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DECLARATION

This is to declare that, this research paper is the original work of "FRU BOMA. I have duly acknowledged all the sources from which the ideas and extracts have been taken. The project is free from plagiarism and has not been submitted elsewhere for publication

CERTIFICATION

We the under designed hereby certify that this study title 'Teacher Professional Collaboration and the Teachers' Efficacy in Government Secondary Schools in Yaounde' was carried out by **FRU Boma**, Registration Number 20V3038, a student of the Department of Fundamental Studies in Education-Option Educational Psychology, University of Yaounde 1.

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DEDICATION

TO MY FATHER OF BLESSED MEMORY

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This work was accomplished thanks to the effort of many who contributed in one way or another. First, much thanks goes to my director; Prof. Mbede Raymond, Professor Emeritus under whom I worked. I heartedly thank him for his guidance, suggestions and criticism which helped to shape the structure of this master piece. He took time off to read, orientate and encourage my progress.

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ABSTRACT

The research work titled 'Teacher Professional Collaboration and the Teachers' Efficacy in Government Secondary Schools in Yaounde' is aimed at investigating how teachers interacting in a collegial atmosphere and learning from each other in a school milieu can influence their level of efficacy in accomplishing classroom task or the teaching learning transaction. Classroom processes have been todirected toward class control and discipline, pedagogic application, evaluation, students' engagement, time management, etc.

The research is conducted based on the fact that school failure had always been a reoccurring factor and even though students and parents carries the highest responsibility, teachers and their inability to implement curriculum can also be a factor. Besides, for a teacher to stay in teaching, he/she must continue learning and improvin g on her pedagogy. A survey which was exploratory was used in the study. A structured questionnaire was designed using the five point Likert scale with questionnaire items being agree, strongly agree, disagree, strongly disagree and neutral. The qualitative data was analyzed through descriptive techniques while the chi square analysis was performed to test for differences between two or more groups in proportion to categorical variables. A Pearson Value less than 0.05 were considered as a cut off value for statistical significance with the hypotheses as follows:

Ha: There is a significant relationship between teachers' motivation and the teachers' efficacy (Pearson correlation value= 15.5 > 0.05)

Ha: There is a significant relationship between available resources for collaboration and the teachers' efficacy (Pearson correlation value=33.5 > 0.05)

Ha: There is a significant relationship between teacher leadership and the teachers' efficacy (Pearson correlation value =23 > 0.05)

Ha: There is a significant relationship between government policies towards professionalism and the teachers' efficacy in Government Secondary schools (Pearson correlation value =24.5 > 0.05).

All the null hypotheses were rejected in favor of the alternative hypotheses therefore indicating that teacher professional collaboration in schools can increase teachers' efficacy in class thereby improving on students' performances. However, the existence of real professional learning communities in our secondary schools to improve teachers learning and implementation is still a fallacy. Many teachers don't see professional collaborative learning as necessary in their professional life and so continue to work in isolation. Teachers should therefore be motivated and the government should work closely with school Principals to foster professional collaborative learning for the improvement of teaching and learning. This can be by providing resources for school based seminars, workshops and conferences; supervised by delegated pedagogic inspectors rather than allowing it only in the hands of divisional and Regional inspectors which is done occasionally without any follow up.

KEY WORDS: Teacher professional collaboration, collegiality, Efficacy, Teaching-learning process.

RESUME

Le travail de recherche intitulé « la collaboration professionnelle des enseignants et l'efficacité des enseignants dans les lycées publics de Yaoundé » que vise l'enquête sur l'étude des enseignants interagissant dans une ambiance collégiale à l'école et apprendre les uns des autres, peut influencer leur niveau d'efficacité dans l'accomplissement des tâches en classe ou dans la transaction enseignement-apprentissage. Les processus de classe ont été orientés vers le contrôle de la classe et évaluation, engagement des élèves, application Pédagogique, la gestion du temps, etc. La recherche a été menée sur la base du fait que l'échec scolaire a toujours été un facteur de réalité et même si les élevés et les parents portent la plus haute responsabilité, les enseignants et leur incapacité à mettre en œuvre le programme peuvent également être un facteur. De plus, pour qu'un enseignant reste dans l'enseignement, il doit continuer à apprendre et à améliorer sa pédagogie.

Une enquête exploratoire a été utilsée dans l'étude. Une questionnaire structure a été conçu à l'aide de l'échelle de Likert avec des articles étant d'accord, en désaccord, fortement en désaccord. Les données qualitatives ont été analysées grâce à une technique descriptive tandis que l'analyse Ki deux a été réalisée pour tester les différences entre deux ou plusieurs, proportionnellement à des variables catégoriques. La valeur Pearson de moins 0.05 a été considérée comme la valeur découpure pour une signification statistique avec les résultats suivant :

Ha: Il y a une relation significative entre la motivation des enseignant et l'efficacité des enseignants dans les établissements secondaires publiques (P. valeur = 15.5 > 0.05)

Ha: Il existe une relation significative entre les ressources disponibles pour la collaboration professionnelle et l'efficacité des enseignantes. (P. valeur = 33.5>0.05)

Ha: *Il y a une relation significative entre le leadership des enseignants et l'efficacité des enseignant dans les établissements secondaires publiques (P. Valeur=23>0.05)*

Ha: Il existe une relation significative entre les politiques scolaires au professionnalisme et l'efficacité des enseignent dans les établissements secondaires publiques (P. valeur=24 >0.05).

Toute l'hypothèse nulle a été rejetée en faveur de l'hypothèse alternative. Cela indique que la collaboration professionnelle des enseignants dans l'établissement public peut augmenter la production d'enseignant en classe et pourquoi donc t'ils les performances Cependant, des élèves. l'existence de vraies communautés d'apprentissage professionnelles dans nos établissements secondaires est une erreur. Beaucoup d'enseignants considèrent l'apprentissage professionnel comme une infiltration à leurs vies professionnelles et donc continuent à travailler en isolement pour craindre d'être remarqués. Les enseignants devraient donc être motivés et le gouvernement devrait travailler en étroite collaboration avec les Proviseurs d'établissements pour favoriser les séminaires, les conférences et les ateliers à l'établissement pour l'enseignant. Cela devrait être supervisé par des inspecteurs délégués plutôt que de ne pas le faire seulement entre les mains de l'inspection Divisionnaire et régionale qui vient occasionnellement sans aucun suivi pour la mise en œuvre.

MOT CLES: Collaboration Professionnelles d'enseignants, Efficacité, Enseignement, apprentissage, collégialité

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LIST OF ABBREVIATIONS AND ACRONYMS

1. ABBREVIATION

CBA : Competency Based Approach

OBA : Objective Based Approach

PBA : Project Based Approach

PL: Professional Learning

PLC : Professional Learning Community

PD : Professional Development

V P : Vice Principal

DM : Discipline Master

DS : Dean of Studies

DV : Dependent Variable

IDV : Independent variable

NEA : National Education Association

HOD : Head of Department

PTA : Parent Teacher

PRC : Project Related Collaboration

OR : Organizational Related Collaboration

IRC : Instructional Related Collaboration

E-LEARNING: Electronic Learning

ICT : Information and Communication Technologies

TPC: Teachers Professional collaboration

TPL: Teachers professional Learning

GCE : General Certificate of Education

A/L : Advance Level

O/L : Ordinary Level

HTTC : Higher Teacher's Training college

PLC : Professional Learning Community

OECD : Organization for Economic Co-operation and Development

ZPD : Zone of Proximal Development

Ho : The null hypotheses

Ha : The alternative hypotheses

2. ACRONYMES

PISA : Program for International Students Assessment

TALIS: Teaching and Learning International Survey

PLEG : Professeur du Lycée d'Enseignement General

PCEG : Professeur du Collège d'Enseignement General

WIFI: Wireless Fidelity

DIPES I : Diplôme de Professeur d'Enseignement Secondaire

DIPES II: Diplôme de Professeur d'Enseignement

UNESCO: United Nations Educational, Scientific and Cultural Organization

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GENERAL INTRODUCTION

Research has shown that effective collaboration among teachers' changes their practices and effectively affect students and why not the teacher efficacy (Barko. 2004, Darling- Hammond, 2000). It is widely suggested that such practices should be anchored and sustain over time with the aim of enhancing not only peer collaboration (Chan Ring 2006, Richardson, 2003), but also the teacher efficacy. Grounded on this assumption, teacher's growth does not happen in isolation. Current professional development which works hand on cloves with teacher collaboration seeks to co- construct knowledge in a redefined professional development context.

In the 1960s, teaching was argued by some sociologist not to be a profession (In villegas- Reimers 2003). They argue that it is like a "junction» for all trades especially with their nature of pedagogy, subject's knowledge and practice. Thus, it can be derived even without training. This is very true today especially in a city like Yaounde with the proliferation of primary, secondary and higher educational institutions which need teachers to teach in them with the first motive being business. With this, most University graduates can easily pick a job as a teacher without any formal training. Though amateurs, some are doing extremely well as they are employed and those who are willing, have taken it as a vocation. This is thanks not only to professional development but also to collaborative practices within the school. This has helped to improve on the teacher efficacy and why not on the teaching- learning transaction. This therefore brings the idea of teaching as a profession and teaching as a vocation.

The English Advanced learner dictionary defines a vocation as a strong feeling of suitability for a particular career or occupation (dedicated to a particular career), while a profession is a paid occupation, especially one that involves prolonged training and formal qualifications. With this, some teachers are into teaching as a profession which is available at the moment to put food on their table and not as a vocation and so lack the qualities of efficacy. It is widely believed that accepting teaching as a vocation is a first step of building the so-called «teacher efficacy". Throughout the world, a called for teachers to be agentic professionals has emerged in literature as a strategic response to policy agendas promoting rigid accountability of educational reforms and school development (Etelapelto et al, 2013). The teacher efficacy is being used to describe the teachers' belief in their capacity to make active choices in educational practices. It refers to teacher's competency

to plan, enact educational change, direct and regulate their actions in educational context. Becoming a crucial variable in studying teaching behavior, researchers have investigated the efficacy of student teachers, novice teachers et cetera and experienced teachers to examine how it affect learning to teach and acting to reforms.

In education, policy implementation and reform innovation rely on individual and/collective efficacy of the teacher. Efficacy is also of vital importance for teacher education and school improvement. Since it determines the way teachers develop their professional decision making. Moreover, social structures should be taken into consideration in relation to teachers' efficacy. Sociologist argues that the social structures and human agency are the two main determinants of social phenomena (Settersten and Gannon 2005). Research also recognizes the challenge inherent to educational systems where teacher's action may be intentionally dynamic yet institutionally constrained (Schwarz and de Groot 2011).

Efficacy in education can only be studied empirically by exploring various components of the teacher efficacy and interplays with other factors of study of such context bound sound efficacy requires rich qualitative data and could involve a life course perspective (Evans 2007) and mixed method studies at various career stages. Empirical studies try to explore the various factors affecting the teacher efficacy. Teacher collaboration is one of such factors which is both internally and externally motivated. In the developed world, the act of collaboration has been code named," professional learning Communities" where it taps into teacher's intrinsic motivation, giving the teacher the opportunity to construct solutions to the challenges they face in the classroom; rather than sit on a general professional development session. A successful and efficient professional learning leads to further development and maintenance of teacher effectiveness. On the other hand, effective learning of teachers relies on their professional agency and their learning process is influenced by their institutional satisfaction and improvement.

When teachers are placed in context of professional learning Communities, their agency (dynamic and complex competency) is determined by a teacher identity, their place and interactions within professional practices. Social professional goals influence teachers learning choices to pursue, to comply with, or perhaps resist learning. Teachers may exercise their agentic capacity position or reposition themselves in line with their own

goals with the school goals. The goals are not fixed but are rather results of interaction between agents and structures or cultures which they operate (Lieberman 2009).

Effective collaborative learning activities can improve teacher's effectiveness through involving them in groups. In this type of shared community practice, teachers are situated and argentic human beings. They negotiate their own learning and practice by emerging learning experiences when working together as professionals (individuals), build their collective efficacy enacted when decisions are made in groups to affect work and professional identities (Hõkkã et al 2017.p38).

The socio-cultural conditions of Communities of practice, supporting and constraining teachers' collective agency also enhance their sense of efficacy. As a complex social system set within even a more complex social system, schools can seriously limit and constrain the teacher efficacy.

Therefore, teacher collaboration plays an integral role in constructing the teacher efficacy through the improvement of knowledge in their learning and teaching with a multiplier effect on students. By bringing teachers' practical, relational knowledge to the level of explicit professional capital, professional development is required to encourage a" sense of wholeness" that lead teachers to see themselves as agents within the school cultures and social structure; a process of learning where knowledge develops from individuals' interaction with their culture and society. Teachers construct new knowledge on the foundation of existing knowledge (Jean Piaget, John Dewey 1967). Lev Vygotsky (1978) also believed in community learning thus his zone of proximal development is not only applied to students but also to teachers (andragogy) where they can learn from each other and from experts in the bid to improve their professional practices/ skills. Kunt Lewin in his group dynamic theory also believed that forces interacting within a social group can bring about a change in the group's mentality and why not their practices (teacher efficacy).

The present study is therefore out to investigate some factors like motivation, professional work satisfaction and team work, which tends to trigger teacher collaboration, some challenges to teacher collaboration and how mitigating them will trigger the teacher efficacy and why not the teaching learning transaction. It is argued from the perspective that the teacher efficacy is not really inborn but it is acquired over time.

CHAPTER ONE: THE PROBLEMATIC

1.0. Introduction

The topic: "Professional Teacher collaboration and teacher efficacy" is a topic which falls under fundamental research and is within the field of Educational Psychology. Educational Psychology tried to apply principles and theories in Psychology to find solutions to Educational problems. The study therefore puts the social constructivist approach to teaching and learning.

Teachers often work in isolation in their classrooms with little collaboration or sharing of ideas or strategies with other teachers or administrators. They keep to themselves and are shielded in privacy in their classrooms (DuFour, 2011). They are not communicating, collaborating, or sharing their expertise with their colleagues. Teachers often say that they feel isolated when they are grading papers, planning and working in their classrooms. The structure of the school, however, allows this sentiment to permeate its walls to an environment of limited or no collegiality (Fallon &Barnett, 2009). Schools are now trying to embed and instill a collaborative environment amongst the faculty and administration.

Experienced teachers will complain that they are burned out. Meanwhile, new teachers are vulnerable and enter their own classroom with limited guidance. These teachers are struggling with demands of principals, vice, and legislators (Crafton & Kaiser, 2011). They succumb to a feeling of being ineffective in the classroom, as they work in isolation with very little being done to revive their passion. Many teachers leave the classroom before 25 years. Teachers leave the classroom because of the expectations placed upon them, the feeling of being isolated, and the feeling of being unsupported (National Education Association, (NEA) 2007). These teachers are experiencing low morale or dissatisfaction with their jobs. Furthermore, the large turnover of teachers places a strain on remaining teachers by having to mentor and assist new teachers in becoming comfortable with their new environment. Consequently, the school culture and environment tend to decline when the teachers are dissatisfied and showing low morale. Teachers often feel overwhelmed with all the requirements placed upon them during the work day (Black, 2003). Working as a teacher includes being a front-line social worker, club sponsor, mentor, and coach.

There are also the demands of meeting Annual Yearly Progress and other high stakes testing throughout the year, which has become a part of the evaluation system for teachers. This dissatisfaction with the working conditions causes teachers to leave the profession at an alarming rate. Collaboration and professional learning communities are becoming popular in the schools of today as a way to improve student achievement along with retaining teachers and may be defined as "a systematic process in which educators work together interdependently to analyze and to impact their professional practice in order to achieve better results for their students, their team, and their school" (DuFour et al., 2010, p. 98). During a collaborative session, teachers meet in a collegial atmosphere to share their expertise and diversity for a common purpose of helping each other and the students.

Conzemius & O'Neill, (2002). Pomson (2005) posited that there is gap between the concept of collaboration and its realization in the schools. Teachers in this study stated that they did not have the background to work in collaborative sessions and resisted working in groups that were chosen by their supervisors. Large turnover of teachers places a strain on remaining teachers by having to mentor and assist new teachers in becoming comfortable with their new environment. Consequently, the school culture and environment tend to decline when the teachers are dissatisfied and showing low morale. Teachers often feel overwhelmed with all the requirements placed upon them during the work day (Black, 2003), working like say, the head of departments.

There are also the demands of meeting Annual Yearly Progress and other high stakes testing throughout the year, which has become a part of the evaluation system for teachers. Bivona (2002) asserted that "teaching is one of the most challenging and demanding professions" because teachers have to deal with many items during their daily routine that it is not a routine at all. Lumsden (1998) stated that the demands placed on teachers are growing at an unprecedented rate and that teacher's work in an environment saturated with students' emotions and reactions to the requirements of high stakes testing. High stakes testing can be detrimental to a teacher's attitude and to the student who is being taught to the test (Fisanick, 2008).

There are also schools that require teachers to use the same textbooks and pace the material the same (Esquith, 2007). These teachers are expected to follow a script which eliminates their creativity and the ability to challenge students. Moreover, students are expected to be motivated to perform to the best of their ability, and teachers are expected to serve in ways like coaches and to aid at risk students under an organizational model that

does not allow that type of assistance. Students also do not show the skills necessary to thrive in the world of high education (Barts, 2012). These skills include critical thinking skills, creativity, and focus. However, the question of who is responsible for motivating teacher's remains fifty percent as new teachers will leave the profession by the end of the fifth year of teaching (Fulton, Yoon, & Lee, 2005). The majority, over half, of these teachers leave because of job dissatisfaction and low morale. As a result, the students are ultimately the ones who lose in their motivation and academic progress with the lack of consistency among the teaching staff and being placed in classrooms with inexperienced teachers (Grossman, Wineburg, & Woolworth, 2001). These researchers proposed that students benefit from seeing teachers model learning communities and learning from each other. Fulton et al. (2005) also suggested that teachers need to be incorporated into a collaborative group from the beginning of their careers and that relationships with colleagues need to be a key factor.

Talking of building the teacher efficacy, it has been used to refer to situations where teachers have the capacity to exercise their discretion and judgement on adapting their instruction and curriculum to meet the diverse and changing needs of their students (Priestley Biesta and Robinson 2015). It has been used to refer to the capacity of teachers to act purposefully and constructively to direct growth, and to contribute to the growth of their colleagues (Atkin, 1994). From all the aforementioned practices, one will agree that collaborative practices in schools have all the attributes of promoting the teacher agency/efficacy.

A choice does not have to be made between teacher efficacy and compliance. Looking at the Cameroonian context, the teaching profession has become a ready market for all persons who are able to transmit knowledge for payment and not as a vocation. The teacher agency is almost absent in many teachers. Normally, it is supposed to start by a teacher developing an ethical code for the profession. Ethical code refers to the assembly of behaviors; attitudes to behave by a teacher to be able valorize his teaching profession. (Tsafack, 1998), talks of the ability to the judgement of values, appreciation accrued to what is good and bad.

It is from cultivating that professional ethics that a teacher moves to loving the job not only as a profession where he/she works with the motivation only toward payment but as a vocation. According to Tsafack, a teacher chooses a vocation through a profession. A teacher who considers teaching as a vocation sees it to be the best profession and put all

the attributes. The teacher manifests false attributes according to Tsafack (1998) in the following ways

- Love teaching only as a part time job.
- ➤ Love teaching for job security.
- ➤ Love teaching to impress the authorities for promotion.
- Love promotion as a transition for a better job.
- ➤ Love teaching for eloquence. etc.

It is from this background that many teachers in the field especially in the Secondary educational sector are coming from and had failed to develop their efficacies. On the other hand, a teacher who is born a teacher and who has an inborn agency exercises the following.

He /she have the spirit of lecture /research.

Has interest for children, adolescent and youth education. Love and respect them.

Love to share not only his expertise knowledge with others but his personal resources. All these are indicators of internal motivation.

External motivation on the other hand is manifested thus:

The individual takes teaching time very serious. Teaching is not a secondary activity. As some teachers will intentionally sit and loss their teaching hours. Their principal center of interest is not the job but the fact that Learners are satisfied.

A sense of mission: His sense of responsibility bypasses his sense of mission. He exercises his duty in a respectable way.

- ➤ He teaches from general to particular interest.
- ➤ Lastly, he develops a professional conscience. Professional conscience is the normal right to exercise professional judgement on pursuing professional responsibilities. It is the teacher ability to take the initiative to do his/her job well.

It can be exercise by showing prove of the following 4 elements.

- ❖ Regularity: If a teacher is regular and always on time in class. They also make sure their program is covered for the year.
- ❖ Zeal: It indicates the enthusiasm in pursuit of a cause of teaching and its objectives. However, there is negative zeal in some cases to attract the hierarchy.
- ❖ Spirit of initiative: This is when a teacher will try new things, methods and is more open to criticism and change. He/she is ready to learn from others.

Finally, a teacher professional qualification, intellectual, moral and physical quality with leadership qualities greatly enhance collaboration and why not the teacher efficacy.

From the background knowledge, one will try to discover that there is a direct link between teacher collaboration and the enhancement of the teacher efficacy. It is not really inborn per say, but it is acquired overtime through experience and other factors. Many researchers have tried to look at the concept of efficacy as a whole but however, not really dwell on the aspect of teacher collaboration. Woodland et al (2013), writes that a definition of teacher collaboration is elusive, inconsistent and often theoretical. The need to reach a consistent definition is well documented in literature. Kelchterman (2006) highlights the importance and necessity of further definition and specifications of teacher collaboration in order to "properly discuss the issue". The absence of a well consistent definition, leads to a mixed and inconsistency result which could make interpretation of research results very difficult. Idol et al (1993), provides one of the first operationalized definition" an interactive process that enables people with diverse expertise to generate a creative solution to mentally defined problems." This definition laid a foundation later expanded such as occupational and organizational psychology (Piepenburg 1991), pedagogic oriented (Esslinger, 2000), political (Reinhardt, 2000).

Mora-Ruano et al (2018), provides a definition exclusively at teachers' level which such aspects as rational trust, school administration coordination, exchange of ideas and materials between teachers play a central role for teaching effectiveness. This therefore give rise to professional learning which recognizes teachers as their own agents of growth and emphasizes that learning is an experience driven mostly by internal factors such as motivation to engage in, Structural conditions for professional learning as well as the degree to which the school involves teachers in decisions about what to teach, how and when to teach.

Teachers need to own their agency and take responsibility for their learning and teaching. Things to improve the teachers' efficacy include:

- ➤ Cooperate teaching- a teacher watch others teach and especially an expert.
- > Support teachers' engagement (teachers' network), fellowship programs.
- > Establish cultures for continues learning and implementation.

From the background knowledge, one will discover that there is a direct link between teacher collaboration and teacher efficacy if well implemented. It is not really inborn per say, but it is acquired overtime through experience and other factors. This research work is therefore out to investigate effective teacher collaboration as a factor for promoting the teacher efficacy. The ultimate goal for teaching in Cameroon schools is to facilitate learning.

1.1. Historical background to the study

Also known as professional learning Communities (PLC) in the Western world, it first emerged among researchers in the early 1960s when they offered the concept as an 'alternative to the isolation in academic teaching profession in the USA. The research becomes more explicit in the late 1980s and early 1990s.

In 1989, Susan Rosenthaltz's study 78 schools and found learning enriched schools were characterized by collective commitments to students learning in a collaborative setting. Here, it approved improvement in teaching which is collective rather than an individual Enterprise, analysis, evaluation and experimentation in concert with colleagues. Teacher collaboration link to shared goals focus on student achievements led to improved Learning, greater certainty about what was effective, higher level of teacher commitment and why not their agency.

In 1993, Judith Warren Little and Milbrey McLaughlin reported their research that concluded the most effective Schools and departments within the school operated as strong professional communities characterized by:

- > Shared norms and beliefs
- Collegial relations
- ➤ Reflective practices
- > Professional growth
- > Mutual support and obligation.

The government of Cameroon is progressively transforming teachers' education so that it cans response to providing education for sustainable development. Transformative teachers' education proposes the preparedness of teachers who can in their practice ensure transformative learning, where teachers and learner are co-constructors of knowledge. (Tchombe, 2000). Education during the colonial eras had its specific mission of evangelization and colonialism. Today, there are new expectations where the focus is on having teachers who are visionary leaders to ensure sustainable education.

According to Tchombe (2000), schools responded to the need of evangelization more than National development. By the 19th century, missionaries present were the London

Baptist (1885) and the Roman Catholics (1907) in areas like Bimbia, Douala, Foulassi where earlier attempt of a specialization school was opened. It was a Presbytarian specialization school with a two-and-a-half-year training focus on pedagogic activities, general culture and the bible.

