the secondary or higher education institution;
- This study was carried only in the Yaounde VI municipality another study could be carried in the entire Centre region for a better understanding of the phenomenon.

### **5.4. Limitations of the study**

This research as a scientific exercise experiences some limitation or difficulties. These limitations include the following: There were limitation in terms of accessing documents on school

management and conflict resolution. Few works exist in this area making working on the concepts more stressful. Carrying out a scientific investigation of this level requires time, sacrifice and determination. The study was conducted in Yaoundé VI Municipality centre region of Cameroon with teachers as the target population. However, the researcher succeeded with the study she experienced or went through hardship and challenge. The researcher encountered a lot of constrains in the course of the findings of this study. The following are the main difficulties encountered by the researcher in course of the study.

Reluctance of some teachers to provides useful information. In some schools, some teachers were very reluctant and some of the teachers were not all receptive to provide full information on the problem under study. The researcher had to visit some schools more than 2 times to reemphasize on the importance of the study. Given the fact that the researcher has a background in science of education, the assistance of a statistician was unavoidable, as such, it was not only difficult to fine one, but it entailed financial means.

## CONCLUSION

The study is divided into five chapters namely chapter one which handled the back ground, problem objectives and hypothesis of the study, chapter two focus on literature review which had to do with conceptual review, theoretical framework and empirical review, chapter three research methodology, chapter four presentation and analysis of data to test the hypothesis while chapter five focused on discussion of findings was done in relation to literature review the instruments used for data collection was questionnaire which has closed ended question making it purely a quantitative study and the data was analysed using descriptive statistics as well as inferential analysis using the multiple linear regression. For the descriptive statistics percentages and frequencies were presented in determining the various perceptions of teachers. The empirical analysis of the study was done using regression. In the study 2 of the alternative hypotheses retained, and 2 the null hypothesis was retained indicating a strong significance link between professional development and teachers effectiveness in primary schools in Yaounde VI municipality. From the results of the study, it was concluded that professional development has a significant influence on teaching effectiveness in some primary schools in Yaoundé VI municipality. This is based on the fact that most of our alternative hypotheses were retained. Based on the findings of the study, significant recommendations were made to the stakeholders of the primary education sub sector.

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## APPENDIX

REPUBLIQUE DU CAMEROUN  
Paix – Travail - Patrie  
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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  
-----  
THE FACULTY OF EDUCATION  
-----  
DEPARTEMENT OF CURRICULUM AND  
EVALUATION  
.....

### Teachers' questionnaire

**Dear Respondent,**

The questionnaire is developed for a Masters' dissertation in the Department of Curriculum and Evaluation (section B: Educational Management), Faculty of Education in the University of Yaoundé 1. At the end of the training, the student is expected to write and defend a dissertation in the partial fulfillment of the programme. The research is entitled: **The Impact of Teachers' Professional Development on Teaching Effectiveness in Primary School in Yaoundé VI Municipality**. All information received remain confidential with the researcher and your privacy shall be appropriately secured in line with Cameroon law no 91/023 of December 1991. The questionnaire is designed to collect data strictly for academic purposes. Please answer directly and fully as possible.

#### SECTION A:

##### Demographic Information

##### Fill in the appropriate information

Level of education: \_\_\_\_\_

Age: 20-30  31-40  41-50  51 and above

Sex: Male  Female

#### SECTION B:

Please tick (✓) in the box corresponding to your most preferred respond: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) and fill in spaces with short answers.

S/N	Statements	Responses			
		SD	D	A	SA
<b>In-service training</b>					
1	My institution regularly organise professional seminars/conferences				
2	My school ensures individual teachers skills development				
3	My institution send teachers on further education				
4	My school has a continuous skill development evaluation policy				
5	My school encourage knowledge exchange				
6	My school carry out need analysis on teachers' knowledge and skills gap				
7	There are institutional strategies for in-service training				
8	In-service training in my school is more proactive than reactive				
9	In-service training in myschool is guided visionary leadership				
10	The training takes into consideration objective and content of curriculum				

### SECTION: C

<b>Allocation of resources</b>		SD	D	A	SA
11	There is careful planning in the allocation of resource in my school				
12	The number of teachers is commensurate to the numbers of pupils in my school				
13	There are available and up-to-data informational resource				
14	The infrastructural maintaining is of good standard				
15	There are available financial resources that respond effectively to school needs				
16	There is equity in the allocation of resources in my school				
17	Teaching hours are well organised to suit teachers and subjects				
18	There exist a good management approach to allocation of resource				
19	My school head have a forecasting strategy for resources allocation				
20	My school integration the community allocation of resources				

### SECTION: D

<b>Peer Collaboration</b>		SD	D	A	SA
21	There is constant peer-to- peer coaching of new colleagues				
22	My school promote good social relations with other colleagues				
23	My school promote participative learning strategies				
24	My ensure constructive learning strategies				
25	There is consultation among me and my colleagues				
26	My school has a culture of Peer mentoring				
27	There is cooperation in relation to school data collection				
28	There effective and interpersonal relationship between teacher				
29	There is good concertation among me and my colleagues				
30	There is always a consensus on pedagogic approaches				

**SECTION: F**

<b>Effective pedagogic Supervision</b>		<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
31	My school improves on instructional practices				
32	My school fosters effective curriculum implementation				
33	There is effective incentive schemes in my school				
34	My ensure effective pedagogic coordination				
35	There is effective monitoring to ensure quality teaching				
36	There exist continuous school teachers evaluation				
37	My school promotes good working relation				
38	My school promote action research for the improving of teaching				
39	There is equity in the teaching-learning process				
40	My school ensure the competence and quality of its human resource				

**SECTION: G**

<b>Teaching effectiveness</b>		<b>SD</b>	<b>D</b>	<b>A</b>	<b>SA</b>
41	I integrate pupils into your lesson				
42	I use a variety of activities of learning methods				
43	I use variety of questioning techniques to elicit knowledge from pupils				
44	I use teaching method appropriate to national curriculum objectives				
45	I ensure the effective transmission of skills and behaviour change in pupils				
46	I ensure the mastery of the subject matter of every lesson				
47	There is rigor in lesson preparation and objectives				
48	There is effectiveness in lesson presentation				
49	I ensure effective communication in knowledge and skills transmission				
50	I ensure effective time management				

*Thanks for your assistance*

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