With high demand for teachers, professional regional schools were opened in Ebolowa, Nchang, Ngaoundere, Garoua and Maroua. There were also autonomous training centers in Douala, Fonkeng, (2000). From this, one will discover that schools were to provide students with basic skills in reading, Arithmetic and writing.

During the British colonial era, education was greatly neglected from 1922-1961. The first school for training of teachers was opened in Victoria in 1922 and was later moved to Buea. Successful Grade III teachers taught for a year before gaining admission to a two-year course (GRADE II). In 1945, G.T.T.C Kumba was opened. From then onward, teacher's training schools were opened by both private and state initiatives for the training of both Grade I, II and III in both French and British Cameroons. The curriculum included courses of professional development. Grade I certificates were awarded to those who obtained both O/A Levels in General Certificates of Education Examinations.

In 1961, the Higher Teachers Training College Yaounde was opened for training Secondary school teachers for both the first and the Second cycle. Since then, there has been a revolution in teachers training and professionalism in Cameroon.

The state maintains significant control over teachers' education by running National examinations for entry to initial teachers' education programs and for graduation from programs as qualified certified teachers. Government policies since 2003 suggested the balance to accreditation of teachers well for further professionalism (Tambo, 2000, Ndongko, and Nyamnjoh, 2000). A proper development and practice of teacher Education without and within the context of the school will contribute in determining the teachers' quality in teaching and learning.

1.2. Conceptual background to the study

The cry today by the government and the international community has been that the teachers should be agentic. This is true especially with the last theme of the teachers' day which was "Teachers at the heart of educational recovery". This was in line with the Covid 19 pandemic which really affected the educational sector. This therefore shows that teachers have a central role to play in education as agents of change. Bringing it to the

Cameroonian context, agentic teachers are called upon to be able to construct solutions to real problems they face in the classrooms rather than sit in a generalized professional development session, but which is not the case. Teachers work in isolation, are not challenged to improve on their practice's year in, year out and in the phase of an educational problem, they will rather prefer to abscond. The long run effect has been ineffectiveness, low student performance and falling standard of education both in the educational and moral aspects. The following questions are therefore asked:

- ➤ It is probably that our secondary school teachers are not collaborating within the school context as a main factor to build their agentic landscape or efficacy
- ➤ Do they appreciate the aspect of professional collaboration but may be lack the spirit of good leadership and coaching to flame it up for their own growth?
- ➤ Do they lack a good and conducive environment to spur them up so far as their work as a teacher is concerned to build that agentic capacity or?
- Probably, it is the lack of internal motivation as well as external motivation that has rendered teachers or most teachers especially in secondary schools ineffective.

To better understand this research finding, the following conceptual table has been taken into consideration.

Dependent Class Independent Motivation control/manage variable variable ment Resources Application of pedagogic styles Teacher Teacher efficacy professional collaboration Student Teacher leadership engagement Time management/ Government policies syllabus coverage

Table 1: The conceptual table

Source: Design by the researcher

1.3. Contextual Background to the study

Collaborative teacher activities in Cameroon secondary schools can be traced right from the African traditional system of Education. Indigenous refers to specific group of pe ople defined by ancestral territories, Collective cultural configuration and historical location. (Njoti et al, 2015), denotes that knowledge is typical and belongs to people from specific place with common culture and societies.

The indigenous African education as identified by Fufunwa (1974), Macojong (2008), Njoki et Al (2015), and Ebot Ashu (2016) identified seven cardinal goals of African indigenous education.(AIE) These goals are to develop intellectual skills, physical and social skills to understand, appreciate and promote the cultural heritage of Community at large, in order to develop a sense of belonging and encourage active participation in family and community affairs (training a child to know farm work, hunt, carve, weave et cetera). This was to develop a healthy attitude towards honest labor, and to inculcate respect for elders and those in authority.

It was a lifelong process whereby it progresses in stages of life from cradle to grave. This implies that African indigenous education is continues throughout one's life from childhood to old age.

It was community orientated: The institutions were directed towards the social life of the community.

It was not literacy dependent meaning learning experiences were delivered orally and knowledge is stored in the head of elders.

Emphasis was on practical learning. The young learned by watching, participation and executing what they have learned from an expert or mentor. Learning was holistic in nature and everyone has to learn everything in the community.

There was a spirit of communalism in everything done. Children upbringing was a take for the whole community. If a child misbehaved, for instance in the absence of his parents, any adult member of the community was responsible for his correction on the sport. That implies, children or a learner belongs to the society. African parents sought to raise their children within the community where each individual saw his well-being as tied to the welfare of the group, clan or tribe.

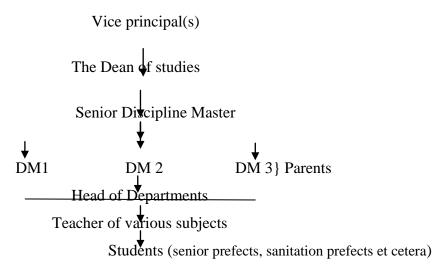
The community philosophy is a process of caring, collaborative, creative and critical together. Here, people work out what really matter, possible and what they can do.

It is a rich and deeply rewarding (Waghid, 2001, Horsthemke, 2017), Graeme (2016), and Evans (2012), agreed that community philosophy empowers people in any context to be active and to generate ideas of the grassroots level. This is almost thinking together in a non-confrontational and truly democratic way.

Education in Cameroon has moved from the indigenous traditional education to Colonial education during the German, British and French periods. During these periods, education moved from the traditional community setting to the schools and classroom setting. Collaborative practices then became within the school like between administrative staff, staff, parents through parent teachers' associations, within various departments et cetera.

School administrators embrace the extremely important role of ensuring the system of operating effectively and efficiently. Those placed at the administrative roles such as principals, Dean of studies and head of departments to demonstrate a high level of excellent in every realm within education. A model secondary school in Cameroon has the following administrative structure:

Figure 1 : Organigram of secondary school administration / collaboration in Cameroon Principal



Source: Designed by the researcher

The principal

He is an instructional leader who works with his teachers and college personnel in an effort to improve the teaching-learning situation. This involves mutual understanding, shared purposes, respect for that which is unique in each human being and the effective says of working together. A principal's ability to inspire the group, control and initiate a set the pattern of behavior for others is very important for a successful and effective administration for curriculum development and implementation.

***** The principal has the following roles:

- ➤ He ensures that schools, teachers, counselors et cetera are collaborating towards a common goal while improving standards and opportunities. To achieve this, the principal need to set goals, task and purposes depending on the extent to which leadership can satisfy a group need. These needs include psychological and physical needs, which in turn will elicit the type of spirit and commitment desired on a group and necessary for the attainment of organizational goals and objectives (Ndongko, 1989)
- ➤ He is responsible for forming a distinguish team to support the goals and aspirations of student. With the assistance of the Vice Principal (V.P), goals can further be achieved with greater outcome and acceptance. The principal also learns techniques to relate children of all ages, background. Having the capability to relate children is not only essential to administrators, but also vital to the overall success of the school district and standardized testing.

He inspires confidence in the member of staff to do things by themselves. He must call attention to a compliment of the group and assist in building of the staff moral (ethical respect to discipline and confidence).

They promote an atmosphere of informality. Intelligence is not a substitute for friendliness and informality deals with other members of staff. Informal relationship with staff members is very important for effective leadership and teacher collaboration. By showing an interest in hobbies, skills of each staff by inviting them to his home for Social meetings and encouraging the use of first names instead of formal titles. The leader assists to create an atmosphere of friendliness that contributes to smoother human relations in the school.

Building staff morale: The principal is responsible for the building of the staff moral by:

- > By paying attention to the health needs of the teacher
- ➤ Regulating teachers' work load.
- > By recognizing outstanding accomplishments of others.
- ➤ By bargaining from the ministry of Secondary Education and government good working conditions for the teachers.

➤ By showing willingness on solving problems created by the teachers' own mistakes. This can help to build a staff morale of effective implementation of the school curriculum.

Foresightedness: An instructional leader who has no vision of richer and more successful lives for the student he is teaching is not a good leader. The leader who does not see the school as an agency for assisting each other to fullest his capabilities, is an effective leader and therefore not fit for that position. A good leader works and strives for Educational opportunities that student and teachers will exploit. It was for this reason that the special status for teachers granted by the Ministry of National Education of 5th December 2000 makes it clear that before the teacher is appointed as instructional leader, his/her professional profile and qualifications will be taken into consideration. Competence in instructional leaders comes only with courage to face difficult assignments.

The Democratic leaders: The respect for individuals is the essence of democracy. Without respect for individuals, no instructional leader can measure up his responsibilities. Since there are many people who are affected by the curriculum decisions, the Democratic concept of education is that those who will live by decision should have a share in making it (Zeus, 1976).

The leader reflects his respect for personality in his dealings with the students, teachers, parents and other citizens. Intelligence, personal integrity and the ability to build morale and courage are included in the principles of respect for personality.

The principals and supervisors are no longer unapproachable but are working on a level with the teachers to promote the development of children. Organization for cooperative action. Organization for curriculum improvement is a continuous process since it involves changes in behavior of individuals. Any plan of organization must be taken into account, the experience ability of the people to involved and the problems existing in the community.

Therefore; as cited by Saylor and Alexander (1974), a good leader must maintain a comfortable environment, secure Frank and full expressions of ideas, summarize faithful agreements/decisions reached by the group and progressed from time to time, help record keeper maintenance, and adequate notes so as to flow and results of discussion, recognized fully the action of others.

Vice Principal

The vice principal in Secondary schools works very closely with principals in the organization and supervision of the teaching-learning process. In the absence of the principal, the V.P sits in for him to chair meetings with members of staff. His functions can be summarized as follows:

- ➤ Carry out registration of students and participate on the management of model school funds on line with guiding principles put in place.
- ➤ It prepares pedagogic documents such as report cards, mark sheets, master sheets, roll call list, log book, schemes of work forms.
- Participate in technical session to share teaching experience.
- Facilitate technical sessions directly related to model school.
- ➤ Do marketing of schools to recruit students and teachers.
- > Prepare student list.

The Dean of studies

He is directly responsible for academics on schools. However, in some government secondary high schools in Cameroon, there are no Dean. Their function is done by the vice Principal. His functions can be summarized as follows:

- ➤ He develops, administer and promote the academic programs and academic support function of the college.
- Develop recommendation for nominations, retention, promotion tenure, compensation in the various departments.
- ➤ Initiate a dismissal within the college in consultation with the principal and legal counsel.
- ➤ Coordinate and promote academic proposals, changes reviews and other academic matters with other schools, institutions or groups.
- ➤ Develop and Coordinate educational policies, planning functions and physical facilities planning.
- > Supervise the marketing and public relations/ recruitments.

The Discipline Master (D.M)

A discipline master or mistress is a leader of a school discipline team. In Cameroons' secondary schools, we have more than one depending on the population size of the school. He works hand in gloves with the school administrators and teachers in maintaining orderliness in the school thus promoting teaching-learning in a Serene and quiet atmosphere. His functions can be summarized this:

- Assist the school head in making decisions on the staffing of the school discipline team.
- Form a lead in the school discipline team to plan and Develop students discipline work with specific objectives for the school year.
- Monitor the resources allocated to the school discipline work.
- > Implement school discipline policies and school rules.
- Assist other teachers in managing students with behavioral problems, helping them to overcome difficulties.
- ➤ Take the lead in conducting investigations involving students, teachers, parents complain and likewise, the public.
- Assist in running staff development programs to straighten teachers' skills in managing student's behavior.
- > Attend meetings and seminars related to discipline.

The teachers

A teacher is a role model, mediator, mentor, caregiver, motivators and advisers to learners. The teacher does not only help students to learn by imparting knowledge on them and by setting up a situation where student can learn effectively, but is a mediator. That is, he breaks down knowledge do that it can be easily absorbed by learners. A trained Secondary school teacher in Cameroon is a graduate from ENS which are found in Bambili, Yaounde, Maroua, Ebolowa as whereas ENIET/ ENSET for the technical subsection. Teachers are trained on their various core-subject areas are being called upon to instruct and direct learning outcomes in these various areas. It can so be degree or A/L holders. They collaborate by working together with the head of departments and the administration in promoting teaching-learning.

The teacher plays many roles within the school environment rather than just a mere classroom educator. Today, teachers can work across a variety of subjects which they bring your life with the assistance of modern and interactive technologies.

➤ The teacher brings the school curriculum to life. A good teacher can inspire young people to learn no matter their background. Imparting knowledge is inspiring a critical thought or value on learners therefore playing a central

position within the community. A teacher must therefore be passionate and dedicated with a strong desire for lifelong learning in which collaboration is the remedy.

- ➤ Teachers plan, prepare and deliver lessons based on the national curriculum with various guidelines in the different subject areas.
- ➤ Teachers support various leadership teams to implement the school development plan.
- > Teachers assess, evaluate/ test and report behavior of students.
- ➤ Teachers provide educational and social guidance to students and ensure the highest standards of quality while applying the most up to date teaching method.
- Take part in continuous professional development (CPD).
- Attend and take part in staff meetings. In such meetings, issues on school administration are discussed or it can be a class council where decisions are taken concerning the student's evaluation progress and success.
- ➤ Teachers collaborate with parents, careers, guidance support workers and other professionals to safeguard and ensure the educational welfare of stagnated students who may have special need problems.
- Teachers also collaborate among colleagues to promote teaching- learning. The effectiveness of a teacher will depend on the teacher personal motivation, leadership skills and coaching.

Head of department

In Cameroons' secondary schools, the head of department is selected or proposed by the principal based on longevity, assiduity and hard work. In government Secondary schools like G.B.H.S Mendong, the principal proposes the various heads and forward their names to the Ministry of Secondary Education for appointments. They have the following responsibilities:

- ➤ Regulate teaching activities at the departmental levels to ensure that the curriculum or content is well executed.
- ➤ He organizes and chair departmental meetings. Here, issues and challenges affecting the department are discussed amongst teachers.

- ➤ At departmental meetings, teachers are acquainted to their colleagues and discuss ways on improving on the subject matter.
- ➤ The head of department (H.O.D), works at the needs of the department like didactics materials and writes a report to the administration.
- ➤ He organizes extra- curricular activities amongst the teachers where they get to know about their private life, families, homes etc. With this, members of the department become one another's keeper in sickness, share happy and sad moments likewise, the school in general.
- ➤ He updates teachers on new teaching methods, lesson planning and design, available seminars, learning opportunities and encourages Teachers to participate.

The Parents

The parent - teacher association is a medium for Teachers to collaborate with the parents in enhancing teaching and learning. Here, teachers come to understand the psychosocial background of the learners and can better tailor their learning needs in the classroom.

Education takes place not only in school but also within families, Communities and the society as a whole. Despite the various degree of responsibility taken by each group, none can be some agent to take full responsibility for their children's education so long as children interact with the learning world outside their families (Begin and Gallagher, 2001). PTA is a representative of a large community.

With the new information and communication technologies, teachers' communication with parents has become more effective as students follow up can be reported to the parents on WhatsApp chat groups.

The teacher efficacy

The term efficacy has been extensively discussed and debated for many years due to its multiple interpretations, resulting in a range of theorization and conceptualization.

The theoretical foundation of self-efficacy is found in social cognitive theory, developed by former APA president (1974) and current Stanford professor Albert Bandura (1977, 1997). Social cognitive theory assumes that people are capable of human agency, or intentional pursuit of courses of action, and that such agency operates in a process called triadic reciprocal causation. Reciprocal causation is a multi-directional model suggesting

that our agency results in future behavior as a function of three interrelated forces: environmental influences, our behavior, and internal personal factors such as cognitive, affective, and biological processes.

This trinity mutually impacts its members, determines what we come to believe about ourselves, and affects the choices we make and actions we take. We are not products of our environment. We are not products of our biology. Instead, we are products of the dynamic interplay between the external, the internal, and our current and past behavior. In reaction to more reductionist theories, Bandura noted: "Dualistic doctrines that regard mind and body as separate entities do not provide much enlightenment on the nature of the disembodied mental state or on how an immaterial mind and bodily events act on each other" (1986, p. 17) Central to Bandura's (1997) framework is his concept of self-efficacy. Bandura's aspirations about self-efficacy were grand, as reflected in the title of his 1977 article "Self-Efficacy: Toward a Unifying Theory of Behavioral Change." In this seminal work, Bandura defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Self-efficacy beliefs were characterized as the major mediators for our behavior, and importantly, behavioral change. Over the last quarter century, Bandura's other works continued to develop and defend the idea that our beliefs in our abilities powerfully affect our behavior, motivation, and ultimately our success or failure (cf. Bandura, 1982, 1986, 1993, 1996, 1997).

Bandura (1997) proposed that because self-efficacy beliefs were explicitly self-referent in nature and directed toward perceived abilities given specific tasks, they were powerful predictors of behavior. The research literature has supported this proposition. Research has linked efficacy to a variety of clinical issues such as phobias (Bandura, 1983). Teacher efficacy research is roughly a quarter of a century old now. Early work suggested powerful effects from the simple idea that a teacher's beliefs in his or her ability to positively impact student learning are critical in actual success for failure in a teacher's behavior. These beliefs, called teacher self-efficacy, can be explained in Bandura's (1977) social cognitive theory, which emphasizes human agency within a multi-directional model that influences our thoughts and behaviors.

The study of teacher efficacy has suffered from poor construct validity issues. Relatedly, it has also suffered from foreclosure on instrument development before sufficient validation of scores across studies was evidenced. Recently however, there have

been several important advances in the field on both substantive and measurement grounds. The teacher efficacy construct has undergone serious scrutiny and new theoretical models have emerged. Several promising models have been developed. Among other issues, the advancement of teacher efficacy into the next stage of its developmental life would be fostered by empirical evaluation of the sources of efficacy building information, collective teacher efficacy, and methods for impacting efficacy change in teachers.

Additionally, utilization of stronger measurement methodologies, including appropriate factor retention rules, confirmatory approaches, and higher-order analyses, would likely facilitate stronger instruments that yield more reliable and valid scores. Given recent substantive theoretical advances and new, better founded, attempts at measuring this elusive construct, it seems apparent that teacher efficacy is ready to move beyond the adolescent against it has been submitted to over the last few years. Assuming continued efforts are made to seek congruence between theory and measurement integrity, study of teacher efficacy just may be ready for a move into adulthood

As a balance model, the teacher Efficacy might serve as a bridge between professional development and school reform research and theory, where both fields mostly study teachers' change in a separate tradition.

Despite all these review, this study is conducted in Yaounde in two selected schools and the result obtain in this study might not be the same for another school conducted out of Yaounde or within Yaounde in different schools.

1.4. The theoretical background of the study

Participation in collaborative sessions allow teachers to build on their prior knowledge in social context, allowing them to develop as educators. This also cannot be without control where teachers as seen as leaders together with Principal leadership and other member of the hierarchy. This forms a group thus employing the Group Dynamics theory of Kunt Lewin.

Besides, efficacy can be better explained depending on an individual state of motivation. Albert Bandura self-efficacy theory has been used to better understand this study.

1.5. The problem statement

School failure has always been and is still a reality in schools. The causes of school failure ranges from individual factors like child and family factors, absenteeism, cognitive as well as school/resource factors as well as teachers' factors. Therefore, for teachers to

continue teaching, they must continuously acquire new knowledge and improve on their pedagogic practices. In our secondary schools, teachers can expand their capacity to learn by adopting collaborative approach to life. This involves nurtu ring their curiosity and allowing themselves to explore new ideas, skills and people. They are to manage their emotions and beliefs by increasing their awareness on how their emotions and beliefs drive their thinking, influence their behavior and affect their judgment to navigate life with greater confidence. Teachers with high efficacy deliberate and act. This is by setting their plans and acting without over contemplating. They recognize their inner emotions and thoughts name them and let them pass through. This is practice through self-control.

They also recognize the value of giving learners the opportunities to construct knowledge and discover an important truth built on their prior knowledge and their own search for information and relationship.

They want to master their craft by working in teams where they share data, skills, observe each other classes and act as critical friends or effectively used of classroom critiques.

They ask questions and listen to experts.

They manage their emotions and beliefs by increasing their awareness on how emotions and beliefs drive their thinking, influence behavior and effect their judgement to navigate life with greater confidence.

They are assiduous teachers who come to school on time, except otherwise, they teach effectively to cover their periods/syllabus and if missed out, they call for extra classes and are able to transform learners. They belief in their capacity to organize and execute courses of actions required to successfully accomplish a specific task in a particular context. They belief in their abilities and the abilities of their students also impact their performance.

Unfortunately, this is not the case in our Secondary schools. Most teachers lack agentic behavior. Their efficacy is constantly dropping as the days goes by. They work in isolation without any team spirit for fear of being noticed. They don't cover their teaching periods talk less of attaining their teaching objectives. Some don't even respect school programs like the competency-based approach, the project based and E-learning programs. Within and without. With the constant threat of covid 19 and the new innovation by the secondary Education Ministry like the competency based and E-learning programs, most teachers are complete illiterates on the use of information and communication technologies.

As a result of this, students in some subject area have to work extra hard to cover their school content so as to face certificate exams resulting to some of the poor performances especially in certificate examinations. General performance in certificates examinations has always circulated around a fair percentage of 40-60%.

In 2021, GBHS Mendong registered 67.93% in the advance level and 63.66% in the ordinary level. At the same time, the performances of their francophone counterpart in BAC General from 2019-2021 were 60.18%, 47.22% and 56.40% respectively. At the same time, GBHS Mbalngong registered the following results from 2020-2021 in Ordinary level-75.92%, 75.26% respectively.

The results of successful candidates continue to circulate from 40-70% for the past years. This shows that the rate of school failure among candidates is still above 30%. The actual blame is not on teachers but they can still work together to improve on their efficacy which will equally affect the students. As reiterated by Minkolo in 2021 after the release of end of course examination results, 'the BAC results were a reflection of students, the quality of teachers and the system of evaluation '. Thus the quality of teachers can affect students learning".

This study is therefore to see how effective implementation of teacher professional collaboration in our Cameroons Secondary schools can built up this aspect of the teacher efficacy for better learning and student performance. This can be by creating learning networks for teachers, structure online time for Co-planning lessons, discussion board for monitoring students' progress, creation of formative bank for online assessment, supporting teachers so that they can work with each other, track students learning and plan their teaching time efficiently to address this new challenge.

1.6. The study objectives

The General objective

To investigate the extent to which teachers collaborate to improve their classroom practices in Government Secondary Schools in Yaoundé.

Specific objectives

- 1) To accessed the effect of self and external motivation on the teacher collaboration and efficacy
- 2) To examine the effects of teacher leadership on the teachers collaboration and efficacy
- 3) To evaluate the influence of resources on the teachers' efficacy in some government Secondary Schools in Yaoundé.

4) To examine the influence of government policies on the teachers' collaboration and efficacy in some government Secondary Schools in Yaoundé.

1.7. Research questions

General question

How does teacher professional collaboration enhance the teacher efficacy?

Specific questions:

- 1) How does motivation affects teacher's interaction with colleagues?
- 2) What are the resources put in place in our secondary schools to enhance the teachers' efficacy in Government Secondary Schools?
- 3) How can teacher leadership enhance the teacher efficacy in our Government secondary schools?
- 4) How can government policies helps to build on the teachers' efficacy in government secondary schools?

1.8. Research hypothesis

General hypothesis

Ha: There is a significant relationship between teacher professional collaboration and the teacher efficacy in some Government Secondary Schools in Yaoundé

Ho: There is no relationship between teacher collaboration and the teacher efficacy in some Secondary schools in Yaoundé.

Specific hypotheses

- 1. There is a significant relationship between motivation to professional collaboration and the teachers' efficacy in government secondary schools in Yaoundé
- 2. There is a significance relationship between available resources put at teachers' disposal for professional collaboration and the teachers' efficacy in Government secondary schools in Yaoundé.
- 3. There is a relationship between teacher professional leadership and the teacher efficacy in Government secondary schools in Yaoundé.
- 4. There is a relationship between Government policies which promotes teacher professional collaboration and the teacher efficacy in Government Secondary Schools in Yaoundé.

1.9. Scope of the study

Geographical delimitation

The research work titled: "Teacher professional collaboration and the teacher efficacy" is limited to government Secondary schools in Yaoundé. This spatial limitation is mainly to reduce cost and for easy proximity for the researcher, since it will be very costly doing research out of Yaoundé. This is also to enable the researcher carries out an in-depth study which results can be easily generalized to all secondary schools. Effectiveness here is the extent to which collaboration is practiced and how it has helped to build the teacher efficacy.

1.10. Justification of the study

The research is to be conducted in response to the concerns that have been principally motivated by the low level of teacher collaboration in our secondary schools and the inability of teachers to plan and enact meaningful change in education, direct and regulate their actions within the educational context. The General cry is seen in the falling standards of education which most at times is blamed on the students whereas the teacher's lack of agentic behavior is a contributive factor. This is clearly seen especially in government Secondary schools where most of the teachers are there as a secondary option and not as what they actually wanted as a job. Some use teaching as a gateway to obtain a government registration number where they can raise capital for their businesses and some even travel abroad. There is a lot of ineffectiveness registered by teachers in government Secondary Schools.

Hence, special attention and emphasis should be given to teacher collaborative activities in schools and the government should direct more resources towards this direction. This will help to build the teacher efficacy with an inverse effect on teaching and learning. It will also further affect motivation- both intrinsic and extrinsic, improvement in sharing of ideas on teaching while building new ones with the ultimate goal towards learning improvement.

All research must have a sound basis upon which key facts and ideas are drawn. To carry out this research, a lot of information regarding thus the general applicability of collaboration or professional learning programs has been used. This is to enhance the reliability of the final research findings and also to serve as an indication of authenticity of the finding so that they can be acceptable. Besides, the thorough and extensive review of

literature on this research topic will enable researchers to narrow down its scope and become more specific by adopting specific research questions to concentrate on and enhance the process of formulating appropriate hypothesis for research. More has been done and resources put in place in Schools to enhance teacher collaboration, but there is need for intensification towards building the teachers' efficacy. Besides, modern professional learning Communities should be created in secondary schools and more open doors to fellowship programs/fellowship /exchange programs made available to teachers. This will not only build their efficacy but the teaching-learning transaction.

1.11. Significance of the study

Research in professionalism has taken the central stage in Education. However, much information is based on attending seminars, formal schooling etc. Internal professionalism which is mostly centered on teacher collaboration is often given less importance and at times, often mentioned just as an organ of professional development. Taking into consideration that effective teacher collaboration through group discussion, teacher correspondence with parents, departmental meetings, sharing expertise knowledge is more important in building workable skills in a teacher and why not his/her agency. This research piece is of great significance first to the teachers not only in Mbalgong/Mendong but teachers at large, the learners, administrators and, or the educational stakeholders.

To the teachers:

A teacher can generally be defined as a person who instruct and facilitate learning. However, there are good and bad teachers. A teacher interplays between knowledge and content, pedagogy and their position towards teaching. He shares personal enthusiasm for the content and learning while engaging all learners in content to. He also uses a host of pedagogically best practices. Collaborating with colleagues, commutating with colleagues, caring for students. All these attributes make the teacher to privatize his agency this reducing burn out or job frustration while enjoying the job. This study is therefore out to encourage the teacher to continue to improve on his practices as mentioned above especially through collaboration while enjoying the job as a vocation. This will also reduce the number of employees leaving the teaching profession to travel abroad mainly not due to low pay package but because they regard teaching as a boring activity for frustrated people. Building their agency will help teachers not only to think decisively but also to contribute to educational reforms.

It will also help in the school milieu especially collaboration to build a collegial community. Collaboration can allow educators to address programs, policies and practices in their environment. This will enable teachers to promote social change as they work in groups. There has been a tradition of teachers working on isolation behind classroom doors, creating a feeling of isolation with all the stress and requirements. Creating collaborative Communities within the school will allow teachers to discuss values, beliefs, experiences as well as their frustration and feeling of being overwhelmed. This will allow a more collegial atmosphere to develop within the school. This will also create a commitment to their personal developmental (Dufour et al, 2006).

Collaboration allows teachers to confront positive energy (Howe, 2007, William, 2006), strengthen and filters through the school, creating a positive culture for the school, educators and students. Gregory and Kazmich (2007), stated that there are several benefits of participating in a highly professional learning Community. These benefits include reduction in isolation, commitment to making significant changes. All these benefits result in a higher efficacy among teachers, increase student achievements and most importantly, improve the teachers.

The administrators

In Cameroons' secondary schools, administrators are principals, Dean of studies, discipline masters, Vice principals etc. The research will enable them to provide a conducive atmosphere in schools for teachers to collaborate. Researches have shown that some administrators instead tend to kill the spirit of collaboration through their attitudes and policies. There can create T-groups, internal pedagogic seminars, provide equipment like computers, internet, good staff rooms, fellowship and exchange programs.

To policy makers

This research is very important to policy makers as it will take into consideration colla**bor**ation in making school policies.

To researchers

The work will add to the already existing literature review in education making it available for used by policy makers, future researchers and educational stakeholders as a whole.

1.12. Definition of terms

The following are the key terms and their meaning as related to this study.

Teacher Efficacy

It is the teacher judgement of his or her capabilities to bring about desire outcomes of students' engagement and learning, even amongst those students who may be difficult and unmotivated (Bandura, 1977). It is linked to their enthusiasm, commitment to bring about change, motivation, etc.

Professional Collaboration

Working together to achieve common goals with the purpose of all participants learning (Dugout, 2010).

Collegial

The extents to which teachers and principals share common work values, engage in specific conversations about their work, and help each other engage in the work of the school. (Sergiovanni, 2005, page 12)

Professional learning Community

A group of people working interdependently towards the same goal (Dugout, 2010)

Teacher agency

It refers to a time flow and/or continuous process of development of individual's practices and act (Giddens 1984). It can also be defined as a dynamic competence of individual to act independently and to make their own actions and decisions. (Barkar 2005)

Professional development

Learning to earn or maintain professional credentials such as academic degrees to formal course work, attending conferences, informal learning opportunities situated in practice. It has been described as intensive and collaborative, ideally incorporating an evaluative stage.

Teaching-learning transaction

It is an act of stimulating learners to attend, observe, associate, remember and use their mental faculties or cognitive abilities to attend to a learning stimulus (Nsamenang, 2004).

CONCLUSION

This chapter has dwell on the generalities of the study like the background to the study, justification, objectives, hypotheses, significance of the study, theoretical background to the study, etc. These aspects will be further elaborated in chapter two. The chapter ends with a work plan which summarizes all the elements in this master piece.

CHAPTER TWO: LITERATURE REVIEW AND THE THEORITICAL FRAMEWORK

2.0. Introduction

This chapter of the work consists of the literature review. Related concepts will first be reviewed, followed by the theoretical framework. Here, related theories will be reviewed together with their contribution to the research topic. This chapter ends with the empirical study which is other research works related to this topic. Also here, the research gap will be examined.

2.1. Conceptual framework

2.1.1. Teacher professional collaboration

According to Davis L, (2020). It is when members of a learning community work together to increase student learning and achievement. The ultimate destination of educators is the student achievements; thus, teacher collaboration is a journey. It is not a task to complete, then move on, it is ever changing or ongoing process enhanced by both social network and technology. According to Sawyer (2005), collaboration is different from cooperation. Collaboration involves partners in the process of doing work together as opposed to cooperation in which partners split the work and combines each of the partial results into final outcomes (Vangrieken et al., 2015). Other terms for collaboration are professional learning communities, teachers' teams.

Professional development and teachers' professional collaboration.

Professional collaboration is a form of professional development. Professional development which is defined as a set of tools, resources and training sessions for educators to improve their Teaching quality and effectiveness is more general. Some of its activities involve continuing education, research and improvement on job performance. Professional collaboration in which this study is focused on is more improve job performance. It focuses on:

- ➤ Keeping up with technology, system processes
- Learning about new development in your field
- ➤ Improving existing skills and taking up new challenges in current position, long or short project Skill based training allows participants to learn conceptual information or necessary behavior, receiving feedbacks on their

performance, learning by doing, discussions with supervisors, working on real problems and Selina's, learning through interaction with others. This is by assessment, challenges, support from counselors, cheerleaders etc.

According to Scheiff (2018), professional development is associated with online workshops, seminars, lectures while professional collaboration also known as professional learning, if well designed is interactive and encourages teachers to take responsibility for their own learning and practice what they are learning. Engatou (2017), compares professional development to off-job training while professional collaboration is compared to on-job training. The details are analyses on the table 4 below:

Table 2: The differences between on-job training (PL) and off-job training (PD)

	PL or on-job training	PD or off- job training
Meaning	A form of training at the work	Job location
	place during performance of	
	actual job	
Approach	Practical	Theoretical
Active	Yes. Because it is done while	No. Because is done without a job
participation	working	to practice knowledge
Location	At the work place	Out of work place
Principle	Learning by performing	Learning by acquiring knowledge
Work disruption	No. Because training produce	Yes. Because is first provided a d
	the product during learning	later follow by performance
Conducted by	Experienced employees	Professionals or experts
Cost	Inexpensive	Expensive

Source: Surbhi (2015) in Engatou (2017), key differences between PL and PD.

2.1.2. Types of teacher professional collaboration

A study carried by PISA talks of the structural characteristics of collaboration. Frirnds and Cook (1992) listed six defining features of collaboration: it is voluntary, require parity among participants, it is based on mutual goal, depend on shared responsibility for participation and decision making, individuals share their resources, accountability and outcome.

Little (1990) identify four types of collaborative elements, including storytelling, scanning for ideas, and joint work.

The Leibniz institute for education of Natural Sciences and Mathematics (IPN) constructed three different forms of collaboration from the questionnaires for teachers used in PISA 2012 namely:

Instructional related (IRC)

It involves elements related to the preparation and development of didactic skills. This form is measure with questions and works together for the preparation of individual and follow up lessons.

Project related (PRC)

Which include aspects related to planning of lesson as well as the preparation of written exams and joint planning and implementation of lessons which encompasses peer observation as well?

Organizational performance and problem related (ORC)

Covering aspects such as strategies to help students based on academic performance within and across subjects as well as strategies to dealing with as well as strategies to dealing with homework. (Frey and al., 2009).

2.1.3. Forms of teacher professional collaborative teachinglearning in Cameroons' secondary schools.

Collaborative teaching, sometimes called cooperative teaching or team teaching involves working in teams to lead, instruct and mentor groups of students. It can be implemented across instructional levels and subject areas. It capitalizes on one another's resources and skills. Collaborative teaching can take the form of:

Parallel teaching

It is a teaching method where two teachers use their individual strength and teaching styles to jointly plan a lesson, then divide the class into halves and each teacher teaches the same lesson to two groups at the same time. Parallel teaching allows for students with disabled or learning needs to receive higher level of support within group setting with decrease level of stigma that sometimes is associated with individual support. Some authorities such as (Eze, 2000), Gbodi and Laleye (2001), and Obayan (2006) believe that knowledge is gender related. Ndagana and Onifade (2000) consider no method of being the best in teaching situation. However, they added that a carefully designed teaching

method can make learning effective. They said «the success in the use of the method depends on an intelligent analysis of the educational purpose, the learners in the classroom, the curriculum Content and the type of subject matter being taught.

Team teaching

It is a simple team work between two or more qualified instructors who together make presentation to an audience (Quim and Kanter, 1984). They plan, organizes, instruct and make assessments on the group of students, sharing the same classroom. In team teaching, every teacher involved is connected to another teaching the same subject. They share work load and subject splitting can be by topics or chapters. There are two types of team teaching:

Hierarchical team teaching

Here, we have a team leader at the Apex who is well skilled and below are regular teachers.

Synergic team teaching:

It is formed by a cooperation of two or more teachers working together as professional equals

Departmental learning:

It is a forum to exchange ideas on the evolution and teaching of subject content or curriculum. It is a good practice to be adopted by all schools.

Teachers' collegial relationship:

Collegiality can be understood as positive interpersonal relationship amongst teachers and a sign of an environment conducive to collaboration. Tanzobkowski (2002). Interpersonal relationship includes mutual support, trust and solidarity, are essential building blocks of a collaborative school culture, that is, in turn, integral to effective collaborative (Hargreaves and Fullab, 2012).

Interschool visits (Exchange mobility programs):

School can plan and make exchange visits in the bid to share pedagogic experiences, ideas and for social solidarity.

School pedagogic seminars

This can be organized at subject levels to exchange ideas on current pedagogic methods and procedures, challenges in its implementation etc. Joint evaluation setting and revision for end of course examination like the GCE.

E-learning- teaching programs:

Here, teachers learn how to use the computer in teaching, preparing and delivering notes like slates for projections, revision, etc.

2.1.4. Benefits and Barriers to teacher Professional Collaboration

Elliott (2005) states that there are many benefits to working in collaborative teams. These benefits include that the practice of collaboration is job-embedded, teachers share knowledge and expertise, teachers feel empowered to strengthen their practices, teachers can address challenging issues, student achievement is affected, teachers look for biases in their practice, and explore how all students are learning. According to Inger (1993), there are several benefits for teachers who participate in collaborative sessions. These benefits include the construction of new knowledge, preparation to assist each other, reduction of planning time, increase in a pool of shared resources, more open to change, and teachers willing to assist new teachers.

Williams (2006) adds another four benefits to collaboration: buy-in, synergy, team accomplishments, and security/satisfaction. Pugach and Johnson (1995) state that collaboration was finally being recognized for its importance in improving the educational process and achievement of teachers and students. Teachers are being asked to open their classroom doors, step into a conference room and share their wealth of information, experiences, and knowledge. These authors state that there are five reasons for teachers to collaborate which include support in demanding times, creating plans for exceptional students, implementation of new strategies, collaboration of the general education teacher and special educator to benefit the exceptional student, and the sharing of new knowledge (p. 11). The collaborative process will ease stress and create an environment more conducive to learning.

Teachers will also be more inclined to try new strategies when they have support from other teachers. Martin-Kniep (2008) puts forth three arguments for the creation of collaborative communities. These include the benefit to students because teachers learning will be increased. There is a benefit to teachers in that they will learn from each other and

share their experiences and knowledge. The third benefit is to the school itself. The school receives teachers with a positive attitude who are committed to the school. These positive teachers are more apt to sustain the necessary changes that the collaborative community has made. This author feels that professional learning communities are necessary if schools are to improve. Troen and Boles (2010) posit that schools can expect a variety of benefits to teachers when they work together including the decline is isolationism, increase in morale, and sharing of their shared strengths. It is now being proposed that collaboration is a way to increase professional development of teachers with the offshoot of increase in student achievement.

2.1.5. Impact of teacher professional Collaboration on classroom processes

Classroom processes here refers to all teacher practices in the classroom that may lead to sustaining or improving students' learning. Over the past decade, research has consistently shown that the variance in pupil outcomes is greater at the classroom level than at the school level and that much of the classroom-level variance can be explained by what teachers do in the classroom (Muijs et al., 2014). Based on a recent literature review Viac and Fraser, (2020), the classroom processes that matter the most for students' learning are

- i) Students' active engagement with teachers
- ii) The reinforcement of content and feedback;
- iii) The classroom climate: and
- iv) Teacher co-operation. TP C can help them acquire the knowledge, skills, and practices necessary to put these four classroom processes into practice.

Evidence from TALIS 2018 suggests that teachers who participated in impactful professional development are more confident in their teaching ability. Teachers who received training focused on teaching in diverse classrooms also report higher levels of self-efficacy in teaching in diverse environments. In addition, teachers participating in training focusing on the implementation of pedagogical practices tend to report a more frequent implementation of effective practices (OECD, 2019).

Since the effects of TPC have been shown to be mediated by the school environment as well as teachers' prior knowledge and beliefs, it will be important to consider these contextual school and teacher characteristics Opfer, (2016); Richardson, (2003), Fishman et al. (2003).

TPC impact on students' well-being

Students' well-being here refers collectively to the desirable outcomes of instruction for student's – following the OECD Teacher Well-being for Quality Teaching Project. This includes students' academic performance but also their motivation, confidence and life satisfaction. Building strong and supportive relationships with their teachers allows students to feel safer in the school setting, feel more competent, form more positive teacher collaborative learning on student achievement. Student achievement is affected by a great variety of factors, many of which are beyond the control of teachers (e.g. students' socio-economic status and access to support at home).

As described above, insofar as teachers do have a profound impact on student achievement, it operates primarily through their ability to improve classroom processes and students' well-being. This ability of teachers, in turn, can be enhanced through TPC. The impact of TPC on student achievement is therefore not direct, but rather the product of a variety of mediated effects with different underlying mechanisms. Nevertheless, student achievement has been the primary and often the only outcome considered in empirical studies of TPC effectiveness. The TPL study seeks to widen this perspective by explicitly acknowledging the complexity of this relationship and contextualizing student achievement within a structure of related (and potentially independently desirable) TPL outcomes that tend to receive less attention.

Other outcomes

TPC impact on teachers' well-being and retention in teaching, as in any other professional domain, opportunities for training and learning are an important part of what makes a job fulfilling and satisfying. The OECD's Guidelines for Measuring the Quality of the Working Environment, for example, consider on-the-job training as one of the major job resources, alongside work autonomy, perceived opportunity for career advancement, and intrinsic rewards. These resources contribute to the quality of the working environment by helping employees to balance their professional demands and thereby avoid job strain (OECD, 2017). Evidence from TALIS 2018 and previous OECD research confirm that teachers' participation in impactful professional development is associated with an improved sense of confidence and job satisfaction (OECD, 2016); OECD, 2014; OECD, 2019). This may increase teachers' motivation to invest in their long-term professional growth and their willingness to engage in additional CPL, thereby creating a

virtuous circle of improvement (Viac and Fraser, 2020). Teachers' well-being also has a range of desirable corollaries related to their capacity to engage in high-quality teaching and willingness to stay in the profession. Excessive teacher turnover can be profoundly disruptive and impairs student learning, especially in schools serving disadvantaged communities (Ronfeldt et al., 2013). High-quality induction programs have been shown to reduce dropout rates among early career teachers (OECD, 2019). By extension, CPL may help to motivate and retain effective teachers throughout their career by boosting their efficacy and job satisfaction.

TPC impact on employee mobility and skills obsolescence

Within the wider economy, training and learning opportunities for adults (both on and off the job) are crucial to prevent skill obsolescence, to increase employees' professional upwards-mobility and to reduce their risk of unemployment (OECD, 2017).

CONTINUING PROFESSION LEARNING ĵį. ĵĵ Motivation Provision Quality Content Access Teachers' well-being Quality teaching Motivation to stay in Classroom processes teaching Student learning Prevention of stress and Student well-being A burn-out Teacher and school characteristics

Figure 2 : Outcome of continuing professional learning

Source: Adapted from Viac; P. Fraser (2020)

The role of technology in teacher Professional collaboration

Data has proven that professional learning communities and networks are extremely effective methods of teacher collaboration with a lot of influence on student engagement.

Actively participating in a professional learning on a social network gives you direct access to knowledge, experience and resources of countless educators who you may have never connected with in your immediate professional circle. We have media platforms like twitter, WhatsApp, Facebook, etc. Also, built in capacities can be offer by school management systems. Teachers can connect with colleagues and share ideas in an online network tailored to by our school.

Lessons plans, instructional content, data analyses can be recorded in the learning management system and shared to colleague. Video technology can also be used in professional development and coaching in collaborative meetings which can be online. Other can include Google hangout or Zoom.

2.1.6. Challenges to teacher professional collaboration

In order for teachers to collaborate effectively, teachers must want to participate rather than feel like to. According to Elliott (2005), the challenges or barriers include time, administrative support, and translating research into practice, developing practices, identifying negativism, and stopping patterns of non-productivity. A collegial and trusting atmosphere allows teachers to share their experiences, stories and knowledge so everyone can have the opportunity to learn from each other.

Guidelines need to be set at the start of the process so that all members know what is expected and required of them. These guidelines include that members will attend the meetings, pay attention to each other without interruption, speak and relate stories only relating to themselves, place no blame or judgment on others, be open to comments and interpretations from other members, and remember that the proceedings are confidential. DuFour et al. (2006a) state that barriers need to be eliminated for collaboration to be successful. These barriers include the type of conversations that need to be held. These conversations need to go beyond the things that need to be taught.

Teachers must stop making excuses as to why they are not collaborating. Staff members must be determined to build a collaborative environment. These authors also give ideas for creating time to collaborating which include common planning, parallel scheduling, adjusted start and end of day, shared classes, group events, banking time and in-service/faculty meeting time and in-service/faculty meeting time. Conzemius and O'Neill (2002) stated that without collaboration there will not be improvement. They continue to state that everyone needs to participate and share their skills, knowledge and experience.

When teachers are taught the skills to collaborate, they are more apt to have clear goals for the group. Even though it is a group working together, the members should not give up their identity and the uniqueness and diversity they each bring to the team. Each member of the team must be committed to developing skills and increasing expertise, have self-awareness, willingness to share experiences, and be willing to work as a team member. Conzemius and O'Neill (2002) also report that there are several barriers to the collaborative process.

Some of these barriers are not in the control of teachers and need to be considered when organizing collaborative teams and sessions. There barriers include the organizational structure of the school, such as departments and grade levels. Other barriers include how the school day is scheduled, the segmented school year, teachers recognized as individuals and space limitations. Other less obvious barriers include attitude, team working skills, policies that recognize my individual and lack of team structure.

The most often mentioned barrier is time (Conzemius & O'Neill). This type of work is considered so time consuming because teachers regard it as something extra, they need to do and not as a way to share the work and improve the results. Team members often feel that they have to accomplish a certain amount of work in a certain time frame, instead of looking at how much they can get done in the allotted time frame. It takes time to learn a new skill or technique, such as collaboration and teamwork, to the satisfaction of all team members.

According to Troen and Boles (2010) there are several common pitfalls to collaboration and common planning. These include the lack of skills needed to utilize the collaborative time effectively, being reluctant to ask for help, lack of leadership, being off task, no clear purpose, a lack of vision of effective collaboration, and building collegial interactions with lack of academic content being discussed during the sessions. This study implements the following practices: utilizing instructional talk, connecting instructional to the classroom, opportunities to implement new ideas and practices, and developing consistent practices across the collaborative team

Teacher autonomy:

There is often a contradiction as far as autonomy is concerned. On one hand, scholars believed that teacher autonomy as an active and independent study strategy can increase the chances of teacher collaboration outside the school (Little, 1990). From his

perspective, teachers are acting as autonomous isolates, being independent with regards to teaching curriculum development, school functioning, professional development and school change, being immutable to external influences. This negative attitude towards collaboration based on individual understanding of autonomy is often adapted and propagated by teachers who regard teacher collaboration as a threat to their freedom (Vangrieken et al., 2015).

On the other hand, in the 1990, scholars argue that teacher's autonomy is an active and independent study strategy that can instead increase the chance of autonomous motivation. Furthermore, it is shown that autonomous motivation often leads to meaningful collegial contact. Scribner et al. (2002) demonstrate that professional autonomy does not mean that the teachers define their practice in isolation. From the above perspective, some scholars understand autonomy as isolation while others see it as a perquisite to collaboration.

2.1.7. Factors favoring teacher collaboration in schools

Communication and the teacher efficacy

Motivation and teacher collaboration

Motivation is that driving force that pushes a person to work towards a particular goal. According to (Drossel and al., 2018), it is both a personal attribute and a team factor. In other words, it is both intrinsic and extrinsic.

Intrinsic motivation: It is influence by personal attributes such as age, gender and experience in the school milieu. Older teachers tend to collaborate than younger or newly recruited teachers. On the gender aspect, female teachers are more likely to collaborate than male colleagues and experience teachers collaborate than novice teacher.

Also, teachers with a strong sense of efficacy who believe in their capabilities to achieve goals are more likely to engage in structured collaboration and improvement strategies. (Runhaar et al., 2010). Teachers' self-efficacy is further related to extra role behavior like voluntary support to team and or school goals (Somech and Drach_Zahavy, 2000).

In Cameroons context, personal motivation especially for government teachers depends on their prefixed goals of joining the public service. Some come in just as a last resort since they needed a job and so this has greatly affected their level of motivation. Extrinsic or external factors to motivation are mostly like team work, resources etc.

Leadership practices and Teacher professional collaboration

Collaborative practices are usually associated with leadership practices. It is believed that strong engagement of departmental heads increases the chances of teacher collaboration. Collective efficacy serves as an intervening variable for student achievement. A Research carried out by Honingh and Hooge, (2014) shows that a good school leader who is open and involves teachers in decision making will support a collaborative spirit in school besides building up personal leadership skills in teachers to take and making favorable decisions to support students learning. In other words, it is known as a collegial leadership style focused on empowering the staff (Dove et al., 2014)

Resources and teacher collaboration

Resources are also referred to work conditions and supporting tools put at the disposal of teachers to ease teaching and learning. Teachers' collaboration through online tools has proven to be relevant teaching method in teacher education programs. As such, there is empirical evidence that team based learning for in service teachers reinforces teacher motivation to collaborate with other teachers and to offer students stimulating learning opportunities. English and Duncan Howell (2008) argued that media tools such as Facebook help to create supportive learning environment for pre service teachers.

Hew and Hara (2007) found four motivations sharing information in teachers' online groups which are collectivism, improving the welfare of the members, reciprocity, sharing new knowledge and empathy for other teachers.

Policies/development programs and teacher collaboration

Although policy makers and administrators have increasingly used provisions with the aim of fostering teacher collaboration, there is still a lack of studies to systematically analyze the impact of initiative and policy frameworks on teacher collaboration.

Schools can influence collaboration through drawing of quantitative and qualitative data, finding best policies that have effects on structures, access to expertise who can afford well routine and level of trust in teachers as well as team spirit practices. These structures will also support common planning time and smaller number of students to teach. The more teachers meet, the more they are motivated and committed to team mission and success of the team in achieving its goals (Somech, 2005). School networks can also seek ways to organize exchange visits or learning communities with other schools.

2.1.8. The teacher efficacy.

The term efficacy has been extensively discussed and debated for many years due to its multiple interpretations, resulting in a range of theorization and conceptualization. Agentic learners need agentic teachers who can respond, stimulate and challenged (Mark Priestley et al, 2015). It is often referred to as the teacher's ability to make informed classroom and professional development decisions based on classroom needs, reflections and consideration. Teaching efficacy is the teacher belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context. While teachers' ability to teach influence their performance, their belief about themselves and their students also influence students' performance despite obstacles such as student background and ability (Ashton and Webb, 1986) It is also referred to the teacher willingness and ability to take action and make changes. There are three reasons that can be identified for the focus on the teacher efficacy:

- 1. There is awareness of active and agentic role of a teacher as a change agent on professional development, school reforms and school improvement.
- 2. The specific problem of sustained change in professional and school development urges for illumination of agentic role of the teachers in professional and school reforms, as well as agentic actions is related to important topics like professional Identity and change capacity of schools (Etelapelto et Al, 2015), Priest et al, 2012).
- 3. Finally, there is growing attention for the role of teachers' work environment in professional development and school reforms (Hoekdtra, Kothagen, Brekelmans, Beijanrd and Imants, 2009)

Teacher learning for professional and school development is embedded within teachers' daily work environments. For this reason, recently developed insights in the role of agency in work environment can help to understand processes and outcomes of professional growth and development as well as school reforms (Billet, 2008, Evans, 2017).

Efficacy as an individual/ collective characteristic.

Bandura (1997) defines efficacy as the teacher belief in his /her ability to successfully cope with tasks, obligations and challenges related to her professional role e.g. didactical tasks, obligations, managing class discipline and other problems in class. According to (Etelapelto et al, 2013), professional efficacy is practiced when teachers in school influence, make choices and take stances in a way to affect their work and meaning. Individuals, when alone or in a group in a given situation, make decisions, take initiatives,

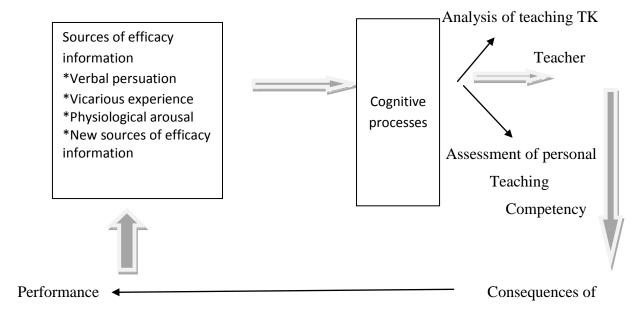
act proactively rather than reactively and deliberately strive and function to reach a certain end. This implies efficacy is about individuals or collectives who are interacting with and within specific contexts.

Teacher efficacy begins to develop early in the teaching career. It tends to be rigid and resistances to change once teachers have ample mastery of experience to fall back on. However, teacher efficacy does not develop linearly, and the acquisition of complex teaching skills and knowledge happen in influx of over time before teachers reach stable level of efficacy. Studies have indicated that factors such as availability of teaching resources, interpersonal support receive from school leaders, colleagues and parents and mastery experience play a role in the higher level of self-efficacy of teachers. Vicarious experience, the second most powerful source of efficacy, is attained through what the teacher observes and read. This can be by observing effective instructions of peers with the same level of experience or experts.

Social persuasion also has a strong influence on teacher's self-efficacy. Sincere and genuine feedbacks from supportive school leaders and colleagues, parental acknowledgement of teachers' performance, students' display of enthusiasm in their learning are forms of social persuasion.

Teacher efficacy also develops through positive interpretation of physiological and emotional state. For example, when teachers experience feelings of excitement prior to introducing a topic, or feelings of pleasure and satisfaction from the delivery of success.

Figure 3: The cylindrical model of teacher's efficacy



Source: Multi-Dimensional model of teacher efficacy by M. Tschannen Moran, A. Woolfolk Hoy, and W, K. Hoy, p;228

Importance of the teacher efficacy

- Those with high self-efficacy have confidence in their abilities and produce sustained efforts to achieve goals. Those with low self-efficacy often doubt their capabilities, are less ambitious and give up on their aims when challenged.
- Efficacy affects decisions a person makes and what they see as achievable. It has been shown to affect mental and physical health, learning achievement, career and job satisfaction/relationships. This tends to improve social cohesion and intergroup relationship.
- > Self
- ➤ Efficacy may shape and enhance policy that specifies goals and processes, enhancing the capacity of teachers to maneuver between repertoires, make decisions and frame future actions. These policies may take into consideration the ecological factor and how it affects the teacher decision making and action. Here, teacher autonomy does not mean absence of policies, since teachers given autonomy might be involved in the social reproduction and might not achieve agency. For teachers to attain efficacy, they exercise their autonomy within the school policies.
- ➤ It enables teachers to be more reflective about potential working practices as they take responsibility for the long-term development of students they work with. Therefore, in the school situation, the teacher is an actor working to bring outcomes
- ➤ With the interne; teachers can easily work across time; space and cultural orientation: This can enhance group performance (Stapes; Hulland and Higgins; 1998
- A school leadership with a high sense of collective efficacy will create innovative changes tailored to the global world and competiveness
- > It depicts dynamic relationships.
- ➤ It treats collaboration and school reforms as an inherently contextualized, including multiple levels
- ➤ It considers its outcomes as part of continuing cycle.

2.1.9. Barriers to teacher efficacy

Covid 19 pandemic and the teacher efficacy: The covid 19 led to school closure and a rapid shift to alternative modes of educational delivery, primarily online learning and teacher supported home schooling. Government Secondary Schools in Yaounde in general had been break down into the two shift system which Teachers find it difficult to manage their students. This shift has revealed deep inequities in educational systems not only in Cameroon but worldwide. An effective response to these changes has tested teachers' personal capacities and collective efficacy intensely. There is therefore a need to develop the understanding of a teacher efficacy in meeting the challenges of the pandemic and the physical and relational enablers and constraint of the environment (Paul Armstrong, 2021)

Another serious barrier is lack of resources like furnished libraries. ICT centers as well as electricity where teachers can even project information within the classroom.

Also, the government is a barrier to teacher efficacy as newly recruited teachers are not paid on time after leaving school. Most of them abandon their classes and are chasing files at the level of the Ministries.

2.1.10. Indicators of teachers' efficacy Classroom management

A research conducted by Aye (2022), looks at the relationship between teachers' efficacy and classroom management. She declares that efficacious teachers are more likely to stay in teaching profession, spend more time teaching, making greater effort in classroom management. She carried out a survey study in Myanmar in South East Asia amongst Primary school teachers and found out that when a teachers' efficacy is high, classroom management is equally high and vice versa. Efficacious teachers are able to learn, use new techniques for teaching and effective management techniques.

Also, classroom management moves along with time management which is the teachers' ability to plan and use his time correctly, Ifediora, (2013). Time management is placed under instructional deliver (it consist of checking class attendance, correction of classwork, lesson delivery and evaluation), management of students' behavior as well as checking of assignments. Adesida (2019), noted that assignment do affect students' performances.

Instructional strategy

Instructional strategies are techniques used by teachers to help student become independent or strategic learners. It becomes strategic if a teacher is able to select appropriate ones and use them effectively. It takes the form of motivating students and helping them to focus their attention, monitoring and assessing learning, forming discussion groups and testing skills. All these is involved in the main learning programs inforce today in our secondary schools- the competency based teaching and learning approach, the E-Learning and project based approach.

Student engagement.

It starts with the teachers' self-efficacy which is the teachers' belief about personal abilities to perform duties in the classroom. These type of teachers are able to devise and employ alternative teaching methods when desired outcomes are not achieved, cope with challenging situations by manipulating the situations emotional and cognitive processes. Such teachers are able to motivate students to become involved in the learning process. Thus engagement refers to the amount of effort students dedicate to learning task. Skinner et al. (2009).

Factors favoring teachers' efficacy

Communication:

It is a special process which does not involve only spoken and written words but to do a variety of actions and nonverbal language such as smiles, frowns, greetings, modes, gestures, mode of dressing etc. (Hall, 1986), sees it as trying to understand and gain inside into mental process of others and situations more serious than most of us can admit.

Motivation

Intrinsic motivation is influence by gender, longevity. Male novice colleagues collaborate less than females with experience colleagues. Teachers with a strong sense of efficacy who believe in their capacities to achieve goals are more likely to achieve a high efficacy. Extrinsic motivation is influence by job satisfaction, the student teacher relationship, class of the students, the topic taught, etc. Some teachers have mastered some topics over the years then other and are able to achieve high efficacy in that direction, besides, teachers teaching examination classes are more motivated.

Leadership structures and coaching

This is by paying teachers on time, setting up supervisory and follow up structures in schools to supervise the teacher work and enforce collaboration. A good leadership structure will also encourage team spirit. This is by giving teachers the preference to make choices regarding their professional learning, including those they will work with and where to focus their learning.

Work place arrangement

The way a school is structured with good staffrooms, restaurants, good classrooms and libraries will give rise to high rate of efficacy and vice versa.

Classroom sizes

This is in respect to the number of students per class. When the numbers of students are small, there is easy interaction with students and the teacher is able to meet the needs of each student in class and vice versa.

2.1.11. Teaching-learning transaction

Teaching is an art of stimulating learners to attend, observe, associate, remember and use their mental faculties or cognitive abilities to attend learning stimuli (Nsamenang, 2004).

Teaching-learning are interlinked to each other. Teachers have to teach a given syllabus in a particular period of time. Some also defines it as the process of attending to needs, doubts and issues of students, which in turn helps them grow as a person and thus learn the subject better. In the modern context, the term teaching is more confined to schools and schooling.

The teacher is therefore at the center of teaching to create a better learning environment where students enjoy learning, being a mentor, guide and friend to students. The teacher uses so many teaching methods and is almost all the source of knowledge that the children acquire in class, where as in those with informal teaching methods, the teacher simply help his people to make efficient use of learning resources that are available. The significant factor in every case is the relationship of the learner to the learning material.

A good teacher is therefore one who has a good understanding of what his pupils need to learn and also of their capabilities for learning. He is able to judge just how much he needs to intervene in each student learning and know the most effective ways of providing this assistance. Thus, a skill teacher is centered on knowing who, what and how to teach and also able to judge when.

Characteristics of good teaching

- > The teacher must be sensitive to the abilities, interest and needs of the students.
- ➤ Curriculum: The teacher must be familiar with what to teach. The school curriculum has syllabuses, schemes of work which can be used for lesson preparation.
- ➤ Resources: The teacher must have available resources inside and outside the school.
- ➤ Teaching methods: It is built on the foundation of knowledge already possessed by the students. With the CBA and other methods, a secondary school teacher must be familiar with them. Here, a teacher stimulates a learner thinking skills so that he can be able to use knowledge gained to solve problems in real life situations. For a teacher to have a good professional skill,
- ➤ He establishes a productive classroom atmosphere.
- ➤ He creates specific kinds of climate settings for different lessons e.g. serious, relaxed, and enjoyable.
- > Houses friendly humors and creates excellent teacher- student's relationship
- ➤ He uses student ideas and gives general praises to students.
- ➤ He exercises class control and discipline.
- ➤ He uses appropriate punishment to misbehavior.
- ➤ He deals with problems before it out of hand.

Good teaching materials need little or no explanations, stimulate ideas, demand an active response from learners and are flexible to use.

Learning

Psychologists define learning as a relatively permanent change in behavior that results from experience. H.J Klausmeir defines learning as a process which leads to some behavioral change as a result of some experience, training, observat5 activity. So many theories have been formulated by Psychologists concerning learning like J. B Watson who suggested that all behaviors are as a result of learning process.

Classical conditioning is a learning process in which an associate is made between a previously neutral stimulus and a one that naturally evokes a response. Operant conditioners like Edward Thorndike, B. F Skinner underlined that consequences of our actions shape voluntary behavior.

Observational learning is a process in which Learning occurs through observing and imitating others. Albert Bandura's Social Learning theory suggest that on addition to learning through conditioning, people can also learn through observing and imitating the actions of others.

The Learning process is continuing and starts right from birth till death. Learning endeavors us to develop our adaptive capabilities as per requirement to changing environment. For learning to occur, two things are important:

- 1. The presence of a stimulus in the environment.
- 2. The innate dispositions like emotions and instinctual dispositions. Other types of learning involve motor learning, verbal Learning which is related to language used for communication and symbols, figures and signs. Concept Learning is associated with higher cognitive processes like intelligence, thinking, and reasoning. Discriminatory learning is based on principles which help in managing the most effectivity. Looking at the key characteristics of learning, it is an experience acquisition process, it requires, relents and modified experiences, it establishes relationship between stimulus and response, learning is concerned about cognitive, conative a d affective aspects and it uses the memory.

From the above ideas on learning, a teacher collaborative learning is unavoidable since learning is a whole life long activity and if a teacher is to teach, he must keep learning. Hilgard and Bower (1960) produced a list of 14 points which shows that understanding learning theories by a teacher will help him to fully interpret the school curriculum and to implement it. Amongst these are factors such as motivation, learning materials, attitudes, etc. With the coming of the competency based learning, the teacher needs to fully understand the learners so as to fully make it meaningful. This is like knowing which strategy to be used in the classroom to enable students fully resolves problems. Therefore, teaching today is not only based on tent knowledge but on teaching-learning-evaluation strategies.

2.1.12. Teaching-learning transaction

Teaching is a transactional process par excellence. It involves a community of learners including the teacher as a learner as well. The transactional nature of teaching and learning are evident in a three sided structure (Nsamenang 2004). On one side is the teacher, another is the content and the third is the learner who speaks with the teacher content to learn and how to learn it. The personality attributes and the strategies of the teacher-learners and the nature of content largely determine the transaction.

Here, teachers' can be considered as sellers having an inexhaustible commodity to sell in the market which is content. Learners are buyers who bargain; compete to acquire much as possible. The amount each buyer gets from the transaction depends on the seller marketing process. This is also similar to the pedagogic triangle of Osaye. It explains the relationship between the learners, teacher and knowledge. Learning process relationship: It shows the relationship between learners- knowledge. The teacher here is the organizer of external learning processes. He is the mediator and has a stronger bond between the learner and knowledge.

Teaching relationship: The privilege is teacher knowledge relationship. The teacher structures lessons for learners. He looks for content. The training process relationship is centered on teacher-learners. They are constantly in interaction. The teacher presents situations for the learners to resolve and when they can't, he turn to the teacher for remediation. Thus, teaching connotes causing learning- the facilitation of learning. Because teachers don't teach for themselves, teaching is learner centered. We can claim that nothing has been taught until it is learned. In reality, the idea of effective teaching is meaningless if it does not lead to effective learning. Therefore, teaching is much more than delivery of thoroughly prepared lessons especially in our present technological age. Teaching is therefore valuable not in itself but as it foster learning. Unfortunately, teachers teach for themselves as it does not promote learning in the Learners.

Looking at the Competency based Approach, teaching is supposed to help a child solve problems in the society. This makes learning not only content base, where a child learns to pass an exam but learning which connotes Civic Life This therefore calls for teachers to be aware of the different forms of learning, in which some may be promoted by then such as:

- Natural learning
- > Classroom learning.

- Learning how to learn or incidental learning.
- ➤ Value learning.

The professional or classroom teacher plays a multiple inter-related role. He is like a student who learns from every teaching- learning situation; a planner who prepares what to do with learners, and a skilled craftsperson in control of the learning environment. The teacher is also a decision maker who highlights and demonstrates the relationship between the society, the school system and the subject matter, relating them to learner's needs and aspirations.

A summary of the relationship between teaching and learning.

- ➤ Teaching facilitates learning. Even incidental learning helps not only to learners but may also ease the work of a teacher
- ➤ Teaching in itself involves a considerable amount of learning. The teacher needs information about the society, the learners, the school system 8n which collaborative professional learning may be of help
- ➤ Both teaching and learning is a continuous process. The learners can sometimes be a teacher since he/she influences the behavior of the teacher.
- ➤ Teaching Learning and human development are intertwined because developing and Learning is the essence of human life. This is more meaningful to people within the preview of Their Cultural worldview.

The value of learning.

The ultimate value of learning is transferred learning. Transfer is knowledge or skills gained in one subject or situation which is applied to another subject or situation. For example, a girl applies her knowledge of food values learned in school when preparing meals at home. Similarly, the boy who uses his knowledge in mathematics in the physics lesson is transferring knowledge gained from one subject to another.

Transfer knowledge may be lateral or vertical. Vertical is when a child learning mathematics will be useful in studying chemistry /Physics. Vertical is when a child learning skills in one subject, say reading is used in other subjects throughout his life.

Teachers should therefore endeavor to teach basic principles from which learners are able to transfer their knowledge to problems they are likely to meet. Some considerations should be given to the following general rules:

- As certain as far as possible the past experience of learners in relationship to new materials you intend to teach.
- > Carefully instruct on basic skills.
- ➤ When setting task on material learnt, try to ensure that these are similar as possible to the learning situations e.g. positive transfer where knowledge or skills gained in one subject area is transferred to another situation or negative transfer which inhibits one's performance in another e.g. false generalization.

2.1.13 The Competency Based Approach of teaching-Learning.

The Competency Based Approach (CBA), which is widely recommended today in our secondary schools for teaching and learning, is a value-based learning almost similar to transfer learning. It has many definitions but Rogers (2000), defines it as «the possibility for an individual to mobilize and integrate resources in value of resolving a problem which arises from a family of situations. Here, we have:

- Resources which is knowledge, skills and attitudes which a student mobilizes
- > Situations: It refers to the particular problem at hand that a student has to mobilize resources.
- Resources: It is the knowledge, skills and attitudes necessary to master for Competency. Thus, knowledge is like knowing the vocabulary for telephone conversation. Skills is like formulating questions, answers to questions asked. Aptitude is like adopting a cordial attitude. The situation reflects the competency to be installed in the learner. It can be considered as an occasion to exercise competency.

Teaching in the Competency based approach involves identifying the resources of knowledge, skills and aptitudes and choosing activities for integration and formative evaluation. Integrative activities that allows learners to mobilize resources in a complex situation. These activities can take place throughout the year. Another alternative consists of using one week for integrative activities. It can be at the end of the month or after six weeks of learning. Integration can also be progressive.

Table 3: The differences between the Objective Based Approach and the Competency Based Approach

	CBA	OBA
entry behavior	The situation	- The content
-Contextualization	- In a particular context	- Out of context
- Centered on	-Learners	-Teachers content
-resources	- Many resources	- Cognitive resources
-Out profile	- the situation treated in terms of resources	-Content discipline is reproduced
-Paradigm	-Behaviorists	-Exclusively behaviorists
Base	-The action of learners	-The transmission of teachers.

Source: Designed by the researcher.

Evaluation in the CBA: Evaluation in the CBA takes into consideration the blooms taxonomy where both knowledge, skills and aptitude is being evaluated. Rabat (2006), cited 4 criterions for evaluation which are:

- > C1: interpretation of the situation problem.
- > C2: Used of content and context.
- > C3: Coherence of response
- > C4: Presentation of work.

Other subjects have their own mode of evaluation. The emphasis here is on acquiring skills to solve problems.

It is based on the lapses if the Objective Based Approach (OBA) that the Ministry of Secondary Education opted for the CBA. The problem is that many teachers finds it difficult to apply it in the field. Despite the many training seminars, learning in professional schools etc., teachers still find its intricacies difficult. It is for this reason that collaborative professional learning had remained the main option of fostering programs like this which also combines E- learning and Project Based Approach.

2.2. THE THEORITICAL FRAMEWORK OF THE STUDY

The theoretical framework of the study defines the key concept in research, proposes relations between them and discusses relevant theories based on literature review. It gives direction in research, allowing the researcher to convincingly interpret, explain and generalize from your findings.

2.2.1. The social cognitive theory of Albert Bandura

Albert Bandura was born on the 4th December 1925 at Mundare, Canada. He had a Canadian American nationality. However, he was born to a Polish and Ukrainian father and other. His parents were a key influence in encouraging him to seek ventures out of the small hamlet they resided and he later credited his work in Northern Tundra with the interest in psychopathology. His experience in Yakon where he was exposed to the subculture of drinking and gambling helped him to broaden his perspectives and scope in view of life. Bandura arrived in the United States in 1949 and was naturalized in 1956. He was married to Virginia Varns in 1921-2011) and they raised two kid- Carol and Mary.

Bandura was initially influence by Robert Sears work on familial antecedent of social behavior and identity learning and gave up his research on psychoanalysis. He directed his initial research to the role of social modelling in human motivational thoughts and actions. In collaboration with Richard Walter his first doctoral student, he engaged in studies of social learning and aggression. The initial stage of Bandura research analyses the foundation of human learning and the willingness of children and adults to imitate behaviors observed in others in particular aggression. He discovered, according to social learning theories, models are an important source of learning new behaviors and achieving behavioral change in institutionalized settings.

In 1963, Bandura published social learning and personality development. In 1974, Standford university awarded him an endowed chair and he became David Starr Jordan professor of social science in psychology. In 1976, he published social learning theory. While investigating the process by which modelling alleviates Phobia disorders in snake phobic, he found that self-sufficiency beliefs (which the phobic individuals had in their own capabilities to alleviate their phobia) mediated changes in behavior and fear arousal. He launched a major program of research examining the influential role referent thought in psychological functioning. Although he continued to explore and write on the theoretical problems relating to Myriads topics, from the late 1970s, he devoted much attention to exploring the role of self-sufficiency relief in human functioning.

In 1986, he published social foundations of thoughts and actions, a social cognition theory which offered a social cognitive theory of human functioning that accord a central role to cognitive, vicarious, self-reflecting and self-regulating processes in human adaptation and change. The theory has its roots in an agentic perspective that view people as self-organizing, proactive, self-reflecting and self-regulating, not just as reactive

organisms shaped by environmental forces or driven by inner impulse. The book, self-efficiency; the exercise of control was published in 1997.

Main issues in the theory

Self-efficiency is described as a perception of a key factor in a generative system of human competence. These perceptions are concerned not with the number of skills you have, but with what belief you can do with what you have under a variety of circumstances. In the standard methodology for measuring efficiency beliefs, "individuals are presented with items portraying different levels of task demands and they rate their strength of their belief in their ability to execute the requisite activities. The items are phrased in terms of can do rather than will do. Self-efficiency varied in terms of events, levels of task, challenges, and generality across range of activities.

Four main sources of self-efficiency include inactive mastery, experience, and vicarious experience, and verbal persuasion, psychological and effective state.

The four mediating processes has four separate subsections which describe theory and evidence for how cognitive, motivational, effective and selection processes may mediate influences of outcomes of interest from self-efficiency perceptions or where it produces effects

The processes operate in concert, rather than in isolation in ongoing regulations of human functioning.

The theory also describes development origins of a sense of personal agency and the associated self-efficiency perception. These includes financial sources of self-efficiency in adulthood may he appraised unless people believe they can produce desired effects by the way they behave

The core properties related to human efficacy are:

- ➤ **Intentionality:** people form intentions that include action plans and strategies for realizing them.
- Forethoughts: This includes more than future directed plans people set themselves goals and anticipate likely outcomes of prospective actions to guide and motivate their efforts anticipatorily. Forethought provides direction, coherence and meaning to one's life.

- ➤ **Self-reactiveness:** Agents are not only planners and fore thinkers. They are also self-reactiveness. They do things that give them satisfaction and sense of self-worth, they refrain from actors that bring censure.
- ➤ **Self-reflectiveness:** People are not only agents of action. They are self-examiners of their own functioning. The functional self-awareness reflects their personal efficiency, the soundness of their thoughts and actions, the meaning of their pursuits and makes corrective adjustments if necessary.

Contribution to the topic

Core belief is the foundation of teacher motivation and accomplishment. Unless teachers believe they can produce desire effects by their actions, they have little incentive to act or persevere in the face of difficulties. One can only affect change in the school system by one's action.

Belief in efficiency is the key personal resource in self-development, successful adaptation and change. It operates through its impact on cognitive motivational, effective and decisional processes. Efficiency beliefs affects whether individuals think optimistically or pessimistically, in self-enhancing or self-debilitating ways, such beliefs affect people's goal and aspirations, how well they motivate themselves and their perseverance in the face of difficulties and diversity. Efficiency beliefs also shape people's outcome expectations- whether they expect their efforts to produce favorable outcomes or adverse ones.

2.2.3. Group management and group dynamics theory by Kurt Lewin

Kurt Lewin (1890-1947) was a German-American social psychologist whose extensive work covered studies of leadership styles and their effects, work on group television making, the development of force field theory, the unfreeze change, refreeze change management model, the action research approach to research, the group dynamic approach to training especially in the form of T-groups. Lewin has a great influence on research and thinking on organizational development and was behind the founding of the Centre of group dynamics in the USA, through which famous management thinkers passed. Group dynamics deals with the attitudes, behavioral pattern of groups. It talks of how groups are formed, their structures, processes and forces operating within groups. A group refers to two or more people who share common meaning and are out for a common goal.

Born in 1890, in Mogilno, Poland to Recha Engel Lewin and Leopold Lewin, married to Gertrud Meiss (1929-1947), father of four (4), Kunt Lewin studied medicine in the university of Feiberg but was later transferred to Munich to study Biology. Around this time, Lewin aimed to show that democratic styles achieve better results. However, the possibility of social and cultural influences undermines his findings to some extent, but the studies nevertheless suggested benefits of democratic style in an American context. They also showed that it is possible for leaders and managers to change their styles, and to be trained to improve their leadership to adopt appropriate management styles for their situation and context.

Force Field Theory

In Lewin forced field theory, he viewed peoples' activities as affected by forces in their surrounding unit or field. Lewin defines a field as the totality of coexisted frets which are conceived of as mutually interdependent.

Three main principles of force field theory are:

- ➤ Behavior is a function of existing field
- Analysis starts from the complete situation and distinguishes its component parts
- A concrete person in a concrete situation can be mathematically represented.

Force field is used extensively for the purpose of organizational and human resource development, to help indicate when driving and restraining forces are not balance, so that change can occur. Driving forces might be impulses such as ambition, goals, needs, or fears that drive a person towards or away from something. Restraining forces are viewed by Lewin as different in their nature, in that they act to oppose driving forces, rather than comprising independent forces themselves.

The fluctuation between the restraining and driving forces creates a stable routine of normal, regular activities described by Lewin as the "quasi stationary processes". Continues fluctuation will balance out or he was involved in socialist movement. He did his doctorate in the university of Berlin and developed interest in philosophy before encountering the Gestate psychologist. He got his PHD in 1916 while serving in the army. By 1921, he became professor of psychology and philosophy at the Berlin University.

He relocated in the United States in 1933 to escape from worsening political position in Germany. He taught child psychology at Cornell and Iowa before becoming a researcher in child psychology in a research station in 1935. In 1944, with McGregor, and others, he

founded the anther for group dynamics at Massachuselts institute of technology. At the same time, Lewin also was engaged in a project for the American Jewish congress in New York- the commission of community interrelations. Lewin died in 1947 in Bethel Maine of heart attack.

Leadership styles and their effects

Together with L. Lippit and R. White, Lewin carried out studies relating to the effects of three (3) different leadership styles on the outcome of boys' activities group in Iowa (1939). Three (3) different styles were classified- democratic, autocratic and Laissez Faire. It was found that a group with an autocratic leader has more dissatisfaction and behavior being either more aggressive or apathetic. In a group with a democratic leader, there was more cooperation and enjoyment, while those in laissez faire group showed no particular dissatisfaction though they were not particularly productive either.

Significantly, when the respective leaders were asked to change their styles, the effect on each leadership style remained similar or led to equilibrium. Therefore, individual behavior is an intricate set of symbolic interaction of forces that do not only affect group structures but modified individual behavior. Therefore, individual behavior is a function of a group environment or field as a totality of coexisting fact which are conceived as mutually interdependent. A field was a continues state of adaptation and change and constancy are relative concepts. Group life is never without change, merely different in the amount and types of change exist. Therefore, quasi stationary equilibrium is the difference between the amount of change and type of change.

A field is therefore the totality of coexisting facts which are conceived mutually interdependent. Three main principles of force field theory are:

- 1) Behavior is a function of existing field
- 2) Analysis start from complete situations and distinguishes it component parts
- 3) A Concrete person in concrete situations can be mathematically represented.

Force field is extensively used for the purpose of organizational and human resource development, to help indicate when driving and retraining forces are not balance so that change can occur.

After WW1, Lewin carried out research for the United States Government exploring way of influencing people to change their dietary habits toward less popular cuts of meat. He found out that if group members were involved and encouraged to discuss the issues

themselves and were far more to make their own decisions as a group, they were far more likely to change their habit than if they had just attended lectures giving appropriate information, recipes and advices, fate interdependent.

Lewin had an impact on a generation of researchers and thinker concerned with group dynamics.

The word group dynamics comes from a Greek word meaning force. Group dynamics therefore refers to the force existing within a group. It is the study of these forces, what gives rise to them and what condition modify them, what consequences they have (Wright 1951) called group Dynamics-

Lewin talks of the importance of a group in shaping the behavior of its members. He was addressing two questions:

- 1) What it is about, the nature and characteristics of a particular group which causes it to respond (behave as it does to the forces that infringe on it).
- 2) What about the nature and the characteristics of a particular group which causes it to respond as it does to the forces that infringe on it and how these forces can be changed in order to illicit a more form of desirable behavior. It was by addressing these questions that Lewin developed the concept of group dynamics.

According to Lewin, group dynamic should stress on group behavior rather than individual behavior as the main forces of change (Bernstein, 1962). Lewin says it is fruitless concentrating on changing behavior of an individual because individual isolation is constrained by group pressure to conform. Therefore, the forces of change must be at group level like the organizational norms, roles, interaction, socialization process to create a change or disequilibrium.

Lewin talks of human personality which is determined by the interaction of nature and nurture. In his equation, $\mathbf{B} = \mathbf{F}(\mathbf{P}, \mathbf{E})$

B = Behavior is a function of (F) a person, P and E (his environment)

Thus Lewin concluded that a group is a function of individual traits plus environmental factors.

Action Research

It emphasizes that change requires action and is directed at achieving this. Secondly, it recognizes that action is based on analyzing the situation correctly, identifying all possible alternative solutions and choosing the one most appropriate to the situation at

hand. To be successful, there has been a felt need. It is an individual inner realization that a change is necessary. Related to Lewin's work of the field, it emphasizes why individual behave the way they do when subjected to forces in a group. Research action was used to reduce violence between Jewish and Catholic teenage gangs in New York.

The 3 Step Model

Lewin devised that successful change in the society or organization involves three (3) stages:

Step 1: Unfreezing: Lewin believed that the stability of human behavior on quasi stationary equilibrium is supported by a complex field of driving and retraining forces. He argued that equilibrium need to be destabilized (unfrozen) before behavior can be discarded (unlearnt) and new behavior adopted.

Schein further states that unfreezing involves 3 processes:

- 1) Disconfirming the validity of the status quo
- 2) The introduction of guilt or surviving anxiety
- 3) Creating psychological safety

Therefore, those concerned must feel safe to loss and be humiliated before they can accept the new information and reject old behaviors.

- **Step 2: Moving:** Lewin says any attempt to predict or identify any specific outcomes from planned change is very difficult because of the complexity of forces concerned. Instead, one need to take into account all the forces at work and identify, evaluate on actual and error be it in the available options. This promotes action research for individuals to move from less acceptable to more acceptable behaviors in a group. Lewin however noted that without reinforcement the change will be short lived.
- **Step 3: Refreezing:** It seeks to stabilize the group at a new quasi-stationary equilibrium in order to ensure that new behaviors are relatively safe from regression. The main point in refreezing is that behavior, personality and environment of the learning, group norms must be transformed to sustained changes of individual's behavior. In organizational terms, refreezing requires changes of organizational culture, norms, policies and practices.

Summary

1) To analyze how groupings were formed, motivated and maintained to do this, he developed both field theory and group dynamics.

2) To change behavior of a social group, the primary method is action research and 3 step model.

Group according to Lewin is not dissimilarity or similarity of individuals but inter independent of fate. It traces group behavior rather individual behaviors.

Contribution of Lewin's ideas to teachers collaborative learning and teaching

The experience of Kunt Lewin, developed some 100 years ago continue to fit like a Jig saw into organizational structures or groups and why not a school and teachers as a sub-group. Looking at Lewin's definition of a group as people with interdependence of fate, with individuals having different characters, it fits exactly to a group of teachers in a secondary school who are recruited from different parts of the country, who have graduated from different training schools at different years or promotion but are now working in a school with one goal of promoting the teaching-learning transactions. Their task may be different say teaching different classes but at a certain level, it is interdependent because looking at the GCE examinations, the syllabus starts in form 3, therefore a teacher teaching say form 3 and form 4 should work hard to cover his own portion of work so as to ease the work of the teacher teaching form 5 as she prepares the student for final exams. This therefore makes the teacher to form a powerful dynamic group for the ultimate success of the students thus making collaboration inevitable. This can be in the sense that a teacher teaching form 3 in the same subject area but facing some difficulties might talk to the form 4 teachers and vice-versa.

Looking at the field theory of Lewin, it is very imperative to teacher collaboration. Teachers posted to an environment for the first time to work might have a negative view of the environment which in turn will affect their behavior. They may turn to isolate themselves from other colleagues, but as Lewin put it, a field was a continuous state of adaptation and change, they may adapt with time which will encourage collaboration, their efficacy in the teaching-learning transaction as a whole.

Bringing Lewin's group dynamic theory into the limelight, one will discover that there is no organization without norms, interaction or socialization process. In a school, all these structures are imperative both at subject departmental levels, school level etc. Through socialization both in school and out of school, teachers come to learn from each other thus bridging that gap of differences that exists amongst teachers due to pride, conflicts especially amongst female colleagues through group norms, teachers are oblige to

attend departmental meetings, fill report booklets, progression sheets, log books etc thus bringing collaboration and change amongst teachers.

Looking at the action research, the idea of "felt need" is very imperative to teacher collaboration and the teacher efficacy. Lewin defines it as that realization that a change is necessary. Until "felt needs" are realized by the teachers, they will never be subjected to group norms or a change (forces of a group). This is the reason why you will find some teachers who are so adamant to growth in their profession. Even to mark script is above them talking of filling students' marks correctly. Until they realize a need for change, no force can change their mind set especially government teachers who think their salaries are untouchable.

The 3-step model is also very important in collaboration. In order to develop the teacher efficacy, collaboration will only be effective if the teachers blend their differences, move from less acceptable behavior to a more acceptable behavior in a group while embracing reinforcement which usually comes from head of departments, principals, vice principals and colleagues. In other schools, reinforcement of good behavior takes the form of prices offered to the teacher so as to encourage others to emulate.

When teachers can easily embrace new and acceptable behaviors, refreezing which is changing group culture, norms, policies and practices will be the least of their problems.

Lewin experience encourages the democratic leadership style which is very acceptable especially dealing with adults like teachers. Since in a school structure, for collaboration to succeed, teachers must be leaders, however there are leaders of leaders like Head of Departments (H.O.D.), senior colleagues, principals etc. At times, it is imperative for these leaders to blend both the autocratic, democratic and laissez-faire style to achieve a success.

Also, the T. groups of Lewin are very imperative for professional learning communities. Through T. groups like the departmental meetings, teachers learn to feel free with their peers, solve problems together and discuss about some difficulties faced by individual students in their subject area and how to go about it. Teachers can freely stand the gap for other colleagues say sick or pregnant colleagues.

2.3. EMPERICAL RESEARCH

2.3.1.1. Motivation and the teacher efficacy

Tayi (2004) defines motivation as a driving force towards the attainment of an objective. Motivation can be intrinsic or extrinsic. Intrinsic motivation arises from

internally generated state of the body, for example curiosity or a wish to succeed. Extrinsic motivation arises from externally determined factors like states, reward and approval etc. Motivation for learning is a major problem for teachers especially in collaborative learning.

For collaborative learning to be effective in secondary schools, teachers must be first motivated internally. One of such way is to improve on one's self-concept, a mental picture of oneself and interest. Self-interest is composed of knowledge about self, expectations for self, evaluation of self. Powerful intrinsic motives that are thought to be extremely instrumental and that are worth promoting are approval, simple curiosity, the desire to achieve and the desire for self-esteem or self-worth.

A study carried out by Zin et al (2020) titled 'The relationship between teacher self-efficacy and motivation for teaching" used 373 teachers from eight schools in Yangon region and the results indicated that amongst the teachers preferred type of motivation for teaching, the percentage for intrinsic motivation was the highest. Also, the study indicated more working experienced teachers had greater intrinsic motivation for teaching. They suggested that teachers who are autonomously motivated have a higher level of self-efficacy and vice versa.

Another study by Seyed et al (2018), looks at "The impact of teachers' efficacy and motivation on students' academic achievement in science education among High School students". A performance scale of a-0.89 and a teacher self-efficacy scale of a-0.9 was used as a measuring instrument and an achievement test in science education. Two hypotheses were tested and their results showed that the gender difference was not significant. However, nationality difference was significant in terms of student academic achievement in science education.

Another study conducted by Farell (2002) titled 'Teacher self-efficacy and its influence on students' motivation "carried out a quantitative survey to examine the factors that impact teachers' efficacy and their ability to motivate urban students within the classroom. Teachers' efficacy was the primary factor observed. Five dimensions were used to guide the study which was motivation, administrative support, teacher power, and morale and teaching methods. There was a significant difference found in dimensions that support the fact that efficacy measurement influence students' motivation. Such factors were found in the teachers' assiduity and students' grade levels were significant factors to determine teachers' grade level. The study was recommended for administrators hoping to develop methods that will increase teachers' efficacy, thus improving teachers' motivation.

Another study conducted by Wilson and Colican (1996), titled" How high and low self-empowered teachers work with colleagues and school Principals" and found out that high and low empowered teachers viewed administrative support differently. Teachers were given surveys that identified that they were high or low. Specific teachers were selected from the survey group to participate in the study because of their score. They found out that high empowered teachers felt working with Principals was important to improve decisions made about students in school. They value working with Principals in a collegial atmosphere and believed that it could positively improve the school climate. On the other hand, low self-empowered teachers viewed working with Principals as hierarchical and strange.

A research carried by Suebong (2016), titled "The quality of the school environment and the teachers' efficacy in the Nyong and So'o" looks at vocation among teachers and internal efficiency in the educational system in Cameroon. According to him, success rate in the Baccalaureate and "Probatoire" Exams from 2013-2016 did not exceed 60%. His research findings indicated that vocation is a function of love for learners, teachers' responsibilities and taste for study. All these factors signify intrinsic motivation.

Extrinsic motivation arises from externally determined factors like status, reward, social approval. In the school system, teachers can therefore be motivated through reward like monetary reward to attain learning sessions. Motivation can be further break down into:

Work satisfaction and the teacher efficacy.

According to judge and church (2006), research in many years, organizations and type of jobs shows that when employees are asked to evaluate different factors of their jobs such as supervision, pay, promotion, co- workers and so forth, the nature of jobs usually emerges as the most important job facet. This shows that much can be done to influence job satisfaction by ensuring that work is interesting as possible. According to Weiner (2006), job satisfaction must include the nature of the job which in the school setting will include challenges, autonomy, and variety. It is job satisfaction that will enable a teacher to get more involve in collaborative professional learning activities so as to influence their growth. Job satisfaction can be classified under:

Work environment

Work environment is an important impact on teachers' performance and productivity. Work environment are the processes, systems, structure, tools or conditions in the work place that favors or disfavors an employee's performance. The work environment also includes policies, culture, resources, working relationships, work location. Thus, recording to Clement Groome (2000), the environment which people work will affect their work performance and job satisfaction.

Dilani (2000), added that researchers are increasingly finding link between employees' health and aspects of physical environment such as indoor air quality, lighting quality, stress factors. In the teaching profession, we will begin to look at aspects such as classroom settings; are they well ventilated with a teacher having a seat where from time to time he/she can sit and rest, are didactic materials like chalk, chalk board, books provided on time? Are teachers having a well-furnished staff room for relaxations where teachers can sit and discuss freely with other colleagues? All these are factors when considered well will go a long way to encourage a teacher effectiveness.

According to Macfie (2002), it is important for management efforts to create a working environment where everyone is highly motivated and feel valued. He adds that if staff look after their health, they will be better in their own lives and business. If people feel better the way they are managed, their lives will be productive.

Arrangement of work space and the teacher efficacy

Arrangement is the distance between people and facilities. Robbins (2003), says that arrangement of work place will influence social interaction. According to Zweigenhaff (1976), one topic that have receive considerable amount of attention is furniture arrangement in traditional offices. An office or staff room where individuals can sit at right angle to each other conveys a more natural and informal trusteeship. Privacy within the work place is a function of the amount of space.

Facilities in most schools are dilapidated and inadequate. (Adelabu 2003), Kazeem (1999) has recommended that greater attention should be paid to work related conditions of teachers to improve the quality of teaching and learning thus education in general.

They should be increased supply of teaching, learning materials, clean classrooms to improve teaching-learning. Kazeem (1999) argues that if people work in a clean normal workload, friendly environment, they will find it easier to come to work and to be involved in various task and vice-versa.

Bishay (1996) says the working Environments determines teacher's attitude towards work. Ngidi and Sibiya (2002) says disadvantage working conditions are often not

conducive to teaching and learning. A good example is a rural school which electricity is a major problem. Collaborative learning in E-learning programs among teachers can never be really effective.

2.3.2. Professional teacher leadership and the teacher efficacy

Teacher leadership here implies teachers take more responsibilities within the school for outcomes (Meagan, Lyons, Meg 2011). Studies focusing on teachers as leaders (Bellon and Beauty, 1992), emerged as educational reform movements to intensified teacher's participation in the administrative context such as restructuring and school-based management. Nobody was born a principal but it is through collaborative learning and accepting rules while respecting other that some teachers in secondary schools have been called to leadership positions as Principals, Vice Principals, discipline masters, head of departments etc., all in the bid to foster teaching and learning. Thus, school leadership lies in the hand of both these appointed leaders, classroom teachers and parents in order to foster teaching-learning.

A study carried out by Farell et al (2007), title "Action research foster empowerment and learning communities" defined the power of educators to increase teacher's access to decision making, increase teachers knowledge and status.

Also, Ngwa (2021), carried out a study on "The influence of leadership styles on teachers' attitudes towards work in Public secondary schools in Yaoundé VI" and discovered that principal leadership styles were decision making, delegation of duties, job satisfaction which are the key determinant of teachers' attitude.

Another study carried out by Teague and Ginger (2014), focused on "Teacher leadership and collective efficacy: Teachers perceptions in three US school districts". A quantitative study was carried out with the aim to examine the relationship between teacher perception of the extent of teacher leadership and collective efficacy. The research was guided by the following questions: Do teachers who perceive strong sense of collective efficacy also perceive a greater extent of teacher leadership in schools?

Are there differences in the perception of collective efficacy and factors of teacher leadership, principal leadership and selection?

The design or methodology was the descriptive statistic and ANOVA were run to examine the mean differences in the two schools (n=363). The findings indicated a clear strong relationship between collective efficacy and teacher leadership. The author indicated that

teacher leadership includes informal leadership through their influence on organizational leadership and effectiveness.

Another study by Nadelson et al (2020), based their study on "The Role of Teacher Leadership and Classroom Effectiveness". An explanatory study on the role of K-12 teacher in the classroom is that of a leader. Teachers must identify as leaders to effectively navigate challenges of teaching and learning. They developed and validated tools containing both quantitative and qualitative items to assess attributes of identity of teachers' in context of their role as classroom teachers. They found out that teachers tend to perceive the primary role of teachers as conveyers of knowledge and get strongly agreed that teachers are critical models.

2.3.3. Policies and development programs:

How can public policies influence teacher professional collaboration? Coburn and Russel (2000) carried out a research and suggested that district policies influence teachers' social networks in elementary schools. The more often teachers meet, the more they are committed to both teamwork and achieving its goals.

A research carried out by Day (2007), titled "Effects of nation policies on teachers' sense of professionalism "was an empirical research from Portugal and England aimed at investigating the way in which teachers are experiencing changes in policy environment, which has affected their sense of professionalism and professional identity. Data were collected through questionnaires and focus groups interviews. Findings suggested the existence of some strength in teachers' view on their professionalism, namely, the importance of vocationalism, continuing learning and collaborative culture, the relevance of project oriented work in school and integrated perspective of curriculum.

However, a number of limitations also emerge such as feeling of ambivalence and conflict, associated with bureaucracy, quality of school leadership, lack of understanding and ownership process.

Another study title" Educational policy influence efficacy: Teachers belief in the ability to change Educational policies", grounded their study on social cognitive theory and society to maintain how teachers viewed themselves as educational policies actors. The study employs a sequential explanatory design, c characterized by the quantitative data collection of approximately 250 teachers, followed by quantitative interview of eleven

teachers. Findings reveal that teachers are not only confident of their ability to make changes and see themselves as implementers more than creators of educational policies.

Preservice teachers are motivated to collaborate based on formal and informal interaction with other teachers (Kaldi and Xafakos, 2017, p. 256). Novice teachers seem to need more support through collaboration with mentors. Experience teachers can offer more support and help to locate resources thus helping them to achieve personal goals of professional development (Kaldi and Xafakos, 2017)

2.3.4. Available resources and the teachers' efficacy

Abessolo (2017) in his master dissertation titled "The quality of the school environment and the efficacy of teachers in the Nyong and So' o Division", highlighted environmental factors such as pedagogic resources (what is needed for training, evolution of pedagogy and what is needed to succeed), how the school climate goes with how the school life is organized which is often collaboratively, ratio of students to teachers etc. Are the class rooms well organized with a sit for the teacher, is the computer lab and library well equipped, are the toilets well kept, canteens and sporting activities, good staff delegates, school council etc.

Another research carried out by Kunda et al, (2020) title" The correlation between teachers' efficacy and ICT infrastructure", employed a descriptive survey method within an expose factor research of selected 100 schools in Indian Government Secondary schools using 400 teachers. The research was analyzed descriptively and inferentially. A correlation was between ICT and self –efficacy and their perception of ICT infrastructure. The analysis found out a moderately high and positive correlation between the two.

A study carried out by Tschannen and Woolfolk Hoy (2002), titled "The influence of resources and support on teachers' efficacy belief aimed at exploring the relationship between teacher's perceived support and their teaching efficacy amongst University teachers, found out that teachers' support may not be able to enhance teachers' self-efficacy. This is when they are clear about their teaching responsibilities and or meet basic needs of instructors.

However, a research conducted by Woods (2020), titled 'Teacher technology Efficacy: the relationship among generations, gender and subject area of Secondary School teachers' carried put a correlation study design to examine the relationship between subject area, gender and using the 21st century tools for learning. 34 items surveyed, technology, proficiency, self-assessment questionnaires were used. The results show a TPA C-21 and

the conclusion was made that gender and generation predictor variables shows a statistical significant ability to predict teachers' technology. Therefore, tools are needed in high classrooms today to improve students' advancement.

SUMMARY AND EXAMINATION OF THE KNOWLEDGE GAP

Most research in the past in the Cameroons Educational field had focused on leadership styles, vocation, job satisfaction and the teacher attitude towards work. Abessolo (2017) in his dissertation focuses on the quality of the school environment and the teacher efficacy but failed to direct it towards professionalism. Ngwa (2021), talks of leadership styles and it influence on the teachers' attitude towards work. His focus was not directly on professionalism and besides, he failed to see all teachers as leaders. His focus was like towards the principal leadership.

Teneng, (2017), looked at professionalism as a general factor focusing on both onjob and in-service training. This however differs from this study which is more of training or acquiring competence on-job and within the confinement of the school milieu. This research is bringing in teacher professional collaboration and the teacher efficacy which is broader in outlook and involves all other factors mentioned above to give a broader sense to teachers practice within the school milieu.

Goldstein (2015), focuses on the influence of teacher collaboration on teachers' morals. She however failed to emphasize on professionalism.

Hayle (1974) first drew a powerful distinction between restricted professionalism, skills and perspectives form from classroom experience while school learning occurs gradually and extended professionalism which] envisage that skills and understanding are developed from interaction from practical experience and analysis, including theory. There is an awareness of social, economic and political context which impinge on educational purposes and workplace events are considered in relation to policies and overall educational purposes. Teaching methods are shared within colleagues and reviewed in terms of researched informed principles.

It is from this perspective that this research is bringing in teacher professional collaboration and the teacher efficacy which is broader in outlook and involves all other factors already mentioned above to give a broader sense to teachers practice within the school milieu. It is also out to insist on true professional learning communities within the school milieu for pedagogic improvement and not a mere discussion groups for social

activities. This will directly affect teachers' efficacy in the classroom with a multiplier effect on students output and performance.

CONCLUSION

This chapter have focused on the review of literature; starting from the review of concepts, theories and has ended with the empirical review in order to help identify the knowledge gap of the study. This chapter has also helped to shape an out view for the field research in this study. This is true as the synoptic table ends up the chapter to give a broader outlook of the empirical research.

Table 4: The synoptic table

General hypothesis	Research hypothesis	Variables	Indicators	Modalities	Items
Teachers professional collaboration is	H1 There is a relationship between motivation to professional collaboration	IDV; Motivation	-Personal believes and values towards teaching Internal Motivation-Mastery of subject content, love fir teaching as a vocation External motivation like incentives, coaching, team work, cultural belief about	Agree Disagree Strongly Agree Strongly disagree Neutral	
significantly related to the teachers teaching efficacy in Secondary Schools	and the teachers teaching efficacy in Government Secondary Schools	DV: Teacher efficacy	subject content The teacher self-belief, love for teaching and students. Organization catch up classes, mastery of subject content, improve dynamism in classroom pedagogy, technical skill in teaching, follow-up of slow learners.		Q6-10
	H2: There is a significant relationship between available resources put at	IDV: Available Resources	Accessible computer lab, free WIFI services in school, furnished libraries, comfortable staffroom where teachers sits face to face, Pedagogic inspectors, Budget for seminars within the school, etc.	Agree Strongly agree Disagree Strongly disagree Neutral	Q11-15
	teachers' disposal for professional collaboration and the teachers' pedagogic competency	DV: Teacher efficacy	Application of the CBA, PBA, E- Learning, Evaluation in the CBA, Better classroom interaction with students, better ways of meeting the needs of slow learners, classroom flexibility		Q11-13
	Н3:	IDV: Professiona I teachers' leadership	Strategic leadership with vision for teacher professional development, organizes school based pedagogic seminars for capacity building, encourages team teaching and critical teaching for Improvement of teachers' classroom practices and follow up for feedbacks, organizes exchange visits for learning, inform teachers of new fellowship programs for	Agree	
	There is a relationship between good leadership		learning, involve teacher in decision making, etc.	Strongly agree	Q15-20

	in secondary schools and the teachers' classroom productivity.	Dv: Teacher efficacy	Effective class control, effective class interaction, assiduity, effective time management, effective syllabus coverage and good results	Disagree Strongly Disagree Neutral	
	H4: There is a relationship between Government policies which promotes teacher professional collaboration and the teacher efficacy in Government Secondary Schools	IDV: Government policies and developme nt DV Teacher efficacy	Policy making, providing pedagogic materials for collaboration like computers; providing materials for mini seminars, paying newly recruited teachers on time so that they can be fully involved, creating Newly or novice teachers support networks Promoting collective efficacy, quick adaptation to the classroom climate,	Agree Strongly agree Disagree Strongly disagree	Q20-26
The teachers' efficacy		DV Teacher efficacy	Implementation of decision in the classroom, assiduity, class control, time management, classroom, application of pedagogic programs.	Agree, Disagree, strongly agree, strongly	Q27-30

CHAPTER THREE: RESEARCH METHODOLOGY

3.0. Introduction

This chapter presents a description of the Methodology which was adopted during the research study. It defines the research design, target population, sampling procedures and sample size. It gives the research instruments, validity and final analysis procedure.

3.1. Area of study

This work was carried out in some Secondary Schools in Yaounde notably G.B.H.S Mendong and Mefou and Akono Division.Most of these schools are organized into two sub- sections- Francophone and Anglophones sub- section. The reason for choosing these schools is based on the Bilingual nature of the country and as these will help to understand the problem under investigation.

The population study: This study concerns all the secondary school stake holders in Yaounde, i.e. the Ministry of Secondary Education, Regional and Divisional Delegates, Inspectors, Principals, teachers, students and parents.

Target Population

Target Population refers to the individual or group of beneficiary that the project is aimed at in a geographical area. Creswell, (2012), defines population as a group of individuals with some common defining characteristics that a researcher can identify and study. Government Bilingual High School Mendong/ Mbalgong teachers are the target population made up of about 556 staff and administrators. The Principal and administrative staff were useful respondents while the teachers are more useful because the study concerns them since they face the classroom on a daily basis.

Sampling techniques: This section describes sampling techniques and sample size of the study. According to Amin (2005), sampling is a sub- group drawn from a large population meant to represent the participants. Sampling is done in order to reduce cost, increase the speed of data collection, greater accuracy of the results and availability of the population elements, Cooper and Schinler, (2012), Taking into consideration the concept under study, the researcher made use of a simple random sampling techniques where teachers in the two schools were selected. Some few administrators were interviewed to complete the study.

Table 5: A sample population of the study

Schools	Target Population	Accessible population	Sample size
(Teachers)			
GBHS	256	156	81
Mbalngong		Arts teachers- 61	Arts teachers-39
		Science teachers- 67	Science -23
		Others- 28	teachers-
			Others-19
GBHS	300	164	89
Mendong		Arts teachers- 60	Arts teachers-30
		Science teachers-78	Science teachers-37
		Others-26	Others-22
	556	320	170

Source: From field research 2022.

From table 5, the target population was the total population of teachers in G.B.H.S Mendong and Mbalngong which stood at 556 teachers. The accessible population was 320 teachers. This comprises of teachers' access for interview as well as who received questionnaires. At the end, 150 teachers were sampled for quantitative study and 20 for qualitative study.

3.2. Research design

It refers to a framework of research techniques chosen by a researcher to conduct a study. This allows the researcher to hone on a research method suitable for the subject matter and set up his study success. To attain the objectives of these study, a descriptive survey design using a simple random survey has been adopted. The descriptive survey design is out to describe situations, or a case under study. Here, one observes the impact cause by the independent variable on the dependent variable. In this study, teacher collaboration is being manipulated to see the effect on the teachers' efficacy.

3.3. METHODS OF DATA COLLECTION

A researcher needs to develop instruments with which to collect data. According to Orodho (2008), research instruments refer to tools used to collect data from respondents.

Questionnaires

The researcher used questionnaires to collect data from the teachers. Questionnaires are more convenient since the respondents can fill at their convenient time. The questionnaire is the most widely used technique for obtaining information from the

subjects because it is relatively economical and has the same questions for all subjects (MacMillan and Schumacher, 2001). A 5 point Likert scale questions was used to obtain quantitative information from teachers teaching in Government Secondary Schools in Yaounde with 30 questions in number. n-300, × The questionnaire modalities were "agree, strongly agree, strongly disagree, disagree and neutral" as indicated in table 6 below.

Table 6: Questionnaire items

Items	Number of questions
Motivation and teacher professional	6-10
collaboration	
Resources and teacher professional	11-15
collaboration	
Professional leadership and teacher	16-20
professional collaboration	
Government policies and teacher	21-26
professional collaboration	
Teacher efficacy	27-30

Validation of instrument

After the operationalization of the variables, we came out with the indicators. From indicators, we constructed the instruments. The instruments were submitted to the expert judges to examine the validity of content. Thus, this type of validity established here is known as content validity. Content validity refers to the extent to which the question on our questionnaires are related to the variables of study and really measure what they are supposed to measure. For Marshall and Hales (1971), validity should indicate the relevance of the test for specific purpose. It is the researcher who establishes the validity of research instruments.

The procedure for establishing content validity is = number of the items declared valid \div total number of items.

The rule is that for the instrument to be accepted as valid, the average index must be 0.7 or above.

Reliability of questionnaires

In order to establish the reliability of instruments, the test retest was used. We first administer the instrument to a group of twenty teachers in G.B.H.S Etoug-Ebe Yaounde. This was within an interval two weeks. The correlation was then measured.

As already mentioned, the rational for using questionnaires in this study is based on the fact that they facilitate data collection thereby economizing time and financial resources. A total number of questionnaires were administered to respondent with the intention of data collection.

In order to do this, we have to seek the collaboration of the school authorities so that access might be given to contact the teachers and distribute the instrument to them in their respective schools. The field study took a period of two months. The main research questions were:

- ➤ How can effective teacher collaboration enhance the teachers' efficacy?
- > What are the challenges and benefits of teacher collaboration in Secondary schools?

Administration of questionnaires

A total number of 300 questionnaires were printed and the researcher went down to the two main schools for distribution. About a month was spent doing this as the researcher had to convince groups of teachers to fill the questionnaires, providing them with pens. At times, the respondent will complain of tiredness and had to take the questionnaire back home to fill. Others completed them on the spot and refunded them to the researcher. At the end, all were gathered for analyses

Interview

Interview accordingly to Yin (1994) is one of the important sources of gaining case study information in qualitative method. This method is very helpful because it gives the opportunity to the interviewer to classify questions which is of doubt to the interviewee and it can draw the attention of the interview to the right direction if he or she is going out of question. The interview guide is formulated on the basis of research questions.

A semi structure interview guide is used as an instrument so as so as to encourage respondents to answer the questions. It is also advantageous because it helps to collect standard data across informants and of great depth can be obtained from structure interview. A semi structured interview has its flaws in research process. Taylors (1984), gave detailed criticism of this method based on the idea that does not provide first-hand information on how people act prior to this criticism, the method is still used as one of the main instruments of the study in order to find out factors that can work for and against

teacher collaboration. A semi structure interview was used in the study because its usage fulfills the objectives of the study allowing unique responses from participants.

As a research method, the interview is a conversation carried out with definite aims of obtaining certain information. In this study, Interview evolved gaining insight into the state of readiness as well as progress that has been made in the school level of collaboration. The target for this interview was mostly school departmental heads, Vice Principal who could keep tracks of teachers' collaborative activities and their records of practices in the class room. The researcher spends about 20 minutes with each interviewée with the used of interview guide. Notes were collected through tapes using the phone and jotting in a note book.

Observation

The observation method will be used in collecting data. Observational data represents firsthand account obtained in an interview Meriam & associate (2002, p. 13).

The researcher participated in collaborative sessions in order to observe. Field notes were taken in physical setting, activities, events and reactions. As passive observer, accurate pictures of interaction and reactions of participants' were gathering through focus observation. In order to prepare for this observation, to collect valid data, the cooperation definition of aims of observation, we have to build technological gadgets and adopt to appropriate strategies in order to avoid the distorted of phenomena under observation. At least, give visits were paid to the respective schools so as to be taken for granted during observation sessions. This type of observation used in this study was direct and indirect observation. Observation is a method of getting first-hand information by reducing myopic representation of the problem under study. Using instruments such as pens, papers, cameras, data was collected from the natural environment.

Documents

Collaborative groups were required to complete a collaborative log, collected from departments chair and School improvement committees. Text books and other valuable articles were also consulted to support the research.

Internet sources:

Websites were consulted for valuable information

3.4. METHODS OF DATA ANALYSES TECHNIQUE

Organization of data

Interviews were transcribed in a timely manner, as well as the coding of these transcripts. Word document were used to organize data.

Coding

It is a process where the researcher can place information from the transcript into categories (Creswell, 2008). The researcher creates a list of positive categories before starting to code transcripts. More categories are added to the process as necessary as the coding progresses. The processing of data was done using the SPSS Software (SPSS 25.0 for windows).

The Pearson chi 2 (X²)

The Pearson chi 2 was used to analyze quantitative data, where

The expected values of the two nominal variables were calculated using the formula:

$$x^2 = \sum (o_i - E_i)^2 / Ej$$

Where Oi =Observed value (actual value)

And Ei = Expected value

After calculating the expected value, chi2 test of independence was calculated to observe values of the two variables.

Degree of freedom (DF) was calculated as thus;

DF: (r-I) (C-1) where R= number of rows

C=number of columns

The Level of significance or alpha value (a) was set at 0.05.

The null hypothesis (Ho) assumes that there is no association between the two variables.

The alternative hypothesis (Ha) assumes that there is an association between the two variables thus rejecting the null hypotheses

CONCLUSION

This chapter has dwelt mainly on the method used in collecting and treating information. Emphasis here is mainly on the qualitative and the quantitative method which are used to arrive at this research method. The used of the two methods was to get quality and first-hand information which will give credibility to this research work.

CHAPTER 4: DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0. Introduction

This chapter of the work is destined to present and analyze the results of this research piece. It is the question of presenting the results as identified in the chosen schools, a coding to the teachers' services rendered, their gender, classes taught, the relative variables and hypotheses etc. After this is said and done, we will proceed to the verification of the hypothesis not forgetting the interpretation, discussion and recommendation for further research.

4.1. Data presentation

4.1.1. Qualitative data presentation.

The purpose of this study was to determine the relationship between teacher professional collaboration and the teachers' efficacy in some government secondary schools in Yaoundé. In this section, we are going to show how teachers define professional collaboration and efficacy, how they feel about their collaborative efforts, and how collaboration has affected their output in their workplaces. Qualitative data were collected using the following methods, 20 teachers were interviewed with the used of guiding questions, observations of 4 collaborative sessions, and six collaborative meeting logs from two Secondary schools in Yaoundé. Data was coded to include sections on professional collaboration with themes as motivation, teamwork, /Leadership, resources, efficacy in terms of class management, relationship with students, pedagogic application of the CBA, and syllabus coverage as well as benefits/ barriers to professional teacher collaboration

On the process of Collecting Data in order to discover qualitative study, permission to conduct the study was first granted by the Faculty of Education of the University of Yaoundé I. 20teachers were selected from two public schools with a total staff population of approximately 567 teachers and a student population of approximately 3000 students. These staff was mostly administrators who acted as departmental heads, guidance counselors, discipline masters, Vice Principals. This research site was chosen due to its accessibility. The results and data gave an insight into the influence of positive/ negative effects of professional collaboration by teachers on their efficacy in their workplace. The

main criteria for their selection were that they were involved in a collaborative group in the schools, for example in departments teaching both arts and science subjects.

All participants collaborated within the general school setting or department setting, just not in the subject area. In addition to interviews, observation of collaborative sessions, document review was employed to gather data. Ten interviews were conducted in a face-to-face format for approximately 15minutes each. The guiding questions were used to facilitate these sessions. These questions focused on their perception of collaboration, motivation to collaborate, resources available and individual teacher perception of the influence of collaboration on their efficacy. These sessions were recorded on a cassette recorder and transcribed with 24 hours using Microsoft Word. There were no names used in these transcripts to maintain confidentiality. In order to ensure reliability and validity, I allowed the participants to review the transcripts of their interview. They were allowed ample freedom to make changes they felt were necessary. The changes made were in expanding on their definitions or changing a word to reflect their thoughts more clearly. This member checking procedure allows a researcher to improve accuracy, credibility, and validity of the recorded interview (Creswell, 2012). Member checking also allows critical analysis of the findings and content of the interviews (Creswell, 2012).

Observations of Collaborative Meetings

The researcher attended four collaborative meetings as a passive observer. During these meetings, field notes were taken in a journal and also, filled out the same collaborative log the participants had to complete. About 30 minutes was spent each time doing these observations.

The observation notes were used to compare to the interview transcripts to determine the accuracy of what the interviewees said in the collaborative sessions. During these observations, field notes documents were kept.

Collaborative sessions

In addition to interviews and observations of collaborative meeting, I collected collaborative logs. Administration of this school required each participant complete a log of each meeting attended and turn it in to the department head. Analysis of the logs allowed me to determine if what was being observed in the collaborative meetings was accurately documented. Along with the analysis of the collaborative logs, I conducted

observations of these meetings as discussed in the previous section. Having multiple types of data allowed me to triangulate all three types of data to determine themes.

Coding

Themes were determined by coding the interviews after they were all completed. Coding involved going through the transcripts and determining themes and discrepancies. As themes started to appear, they were categorized according to the questions asked during this study.

These data were triangulated with the document analysis and observations to improve consistency and to see any discrepant findings. Triangulation allowed me to look at the data from multiple types, such as the interviews, collaborative logs, and observations used in this particular study (Creswell, 2012). Overall, the multiple forms of data collection supported the idea that collaboration has a positive effect upon teacher efficacy; however, some minor discrepant data did emerge. This discrepant data will be discussed later in this section. By using multiple data sources in the form of interviews, observations, and collaborative logs, triangulation validated the data. I used triangulation to minimize any possible bias on the part of the participants and me. I was concerned that the participants may say in the interviews what they felt I wanted them to say as they were colleagues.

Teachers' Backgrounds

Twenty teachers voluntarily participated in the study. Table 7 shows the educational background, by certificate earned by the teachers who participated in the study.

Table 7: The educational level of the participants

Number of participants	Certificates	Schools of participants	General classes taught
6	DIPES I	G.B.H.S Mendong	Form 1 - upper sixth
5	DIPES I	G.B.H.S Mendong	Form 1 – Upper Sixth
5	DIPES II	G.B.H.S Mbalgong	FORM 5 LSS, USS.
			LSA. USA
4	DIPES II	G.B.H.S Mbalgong	FORM 5. LSS, USS.
TOTAL =20			USA, LSA/

Source: Field study, 2020

Table 8: Representation by participant's years of experience

Years of experience	Number of participants
0-5years	7
6-10years	5
11-15years	3
15-20years	2
21 years and above	3
	Total – 20

Source: Field study, 2022.

It is separated by their total years of experience of the participant. Table 8 shows that these teachers have many years of experiences with quite a significant amount of teaching outside the participating school.

There was an extensive array of experience among the participants. They had taught not only in public schools but also in Christian and other private schools, psycho educational centers, and reform schools. This diversity of experience of the participants created a varied and broad experiential background to draw upon for the interview portion of the study. Table 9 and 10 represent the number of participants per gender and function who participated in this quantitative study.

Table 9: Gender representation of participants in the study

Gender	Number of participants
Male	7
Female	13
Total	20

Source: Field study, 2022

Table 10: Administrative representation of participants in the study

Administrative position	Number
Principal	1
Vice principals	3
Guidance counselors	2
Discipline masters	1
Head of departments	13
	Total- 20

Source: Field study 2022.

Qualitative research findings

In this qualitative case study, five themes emerged across the interviews and data collected, documented and described how teachers believe collaboration affects their efficacy in the work environment. Below show how those themes are correlated with the research questions proposed for this study:

- ➤ Definition of Professional teacher collaboration and the definition of teacher efficacy
- ➤ The influence of motivation on the Teacher Professional Collaboration and teacher efficacy
- > Teacher professional Collaboration and the classroom efficacy
 - o Application of pedagogic styles in the classroom notably the CBA
 - o Relationship with students; teachers and parents
 - o Lesson preparation and Classroom management
 - o Syllabus coverage
- ➤ The influence of teacher professional collaboration on the teacher efficacy
- ➤ Benefits and barriers to teacher Professional collaboration
 - o **Theme 1:** A. Definition of Collaboration

The definition of collaboration is the basis of the overall discussion that took place during the study as determined using interview questions related to Research

 Question 1. All the participants were asked to give their definition of collaboration as it relates to teachers. This related to the following interview questions:

1. How do you define collaboration?

How often do you meet with the other teachers you collaborate with?

All the participating teachers stated that it was teachers working together, but then some differences appeared. Teacher B posed the definition as follows:

The way I look at collaboration is teachers coming together to see what are the best practices and strategies and show those ideas, along with what worked and not worked in the classroom. Teachers learn from the experience of other teachers and hopefully walk out with a greater understanding of what you have been doing and gaining knowledge from the teachers you collaborate with. Nine teachers mentioned pacing of the course,

writing lesson and/or unit plans, and writing or planning common assessments when they defined collaboration. Teacher mentioned the following:

The most useful collaboration is teachers just getting together informally and sharing ideas. The more specific the better for all participants. Sitting around and talking about what to do in general terms is not as helpful as this is how I do this particular job. It helps you get some ideas. The common theme was that sharing strategies and implementation techniques are essential to effective collaboration. Teachers who participate in the collaborative process gain concrete strategies, activities, and lessons to implement in their classroom (Comenius & O'Neill, 2002, DuFour et al, 2006).

Theme 1: Definition of Efficacy

The second theme, definition of efficacy, was determined by relating to the themes provided by the interview answers.

How do you define efficacy?

Every teacher interviewed related that efficacy is a feeling or attitude towards one's workplace environment. Eight of these teachers stated that it could be a positive or a negative feeling. Another four teachers defined efficacy with only positive attributes.

Teacher B defined efficacy as follows:

The overall emotions or feelings that the teachers or staff has regarding a particular topic, what is taking place in the school, decision making, what input teaches have into decision making. When efficacy is low, it can affect you in many ways, in how you perform, ways it is manifested, and how it is going to be brought into the classroom.

Teacher C defined efficacy as follows: In general, I would define the word as how people feel about their work environment. Your attitude towards students and general input and output in the classroom

No teacher felt the word only had negative connotations. Instead, the majority related only positive attributes to the word, such as "feeling good about teaching, taking some pride in your work, and feeling inspired." Another teacher described efficacy as related to "people's comfort and level of satisfaction with their current employment situation." This same feeling is described in DuFour and et al. (2006).

Theme 2: Motivation and the teacher efficacy

The following questions were asked:

What is your motivation of becoming a teacher?

How often do you meet with other teachers to collaborate?

What are your strength and weaknesses?

Do your schools often organize seminars, exchange visits and conferences within the school?

Theme 3 questions involved both intrinsic and extrinsic motivation of the teachers to involve in teachers' collaborative activities and the impact on their efficacy:

Concerning the question of the reason for becoming a teacher; about 12 of the twenty teachers talked of impacting knowledge on young learners: two of the twenty-five teachers mentioned it was the available profession where they could pass an entrance to grab a government registration number. The rest talks of their motivation first is money. Generally, external motivation came from senior colleagues, other colleagues, love for subject content and the school leadership.

Concerning their weaknesses; teacher A talked of personal family issues which sometimes infringe into the school milieu:

Concerning meeting for collaboration; most of them talked of once per month at the level of the department:

Theme 3: Teacher professional collaboration and the classroom efficacy.

The third theme, collaboration and the classroom related to the following interview questions:

- 1. How does collaboration impact your classroom?
- 2. How does collaboration impact your workload?
- 3. Do you collaborate on individual classroom lessons?
- 3. Do you often practice co- teaching?

The teachers were asked about how collaboration impacts their individual classroom and workload. Seventeen of the 20teachers stated that collaboration had a positive influence on their classroom. Three teachers talked about sharing ideas and strategies in their collaborative sessions, and then they are able to return to their classroom with a new activities and feeling reinvigorated. Teacher A related that "although I loving being able to bounce ideas off of teachers, it is something I miss now that it is not there." This same teacher felt there was little impact on the workload expected. Teacher F felt it did not impact her in the classroom at all. She felt as a physical education teacher that she is just another adult in the classroom.

When asked if collaboration impacted the workload, 10 teachers stated that it had a positive influence on their workload. They are able to share resources, ideas, and strategies. Six teachers felt that their workload increased because of collaboration.

Teacher G reported that "collaboration increases your workload because you have to make the time to participate in the collaborative sessions." However, the same teacher also stated "that through collaboration we are better able to meet the needs of our students.

Sixteen teachers felt they had to make time for the meeting, and by sharing resources and sharing the creating of activities, it ended up increasing their workload. Two teachers felt it had not impact on their workload. Both of these teachers were physical education teachers.

The participating teachers were asked if they collaborate on individual lesson plans. Four teachers answered this question in the negative. Teacher C did not answer this question, as this teacher does not currently collaborate or has not collaborated in the past. Six teachers stated that they collaborate on individual lesson plans. Teacher I, a Physical education teacher, stated that it makes things easier with her co-teacher if they have discussed the lesson plans previously, especially since they are together in the classroom for the entire day. Another teacher collaborated on daily lesson plans with a teacher new to the course, which assists the new teacher a tremendous amount. All teachers thought their collaborative efforts were at least adequate. Two teachers mentioned that they felt they could do better and input more in the collaborative sessions. In all the interviews, it was revealed that for effective collaboration, all teachers need to be willing and open to participation and to learn from one another. Collaborative sessions should be a time of sharing and learning for all participants; therefore, all participants need to enter with an open mind (DuFour et al., 2006a; Hytten, 2011).

Theme 4: The influence of professional collaboration on the teacher's efficacy.

The main focus here was to see if professional collaboration influences the teachers believe in attaining his or her teaching objectives or goals. The following questions were asked:

1. How has collaboration helped you in managing the students, teachers, administrators and parents' behavioral problems? Most of the responses were they have been able to study some characters through collaboration and know how to approach them. In the class room, some students are better managed due to discussion in collaborative sessions like class council meetings, departmental meetings.

2. Evaluate the available resources or didactic materials placed at teachers' disposal to foster professional collaboration and the teacher efficacy?

Most of the teacher's talked of lack of resources like internet connection, well-furnished libraries to encourage professional collaboration. Most seminars for capacity building are organized by the regional delegations in connection with pedagogic inspectors with little or no follow up while the school lacks the resources to organize school based capacity building seminars.

- **3.** Evaluate your degree of integration of ICT and CBA in Teaching and learning. About fifteen teachers out of the twenty-five teachers declared they were still backwards as most of our Secondary schools lack lights in the classroom. Application of APC for about seventeen of them stood at approximately 66%.
 - **4.** How would you describe the influence of collaboration on your efficacy?

Twelve teachers stated that they felt their participation in the collaborative sessions had influence on their efficacy. Seven of these teachers felt it was a positive relationship.

Collaboration is positive and it helps morale was reflected by one teacher. Feeling included as a new teacher was posed as a benefit by another teacher. Another teacher said that collaboration allowed for "fresh eyes on the topic and curriculum." Another teacher felt this collaboration influencing efficacy should be a goal. This teacher felt there needed to be a modification in how collaboration was done with incorporating critical teaching among teachers. The ability to talk and be positive for each other was related by another teacher. Teacher B felt efficacy would be higher if teachers were allowed the choice to participate in collaboration and not mandated to participate. Teacher H said that collaboration helps them to "feel like pals in the collaborative group and to be able to share ideas freely" was brought up by another teacher. Teacher K felt that morale with collaboration improves when teachers are held accountable for the process and stated "that someone has to see that collaborative meetings are scheduled and held to be effective." Although the majority felt there was a positive influence, a negative influence was felt by the other six teachers. Teacher F says "it is just one more thing that has to be done." Teacher D feels because of how she sees her role in the classroom, there is little to no effect. Teacher F is a special education teacher who sees his role more as a teaching assistant than a teacher. Teacher L felt that "The ability of these meetings complaint sessions can create a negative atmosphere and that it depends on the colleagues in the group."

Theme 5: Benefits and Barriers to Collaboration

When the teachers were asked if anything interfered with their collaborative efforts in the following questions:

- 1. Does anything interfere with your ability to collaborate effectively?
- 2. What benefits, if any, come out of the collaboration?

Eight teachers mentioned time as a major barrier. This included other meetings, paperwork, and other commitments such as tutoring students. The unwillingness of fellow teachers to collaborate was stated by five teachers. These teachers stated the unwillingness included fellow teachers who think their ideas are the only ones to share and follow. To a new teacher this can feel oppressive and the new teacher does not feel confident to share in that type of atmosphere. Teacher E mentioned power issues as a barrier. This teacher felt that everyone needs to be equal in the collaborative group in order to feel they can open up and share ideas. Teacher F relates that since she is not a certified in the subject area that she teams with, that she is not taken seriously. She felt that the subject teachers feel she is not competent enough in the subject area to listen to. Teacher L mentions that these sessions can turn negative and become a complaining session about other topics, Teachers related some personal feelings about their experiences in collaboration.

Teacher B relates:

That we rarely do much in the way of team building. In many professions people go on retreats. At the high school level, we think that is silly. I have had many jobs where that was a part of the job. One year the people I was working with formed some type of group against me and I was left out of collaboration. I have seen other collaborative groups that were negative as well.

Teacher D talked about power issues as being an interference that had to be dealt with during the collaborative meetings.

Next, the teachers were asked about benefits to collaboration. Sharing ideas, strategies, learning from other teachers, and talking to other teachers were mentioned as benefits by eight teachers. Higher student scores were mentioned by two teachers along with a greater interest in the course by the students. Pacing and curriculum were mentioned by six of the teachers. They appreciated being able to keep pace with the other teachers and knowing where each was in the curriculum. One teacher mentioned that it light on how teachers perceive their role in the classroom and how to give information to students. Clarity of purpose for her role with working with students with disabilities was mentioned by another

teacher. Teacher H related that she was able to see "the effects of collaboration, willing and positive collaboration. You see higher test scores, more interest, and higher grades." Most teachers shared the same sentiment along with being in the same place in the content with each other in the same subject. "It helps me reflect and to look within. When I meet with my fellow colleagues, I try to learn from them". This scenario was also noted among the majority of the participants. Teachers are teaching each other during collaboration (DuFour et al., 2006b). When teachers meet to collaborate they are learning from each other and sharing their experiences, which is the foundation of the constructivist theory (Dewey, 1967).

Collaborative Sessions and Logs

In addition to interviews, observations of collaborative sessions and analysis of collaborative logs were conducted to validate the interview findings. In this qualitative study, interviews allowed for dialogue regarding the definitions of efficacy and collaboration. The observations of the collaborative meetings provided for a direct observation of what was being discussed and the environment surrounding the meeting.

The collaborative logs were collected to corroborate the interviews and meeting observations. Observations were made by me of these meetings while I took field notes.

Teachers were asked about their collaborative meetings to include frequency and content of those meetings. The frequency of those meetings is shown in the following Table

Table 11: Frequency of collaborative meetings

Frequency	Number
Daily	0
Once a week	1(departmental heads)
Monthly	1 (Departments)
End of term	1 (The class council)
Do not collaborate at all	0

Source: Field study 2022.

As demonstrated by the table 11 above, the majority of teachers collaborate formally about once a week. There was one subject area that met once every two weeks. Five teachers mentioned meeting informally in their responses such as meeting in the hallway between classes, lunch or in a classroom. The teacher who does not collaborate does not

attend the meetings because this teacher feels her voice is not heard. She felt that she has no input into what is being taught as she is a special education teacher she feels she only has input into how to teach it differently. Because she was not consulted, she felt she is only there in the room; she did not attend the meetings. All of the meetings took place in one group member's classroom for accessibility and ease. The sustenance or topics of the meetings fell into similar categories for all the teachers as shown in Table 11.

Table 12: Topics discussed in collaborative sessions

Items	Number
Sequence test	5
Sport	2
Coordinate lab. Equipment	3
Coordinate students activities/ discipline	8
CBA	3
Students with special needs	4
Socials (Baby shower, burials etc.)	10

Source: From field study, 2022.

Overall, most of the topics discussed involve the curriculum and planning how to implement it and assess the students on that content. According to the participating teachers, the discussions revolved around the planning and required paperwork more than the reflection over lesson implementation or student data. Only five teachers mentioned student data as one of the topics, which is a major area of collaborative discussion according to experts such as DuFour et al. (2004).

When asked if there was a leader of their collaborative sessions, all but one group of teachers stated that it was the senior teacher in their group. The other group stated that all members of that collaborative are leaders. This type of attitude made all members feel important and that their ideas and feelings are going to be taken seriously.

When asked about disagreements, all but two teachers stated that disagreements were talked out and compromises were reached or the members decided to agree to disagree on that particular area. One teacher mentioned that in his particular group, the other members of the group would refuse to listen and cooperate. The leader would exert her will on the rest of the group. This made it difficult for any relevant discussion to take place.

A total of eight teachers were observed due to scheduling and the collaborative teams not meeting. One group discussed the standards, testing, pacing, unit plans, activities and the final exam. Along with that, differentiation was discussed. Another group also talked about the final exam along with standardized testing. Another group also talked about standardized testing, the final exam and laboratory activities.

I heard students mentioned, but not student data in two of the groups. Students were mentioned in relation to discipline problems and how to handle them, along with the frustration this created. Many of the topics that were related to me during the interviews were not observed in the observational meetings. This is possibly due to being able to only observe one meeting. The field notes recorded allowed the interview data to be corroborated with the meeting sessions. The difference between the two types of data was of minimal significance. The meetings logs were also analyzed to corroborate the data collected in the interviews and observations. The majority of the logs documented items on the logs such as when to write the next test, what chapter or chapters they would cover next, and Are a worksheet or activity they would do. This fulfilled the requirement set forth by the administration of the school. These logs rarely documented student data being shared or discussed. A major part of collaboration is discussing student data as stated by DuFour et al. (2006a) and Conzemius & O'Neill (2002).

Discrepant Data

The analysis of the data collected revealed two discrepant cases. The first being a teacher who felt the leader of the collaborative made the decisions without input from him. The second was a teacher who felt she was not listened to at the meetings and did not attend anymore. Identifying and analyzing discrepant data is an integral part of validity testing in qualitative testing (Maxwell, 2012). Discrepant data needs to be considered along with the supporting data as to whether the conclusion of the study is plausible or needs to be modified. Teacher C noted that there was a power struggle in his collaborative sessions. The leader of the group made the decisions and the rest of the group was to follow what they did. This particular teacher, who had many years of experience, was not allowed to share his expertise or ideas. The potential for power struggles is strong in this type of environment, especially when time is a factor. The definition of collaboration states that sharing should be taking place (DuFour et al., 2006a: Martin-Kniep, 2008). Teacher F also felt her voice was not being heard.

There was a tendency for the sessions to become complaint sessions about students, no sharing of strategies or ideas, not talking about student data, and taking time out of the school day.

Evidence of Quality

This study followed procedures to assure accuracy of the data. The data was collected in the forms of interviews, observations of collaborative sessions and meeting logs. The participants were chosen due to their accessibility to the researcher and also their willingness. They were also considered colleagues who would be truthful in their answers and not stating what they felt I wanted to hear. These questions became the basis for the themes that I discovered as I reviewed the interview transcripts. I read through the interview transcripts and collected observation logs and employed taxonomic codes over specific textual examples that suggested patterns with participant responses. Once these patterns became manifest and after review of the constructivist conceptual framework, I began to develop themes as responses to the research questions. L. Any discrepancies that I found were noted.

As stated earlier, these teachers felt the collaborative sessions easily become complaint or venting sessions about student behavior. The teachers did not share strategies or ideas that would help student understand the concepts that were not being taught, nor were student data discussed. The sessions became simply a format to share the workload according to these teachers.

4.1.2. Presentation of quantitative data

Presentation of demographic information

Two schools in Yaoundé were chosen for random simple sampling. All the teachers were eligible for study because they undergo professional learning either at the level of the school or at the level of the department. 300 questionnaires were prepared to be distributed in the two schools. At the end, 150 questionnaires were retained. The target populations were teachers.

Table 13: Distribution of sample population

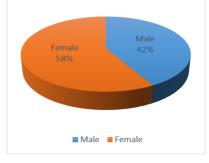
Schools	Target Population	Accessible population	Sample size
(Teachers)			
GBHS Mbalngong	256	142	67
GBHS Mendong	300	158	83
	556	300	150

Source: Field study 2022

Table 12 above indicates that the target population for study was mainly teachers in two schools and out of the 300 questionnaires distributed for sample, one hundred and fifty were retained for analysis.

Figure 4.1: The gender representation of the study

Teachers	Numbers	Percentages
Male	63	42
Female	87	58
Total	150	100



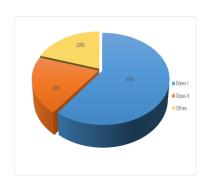
Source: Field study, 2022

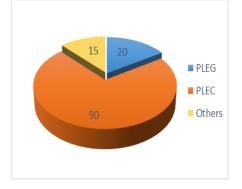
From the graphic4:1 above corresponding to table, 150 teachers participated in this quantitative study. Amongst them were 98 females giving a percentage of 65.1% and a male teacher population of 52 persons giving a population of 34.9%. This therefore shows that in this study, female teachers were more represented than male teachers.

Figure 5: Representation of teachers by their academic qualification and grade

Teachers	Number	Percentage
DIPES I	90	60%
DIPES II	30	20%
Others	30	20%
Total	150	100%

Teachers	Numbers	Percentage
PLEG	20	30%
PLEC	90	60%
Others	15	10%
Total	150	100%



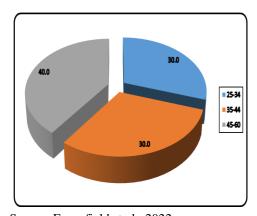


Source: From field study, 2022.

From the above table, 60% of the teachers were from the first cycle of ENS with a teaching Diploma DIPES I, 20% were from the second cycle (DIPES II), and the remaining 20% were like physical education teachers,30% and others who had acquired other degrees like the Masters and PhD certificates.

Figure 6: Teachers representation according to their longevity in service

Teacher	Number	Percentages	
Science	60	40%	
Arts	45	30%	
Others	45	30%	
Total	150	100%	



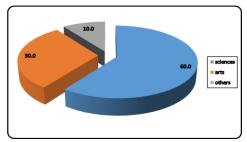
Source. From field study 2022

From the graphic 6 above, teachers are presented according to their longevity in service. Those who are 0-10 years in service are represented by 30%, 10-20 by 30% and 20 years and above by 40%.

Figure 7: Representation of teachers according to subjects taught

Teacher	Number	Percentages
Science	90	60%
Arts	45	30%
Others	15	10%
Total	150	100%

Source: From field study 2022.



From the chart above corresponding to figure 7, teachers' efficacy was studied on a generalized based whether teaching arts or sciences. Arts subjects includes history, Geography, Economics, Literature with a total representation of 30% and Science subjects included Biology, Mathematics, Computer science, Physics, Chemistry (60%). Others were subjects like physical education or sports (10%).

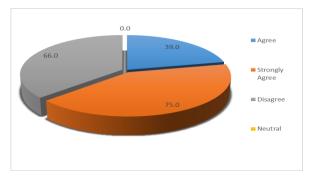
4.1.2.1. Presentation of questionnaire items

A questionnaire was designed with the use of Likert Scale items of "agree, disagree, strongly agree, strongly disagree and neutral in both French and English with affirmative or positive questions. Teachers were asked to tick the one which best affirms to them. The results obtained were as follows.

Motivation and teachers' efficacy

Figure 8 : Representation of teachers love for teaching as a vocation

Test items	Number of teachers	Percentages
Agree	39	50%
Strongly Agree	45	30%
Disagree	66	20%
Neutral	0	0%
Total	150	100%

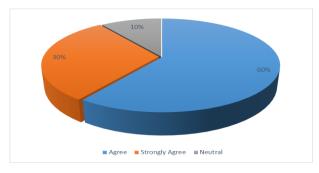


Source: Field work 2022

From figure 8 above, 30% strongly agreed to this affirmation while 50% agree. Putting the two together, one could say that 80% out of the total number of teachers studied have a vocation for teaching which helps in their assiduity in school and classroom practices. Others talks of their motivation for becoming teachers first were for money and with such, it has a negative motivation towards their classroom assiduity.

Figure 9: Representation of novice teachers' interaction with senior colleagues

Test items	Numbers	Percentages
Agree	90	60%
Strongly Agree	45	30%
Neutral	15	10%
Total	150	100%

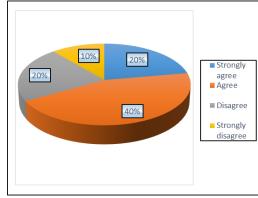


Source: Field study 2022

From figure 9 above, 30% of the teachers interrogated through questionnaires affirm that interacting with senior colleagues affect their classroom practices positively so they strongly agreed. 60% agreed to support the fact that it is true and helping them. This is a form of external motivation. None of the teachers disagreed while 10% were neutral.

Figure 10: Representation of teachers' mastery of subject content

Test items	Number of responses	Percentages (%)
Strongly agree	45	20%
Agree	60	40%
Disagree	30	20%
Strongly disagree	15	10%
Total	150	100%



Source: Field study 2022

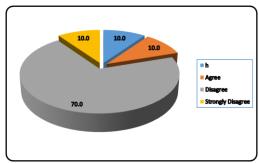
From figure 10 above, 30% of the population studied strongly agreed that a teachers love and mastery of subject content is a strong motivation for collaboration and continues learning. This goes a long way to improve on classroom presentation of knowledge and efficacy. This was strongly followed by agreed with 40% thus toppling disagree and strongly disagree which was 30%. Therefore, there is a link between subject mastery, the urged for more knowledge and better classroom presentation.

Available resources for collaboration and the teachers' efficacy

Resources like a Well-furnished library, computer lab, staff room, electricity will have encouraged professional learning within the school milieu. It will also give teachers that love for teaching and job satisfaction. The following responses were obtained from teachers.

Figure 11: representation of school structures and teachers love for teaching

Test items	Number of responses	Percentages
Agree	15	10
Disagree	105	70
Strongly agree	15	10
Strongly	15	10
disagree		
Total	150	100%



Source: From field study 2020.

From figure 11 above, 70% of the teachers did not see any link between their school structures and their love for teaching or efficacy. This is because their school structures are not the best. Only a small percentage of 10 % agreed. From the second chart, about 70 % of the teachers disagree on having any impact felt by the computer lab and Internet facilities on their classroom practices.

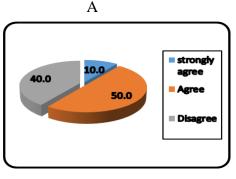
Figure 11: Representation of colleague's collegial attitude / Departmental involvement.

Table:

Test items	Number of responses	Percentages
Strongly agree	15	10
Agree	75	50
Disagree	60	40
Total	150	100

Table

Test items	Number of responses	Percentages
Strongly agree	45	30
Agree	45	30
Disagree	45	30
Strongly disagree	15	10
	150	100



30.0

30.0

strongly agree
Agree
Disagree
Strongly Disagree

В

Source: Field study 2022

From figures 12 above, in A, 50% of teachers agreed that teachers' collegial attitude eased the acquisition of knowledge. This helps improves their classroom assiduity and efficacy. Likewise, a collegial atmosphere amongst colleagues improves their classroom pedagogy. Also, 30% of the teachers agreed that they collaborate at the level of the department as shown in figure B.

Professional teacher leadership and the teachers' efficacy

It looks at a teacher, first as a leader to himself and others and then the school leadership in collaboration and implementation of decisions.

Figure 12: Representation of teachers' involvement in school decision making/Participation in PTA meetings

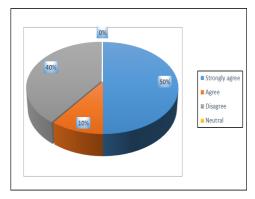
Table A

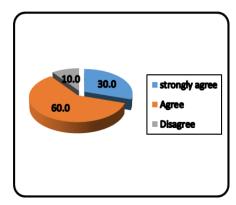
Test items	Number of responses	Percentages (%)
Strongly agree	75	50
Agree	15	15
Disagree	60	40
Neutral	0	00
Total	150	100%

Table B

Test items	Number of responses	Percentages (%)
Strongly agree	45	30
Agree	90	60
Disagree	15	10
Total	150	100%

A B





Source: Field study 2022

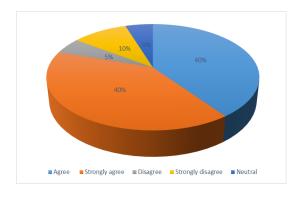
Teachers involvement in decision making was registered a higher degree of 70% agree and classroom implementation in A. In the B pie chart, parents' involvement in

P.T.A, classroom implementation and control has an agreed [percentage of 605 agree against 10 % of disagree. This shows that when teachers are part of a decision making in school, it facilitates classroom implementation thus ensuring their efficacy in class.

Hypothesis **4:** *Government policies and the teacher efficacy:* These are the actions taken by the government which influences teachers' collaborations directly and indirectly.

Figure 13: Representation of teachers' departmental involvement / critical teaching

Test items	Teachers	Percentages (%)
	responses	
Agree	60	40
Strongly agree	60	40
Disagree	7	5
Strongly disagree	15	10
Neutral	8	5
Total	150	100%



Source: Field study, 2022

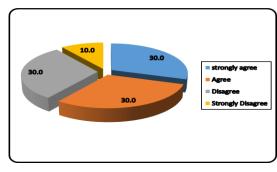
From figure 14 above, 40% of the studied population agreed, 40 % strongly agreed and only 10 % disagree. This indicates that teachers who are highly involved in departmental learning and practice also critical teaching where a colleague can identify some lapses in his /her colleagues and try to ameliorate greatly improves the classroom climate for better results.

Government policies/development programs and the teacher efficacy
Government policies help to affect the school system and the teachers' efficacy either
positively or negatively. In this covid period, the government has reduced classroom sizes
by breaking the school into shift system. Teachers are able to manage their classes well but
ineffective in other areas

Figure 14: Representation of government policies on school supervision

Table

Test items	Teachers responses	Percentages (%)
Agree	45	30
Strongly agree	45	30
Disagree	45	30
Strongly disagree	15	10
Total	150	100%



Source: Field study 2020.

From figure 15 above, 30% teachers from this empirical study agree and 30% strongly agree that a strong pedagogy supervision team in school can positively influence their classroom efficacy.

Figure 15: Representation of organization of school seminars

Table

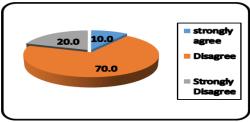
Test items	Teachers responses	Percentages (%)
Agree	32	21.3
Disagree	35	23.3
Strongly disagree	45	30
Strongly disagree	38	25.5
Total	150	100%

Source: Field study 2022

From the pie chart above (figure 16), 70% of the sampled population disagree of having seminars and workshops in schools which can help to build up their mastery of the new programs like the CBA and e-teaching. They indicated that most seminars are organized by the Regional departments/ divisional departments but with little or no follow up for implementation.

Figure 16: Representation of the Covid classroom Sizes

Test items	Teachers responses	Percentages (%)
Strongly agree	15	10
Disagree	105	70
Strongly disagree	30	20
Total	150	100%



Source. Field study 2022

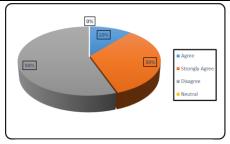
From figure 17 above, about 70% of the sample population still indicated a negative attitude towards the covid classroom sizes though it is good because it has reduced the classroom sizes. With this, teachers can effectively control their classes. But on the other hand, it has increased their workload as they complained of being less efficient especially in the evening classes.

4.1.2.2: Section E: The teachers' efficacy

These are the things that teachers believe in and can do in the classroom to bring about a change in teaching and learning. It is believed that collaboration helps to boast up their actions at the level of class control, time management, assiduity, follow up of slow learners, implementation of pedagogic programs which goes a long way to improve on learners' achievements.

Figure 18: A representation of teachers' level of student engagement in the classroom

Test items	Number of teachers	Percentages
Agree	15	10%
Strongly Agree	45	30%
Disagree	75	50%
Neutral	0	0%
Total	150	100%



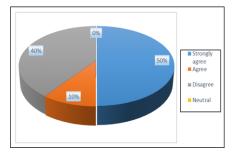
Source: From field research

From figure 18 above, 10% agree, 10% strongly agreed on professional collaboration having an effect on the level of teachers' level of student engagement in classroom activities.

FIGURE 19: A representation of teachers' level of decision implementation in the classroom.

Table

Test items	Number of responses	Percentages (%)
Strongly agree	75	50%
Agree	15	10%
Disagree	60	40%
Neutral	0	00%
Total	150	100%



Source: From field research

From figure 19 above, 50% of the population studied strongly agrees on a link between professional collaboration and their level of decision implementation in the classroom. 10% agree while 60% disagree bringing it to equilibrium.

4.2. Verification of the study hypotheses

The study was tested using the chi square of testing of independence statistic. It was used to determine the significant relationship between the independent and the dependent variable. The hypotheses were set as follows:

Ho: There is no significant relationship between professional teacher collaboration and the teachers' efficacy in secondary schools.

Ha: There is a significant relationship between professional teacher collaboration and the teachers' efficacy in secondary schools.

The expected value of the two nominal variables was calculated using the formula:

$$x^2 = \sum (o_i - E_i)^2 / Ej$$

Where Oi = Observed value (actual value)

And Ei = Expected value

After calculating the expected value, chi square test of independence was calculated to observe values of the two variables.

Degree of freedom (DF) was calculated as thus;

DF: (r-1) (c-1) where

R= number of rows

C=number of columns

The Pearson or P-value was set at 0.05 significance.

The null hypothesis assumes that there is no association between the two variables.

The alternative hypothesis assumes that there is an association between the two variables thus rejecting the null hypotheses. Two variables each from the questionnaire items were selected paired for testing as follows:

Hypothesis 1: Motivation and the teachers' efficacy

Ho: There is no significant relationship between motivation and the teachers' efficacy in government secondary schools. **Ha**: There is a significant relationship between motivation and the teachers' efficacy in secondary schools.

Table 14: A representation of teacher love for teaching and student engagement.

Table 14 is a representation of observed and expected frequencies on the relationship between teachers love for teaching and students' engagement in class

Out of the 150 teachers who provided answers to the question on the representation of teacher love for teaching and student engagement which was a question under motivation, 35 arts teachers agree, 18 disagree, none was neutral, 15strongly agreed giving a total of 53 teachers. Thirty Science teachers agreed, 8 disagree, 15 strongly disagree giving a total of 53. Others who are either physical education teachers or other support staff, 10 agree, 4 disagree, none was neutral and 45strongly agree. These observed and expected frequencies were used to compute value as represented below in table 15.

Student engagement					
(DV)	Agree	Disagree	Neutral	Strongly agree	Total
	35	18		20	
Arts Teachers	(17.5)	(3.6)	00	(6)	73
	30	8		15	
Science Teachers	(15)	(1.6)	00	(4.5)	53
	10	4		10	
Others	(05)	(0.8)	00	(3)	24
Total	75	30	00	45	150

The expected values are in brackets The level of significance (a)= 0.05%

Degree Freedom: (r-1)(c-1) = (3-1)(4-1)

= 2x3=6

Table 15: Presentation of X^2 value on the relationship between teachers love for teaching and students' engagement

Observed frequency (O)	Expected frequency (E)	О-Е	(o-E) ²	(o-E) ² ÷E	
75	37.5	37.5	220	5.9	
36	13.5	22.5	506.25	37.5	
30	6	24	576	96	
0	0	00	00	00	
Total	56	84	1302.25	139.4	139.4÷9 = 15.5

Critical value from the chi square table= 15.5

Statistic or calculated value = 15.5>12.59

Decision= 15.5>12.59. The null hypothesis is rejected

From table 15 above, the Pearson chi square (X^2) was 15.5. It is more than the critical value which is 12.59. This therefore shows that there is a more than 5% significance between teachers love for teaching among secondary school teachers and their Efficacy in lesson presentation as well as student engagement. When teachers have internal motivation

for teaching, they are motivated to improve on their pedagogy by every means available thus carrying the students along.

Hypothesis 2: Resources and the teachers' efficacy

H0: There is no significant relationship between available resources for collaboration and the teachers' efficacy in secondary schools.

Ha: There is a significant relationship between available resources and the teacher efficacy in secondary schools

Table 16: Representation ICT centers for professional learning and the application of pedagogic programs

Application of pedagogic	ICT Ce	ICT Centers(IDV)							
Programs(DV)	Agree	Agree Disagree Strongly agree		Strongly disagree	Total				
Science teachers	7	60	7	4	78				
Serence reactions	(o.7)	(42)	(0.5)	(0.4)	/6				
Arts teachers	3	35	5	6	49				
This receivers	(0.3)	(24.5)	(0.5)	(0.6)					
Others	5	10	3	5	23				
	(0.5)	(07)	(0.3)	(0.5)					
Total	15	105	15	15	150				

Pearson Chi2 (2) =33.5

P. value= .05

Expected values in brackets.

DF= 6

Critical Value=12.59

Chi square statistic value=33.5

Result= 33.5>12.59

Decision= 33.5>12.59. The null hypothesis is rejected

From the table 16 above, the same procedure was followed as in table 15, the chi square after calculation was equal to 33.5 and the critical value is 12.59. This means the statistical value is greater than the critical value. This therefore indicates that there is a significant level of relationship between a furnished school computer laboratory for collaborative learning and the improvement of the teachers' pedagogy in class. This therefore rejects the null hypotheses (Ho) which states there is no significance relationship between available resources for teachers' collaboration and the teachers' efficacy. The alternative hypotheses were therefore accepted.

Hypothesis 3: Professional teacher leadership and the teachers' efficacy.

Ho: There is no significant relationship between teachers' leadership in professional collaboration and the teachers' efficacy.

Ha: There is a significant relationship between teachers' leadership in collaboration and the teachers' efficacy.

Table 17: Representation of teachers' involvement in decision making and classroom implementation

Involvement in decision		Class control(DV)							
Making (IDV)	Agree Disagree Strongly agree		Neutral						
Arts teachers	6	38	20	0	64				
	(0.6)	(15.2)	(10)						
Science Teacher	7	20	45	0	72				
	(0.7)	(8)	(22.5)						
Others	2	2	10	0	14				
	(0.2)	(0.8)	(0.5)						
Total	15	60	75	0	150				

Pearson Chi square- calculated value =23

Level of significance = .05

The expected values are in brackets

The level of significance= 0.05%

Degree Freedom: (r-1)(c-1) = (3-1)(4-1)

= 2x3=6

Critical value from the chi square table= 12.59

Statistic or calculated value = 23

Decision= 23 >12.59. The null hypothesis is rejected

Ho: There is no significant relationship between teacher leadership and the teachers' efficacy in government secondary schools

Ha: There is a significant relationship between teacher leadership and the teachers' efficacy in secondary schools.

From table 17 presentation, the Pearson chi square (X2) was calculated giving 23. It is more than the critical value which is 12.59. This therefore shows that there is a more than 5% significance between teacher among secondary school teachers and their efficacy in implementation. The null hypothesis was therefore rejected in favor of the alternative hypotheses that there is significant relationship between teacher leadership in professional teachers' collaboration and the decision implementation in the classroom.

Hypothesis 4: Government policies and the teachers' efficacy.

Ho: There is no relationship is a relationship between Government policies to foster professional teachers' collaboration and the teachers' efficacy in government secondary schools

Ha: There is a significant relationship between government policies and the teachers' professional collaboration

Table 18: Representation of teachers' involvement in pedagogic training and classroom management

Government policies on		Classroom management(DV)						
School organization. (lDV)	Agree	Disagree	Strongly agree	Strongly disagree				
Science teacher	15	18	10	16	59			
	(3.2)	(4.2)	(3)	(4)				
Arts teachers	15	10	20	7	52			
	(3.2)	(2.3)	(6)	(1.8)				
Others	2	7	15	15	39			
	(0.4)	(1.6)	(4.5)	(3.8)				
Total	32	35	45	38	150			

Expected values in brackets.

DF=6

Critical value from chi square table =12.59

Chi square statistics =24.5

Decision= 24.5>12.59. The null hypothesis is rejected

From table 18, Pearson chi square value was calculated and it totals 24.5 which is greater than 5%. Therefore, government policies which fosters continues pedagogic training, supervision within the school setting has a great influence on the teachers'

efficacy. The null hypothesis was therefore rejected in favor of the alternative that there is a significance relationship between pedagogic training and supervision and the teachers' efficacy

Table 19: Recapitulation of the study results

Hypotheses	X ² Read	X ² Calculated	Level of significance	Decision
HI	12.59	15.5	0.05	H _o rejected
H2	12.59	33.5	0.05	H _o rejected
Н3	12.59	23	0.05	H _o rejected
H4	12.59	24.5	0.05	H _O rejected

From table 19 above, all the null hypotheses from the selected variables tested were rejected. It was therefore concluded that they exist a relationship between teacher professional collaboration and the teachers' efficacy. However, it a fair or weak relationship due to the many obstacles relating to teacher professional collaboration ranging from teachers' attitude, lack of motivation, resources, real professional learning communities, supervision and reinforcement teams, etc. Therefore, more is still left to be done so far as this aspect of collaboration is concerned in our Secondary schools.

4.3. DISCUSSION

The research titled "Teacher professional collaboration and the teachers efficacy" was intended to find out how teachers professionalism within a collegial atmosphere in school can affect their input in class and students output. It was based on the assumption that school failure in our secondary schools has always been a reality caused by so many factors in which the teacher factor is inclusive. This is through the application of the school curriculum, leadership and the pedagogic styles. As an ongoing factor, ways must constantly be sought to address problems of school failure. It was based on this that the research focused on teachers' professionalism within the school milieu to improve classroom practices and curriculum implementation.

Our results from the findings confirm a significant relationship between teachers' professional collaboration and the teachers' efficacy in the two selected secondary schools studied. Motivation of teachers which is first of all intrinsic, deals with accepting teaching first as a vocation before the monetary aspect and then, other forms of motivation like coaching at the level of the department and team work were found to be an additional factor to get them fully engaged in internal professionalism within the school milieu. Other factors like providing resources which can get teachers engaged in discussing their challenges in classroom implementation is an additional factor. However, from the findings in the two schools studied, these resources are totally lagging. Teachers absolutely lack a furnished library where they can access at any time to meet up with students' challenges, computer laboratories with internet facilities for research, lack of well relaxed staff room for professional interaction. For example, in G.B.H.S Mendong, there is no staffroom. Teachers relax under trees after lessons in the classroom. This is already a discouraging factor to professional learning. However, teachers are able to make good use of the ICT center especially computer teachers to improve on their classroom efficacy.

Teachers' professionalism is equally a very important factor to efficacy. It starts by the teachers accepting themselves as leaders and would be leaders. With this, they get involve in decision making and implementation. The current leadership in a school also matter. Active leader's influences efficacy in schools through their leadership. This is by bringing professional learning activities which gets the teachers involve in professional learning. Achieving good results for the school is an additional applause to good leadership.

Research conducted by Mullen and Hutinger (2008), Hewson (2013) suggested school leaders needed a model positive learning behavior for other teachers to emulate in order to improve their professionalism. Orlando (2016), talks of school leaders acting as a form of motivation to professional learning.

Government policies can also enhance the teachers' efficacy. By constantly implementing changes in policies like changing pedagogy programs to meet the learners' needs in the changing times will get the teachers involved in professional learning and implementation. Above all, providing resources for new challenges is an additional applause. However, government policies should be evaluated constantly for amendments since they can instead act as a retarding factor towards the teachers' efficacy. For example, the shift period which was introduced by the government in 2021 due to the Covid 19 pandemic has helped the teachers to effectively manage their class and control indiscipline. Besides, from the findings, they have created electronic groups for professionalism like WhatsApp's groups which has helped them to effectively handled their students both onsite and offsite. This is because the evening classes are sometimes ineffective. However, the negative aspect as confessed by teachers has been an increased in workload not matched by any motivation in terms of incentives which can be a serious factor that would affect teachers' efficacy negatively with negative impact on students' performance.

The findings in this study has greatly confirms the cognitive theory of Albert Bandura (997) which talks of a generative factor of human competence. This does not only involve the number of skills owned by a person, but what your belief you can do with what you have under a variety of circumstances. Efficiency belief is rated by the different level of tasks and their strength which was used as the teachers' abilities to execute activities. Self-efficacy was rated as mastery of subject content, experience, verbal persuasion and others.

The constructivists' theory of Lev Vygotsky was also revenant in this study. New teachers who are being absorbed into the teaching field cannot work in isolation. They must work in connection with experience colleagues both in practice and implementation. By so doing, teachers improve their efficacy and better results on the part of students. In the two schools study, the hierarchical structure of the school as well as its division into departments already signifies learning room for each other. However, at times, discussions in collaborative sessions from the findings are not helpful to the teachers' classroom. Some teachers only get involved in sharing ideas when it comes to the social aspect.

Kunt Lewin in his field theory talks of the field as a function of behavior. Teachers cannot be effective in a school or classroom in isolation. They work together in teams to accomplish task as seen in this empirical research. Understanding this forces in group dynamics will give rise to changes in a group for its advancement and betterment. Teachers also work in teams (T-Groups) to accomplish task in the teaching learning process. The study has also confirmed that leadership styles depend on the leader.

Leadership styles within a particular school will affect its level of professionalism and efficacy. Manka (2021), carried out a study on the influence of leadership styles on teachers' attitudes towards work in public secondary schools in Yaoundé VI municipality and delegation of duties, motivation, job satisfaction and performance were used to determine teachers' attitude towards work. At the end of her findings, it was concluded that leadership styles have an effect on teachers' attitude towards work. She recommended that teachers should be involved in decision making. Involving in decision making is tantamount to professional collaboration which was found relevant to this empirical research.

From these research findings, it can be concluded that resources, good leadership, government policies and motivation can greatly enhance teachers' professional collaboration and efficacy. However, leadership skills are fixed and depend on a particular institution as leadership styles differ from persons to person. Besides, from empirical research, professional learning communities are not far from absent in our Secondary school in Yaoundé. Teachers see it as encroaching into their professional lives. Teachers still perceive the culture of collaborative professional development as strange and believed to have already received all they needed in the training school. Departments which are led by departmental heads were supposed to focus on this but they act more as a forum for coaching only. At times, most of the discussions at departmental meetings are focused on social 1 (visiting the bereaved, baby shower, and other parties). Also, it was found that some teachers naturally have attitude problems like pride, self-containment, introverts which encroaches into their collaborative activities. It is based on these challenges that recommendations have been made.

4.3.1. Limitation of the study:

A research of this magnitude cannot be void of limitations confronted in the field. These limitations were varied and diverse but only the relevant ones will be discussed.

1. The topic, 'Teachers' professional collaboration and the teachers' efficacy in Government Secondary schools in Yaoundé "was too broad to study. This is because the topic does not really tie down to a particular group of teachers since teachers are first and foremost, those of the Anglophone sub-section and those of the Francophone sub-section. Besides, there are further break down into arts and science teachers. Arts are further divided into subjects like history, Economics, Language, Geography etc. Science is further break down into chemistry, Physics. Mathematics, Computer Science, Geology. It was difficult to really manage these groups to get a perfect research finding. Besides, the two schools chosen were intended to be in Yaoundé VI, but after defining the variables and going out for field research, it was discovered that G.B.H.S Mbalgong was in the Mefou and Afamba Division and not Yaoundé VI.

To mitigate this effect, the topic was maintained as simply "Professional teachers' collaboration and the teachers' efficacy in Yaoundé''. The two cases were then maintained as G.B.H.S Mendong and Mbalgong since there are in Yaoundé. Questionnaires' were then prepared in both French and English to get both Francophone and Anglophone teachers involved in a general study. The teachers were then studied in a global perspective as arts and science teachers.

- 2. Efficacy is a very difficult aspect to understand and test. There was contemplation whether to test it from the teachers' perspective or from the students' perspective from their academic performance and views. To mitigate this problem, this empirical research was tested from the teachers' views on classroom management and other activities. Thus, the teachers were chosen as the sampled population.
- 3. The sample size was three hundred teachers in the two schools but at the end, only one hundred and fifty questionnaires were retained. This is because; most teachers have a certain attitude towards filling questionnaires for research. It was a major difficulty but to mitigate this effect, hypothesis had to be tested with the 150 questionnaires returned.

4.3.2. Recommendations for further study.

The topic can be further exploited by tailoring research on how professional collaboration affects teachers' efficacy, focusing data collection on students, their performance on various subjects taught by teachers in class, their classroom behavior etc. This will give a clearer picture of the study.

- 1. Arts teachers can be study as the target population as well as science teachers. Besides, only Anglophone teachers can be targeted as well as francophone teachers. Also, subject areas like Mathematics, physics, economics, chemistry can be targeted to get a detailed empirical knowledge of how professional collaboration can affect teachers' efficacy.
- 2. Besides, leadership styles, motivation, government policies, resources can also be studied as individual factors affecting professional teacher collaboration as well as efficacy.
- 3. Teacher professional collaboration can also be tailored towards efficacy in improving learners' output with special needs in secondary schools

4.3.4. Recommendation for action:

The results can be shared in the participating school for them to better understand the study. This will help to inform the teachers more and motivate them to involve more in professional collaboration

GENERAL CONCLUSION

The work put together in this master piece title 'Teacher professional collaboration and the teachers' efficacy in government secondary school in Yaoundé'', brings an outlook to professional collaboration within the school milieu and the teacher competency within the classroom. Efficacy here is not only the number of skills own by a teacher, but his or her belief on the students and the ability to execute tasks to bring about their success. To accomplish this study, two schools had been chosen in Yaounde which are G.B.H.S Mendong located in Yaounde VI and the neighboring school- G.B.H.S Mbalgong which is instead in the Mefou and Akono Division in Yaounde. The research problem focused on student failure in secondary schools both at the level of class examinations and in public exams. The study holds on the stand that school failure is a reality and even though the students have the majority blame, teachers can also be responsible due to their behavior in classroom practices like assiduity, classroom management, time management, follow up of slow learners, love for students, implementation of pedagogic practices and its flexibility like the CBA, E-Learning, Project based learning programs which are currently being used.

Looking the aspect of efficacy from the angle of professionalism especially through school based learning; the study has been designed from the perspective that collaborative learning can have a positive impact on teachers' pedagogical practices which will in turn act on student learning and achievement.

The study adopted the mixed approach where the qualitative and quantitative data was collected and analyzed to arrive at the present findings. The main instruments which were used to collect qualitative data were through observation, in depth interviews, collecting information from documents/ internet, libraries, etc. Twenty teachers in the two schools were randomly selected for in depth interviews in both schools. The researcher also participated in collaborative meetings as a passive observer where information was collected and coded into themes for evaluation.

The quantitative data was collected through sample studies with the used of questionnaire consisting of 30 items. The 5 point Likert scale was used to obtained information from the target population which were teachers in the two schools. The Likert scale items were: "Agree, strongly agree, disagree, strongly disagree neutral.

The general hypothesis was to see how teacher professional collaboration is significantly related to the teachers' efficacy in government Secondary Schools. The

indicators of teacher professional collaboration were motivation, resources, teachers' leadership, and government policies.

The following can be summarized as results of the research findings:

- > School structures in our secondary schools are set up in a way to encourage professional teacher collaboration. Teachers are grouped into department where they can discuss problems affecting their various departments and look for strategies for improvement of teaching and student learning.
- > Teachers sometimes work in teams to accomplish task.
- ➤ School failure is still a serious phenomenon affecting our secondary school system as well as lack of efficacy amongst some secondary school teachers which constantly needs to be addressed.
- Some teachers still work in isolation within the school milieu without seeing any need for professionalism. They complain of time to collaborate and some have complex issues like bringing down themselves to learn from others.
- ➤ Government policies with direct impact professionalism within the school like workshops, seminars, conferences are absent.
- ➤ Secondary schools in Yaoundé have multimedia centers but their rate of operation is weak. Teachers don't even access them for learning. It is used only by computer teachers.
- Critical teaching is very minimal.
- ➤ Teachers do involve in professional leadership decision making. Teachers who are actively involved are also reflected in their classroom implementation. They are interested in learning and applying new pedagogy at any time.
- New teachers are less efficient because of the government delayed system in paying newly absorbed teachers into the public service. As a result, they are less assiduous and registered a lot of absences. This turn to affect their classroom productivity. Novice teachers also learn from experts or older colleagues.
- The Covid 19 has helped to break down the number of students in class in the two schools studied, but the number still ranges from 50-70 students in which some teachers complained that it is still large for them to manage. Besides, it is not matched by any incentive with the increased workload.

The major challenges to teacher professional collaboration in the two selected schools was found to be lack of time, personal attitude exhibited by some teachers, lack of

resources, no serious government policies on teachers' professionalism within the school milieu, leadership problems etc. Despite these, there is still a fair link between teacher professional collaboration and efficacy. It is based on these findings and challenges that the following suggestions have been made.

Suggestions

- > Support networks in schools should be created for newly absorbed teachers into the teaching field to help them fully integrate into the teaching system and their classroom. These support networks should be assigned with pedagogic inspectors and old experience teachers to help them grow faster in their classroom efficacy and efficacy in general.
- ➤ Government policies should be directed towards creating collaborating professional networks in secondary school which can help teachers strengthen their professionalism. Departmental heads and departments in schools can also be reinforced with resources to carry out this function.
- ➤ Cooperating teaching, team teaching, critical teaching should be reemphasized in our secondary schools. It should not end only at the level of training schools.
- ➤ The government should encourage school based seminars, conferences, workshops. This is by providing resources for its organization rather than left only in the hands of regional delegations and pedagogic inspectors in which they organized such learning opportunities just once in a year. This will readily get all the teachers involve in professional development; even the less motivated ones.
- ➤ Teachers should get involved in decision making. This will go a long way to increase their level of motivation and implementation of policies in the classroom. Besides, this will also prepare them for other leadership positions.
- ➤ The government should give priority to staffrooms for teachers in secondary schools. A well-furnished staffroom will help to bring the teachers together in a relaxed atmosphere for professional learning and development and why not improve their efficacy.
- ➤ Government policies should be tailored towards opening multimedia centers in schools for both students and teachers learning. The teachers need knowledge of the computer especially in this computerized age for research, accomplishing teaching tasks and other things. An ICT teacher should be send to schools mainly

- to train teachers on the use of ICT tools since it is imperative for the E-learning program and other learning/teaching programs.
- ➤ Continues priority should be given to equipping school libraries and computer laboratories. Teachers should create chart groups on WhatsApp's, Facebook and other platforms mainly for professional collaborative learning. This should be separated from business forums.
- School Principals and administrators in secondary schools should give priority to teachers' professional learning and development within the school milieu and supervision for follow up. They can create a day within the month or week for general pedagogic seminar, conference or workshops besides departmental practices. This will go a long way to improve on teachers' efficacy in schools.

APPENDIX 1: QUANTITATIVE RESEARCH QUESTIONNAIRE

REPUBLIQUE DU CAMEROUN

Paix – Travail – Patrie

UNIVERSITE DE YAOUNDE 1 ******

FACULTE DE SCIENCES
DE L'EDUCATION

S F E REPUBLIC OF CAMEROON

Peace – Work - Fatherland

UNIVERSITY OF YAOUNDE 1

FACULTY OF EDUCATION

DEPARTMENT OF FUNDAMENTAL STUDIES IN EDUCATION

RESEARCH QUESTIONNAIRE FOR TEACHERS

I am Fru Boma, a master II student of the faculty of Education. I am out for research under the topic «Professional teacher Collaboration and the teachers' efficacy in the teaching-learning transaction in Secondary schools in Yaounde VI. Your frank response to these questions will go a long way to accomplish the purpose of this study.

Thanks for your cooperation

TEST L: DEMOGRAPHIC INFORMATION
1. Sex: Male ☐ Female ☐
2. Academic qualification: DIPES I. ☐ DIPES II ☐ Others ☐
3. Grade: PLEG PCEG Others
4. Longevity in service 5-10 ☐ 11-20 ☐ 20 years and abov ☐
5. Subjects area taught: Sciences ☐ Arts ☐ Others ☐
TEST II: QUESTIONNAIRE ITEMS
Following the research topic above, efficacy can be defined as teacher

12. Your school have a good ICT/ Internet facility for collaborative learning

Following the research topic above, efficacy can be defined as teacher's belief in his/her ability to successfully cope with task, obligations and professional roles e g assiduity; obligations, classroom management, discipline etc. Professional collaboration are the things done together as to promote teaching and students learning.

Read the statements steadily and chose one that applies most to you by placing a tick (\checkmark) on it. The items abbreviated are: Strongly agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD and Neutral(N)

SECTION A: TE	ACHE	R'S MOTIVAT	ΓΙΟΝ					
6. You love teachi	ng as a	vocation						
A	D		SA		D		N	
7. You have a goo	d mast	ery of your subj	ect content					
A	D		SA		SD		N	
8. The school ince	entives	encourage you a	and your pedagog	gic activi	ities.			
A	D		SA		SD		N	
9.Coaching/teamw	ork eas	e your lesson pi	resentation in cla	ss			-	
A		D	SA	SD		N		
10. You collaborat	e often	with senior coll	leagues in school					
Α	D		SA		SD		N	
Section B: AVAII	LABIL	ITY OF RESO	URCES					
11. Your school st	ructure	s and facilities g	gives you love for	r collabo	orative tead	hing		
A	D		SA		SD		N	
				•				

SA

SD

N

13. Your school hav		l relaxe	d staff		for interac	tive lea		sharing	of id	leas.		
A	D			SA			SD				N	
14. There are availa	ble reso	urces w	hich er	ncoura	ages your o	collabor	ation at d	epartme	ental l	level	e e	
Α	D			SA			SD			Ν		
15. Your colleagues	' colleg	ial attit	ude enc	courag	ges your cl	assroon	n practices	3				
A	D			SA	1		SD			N		
SECTION C: PRO	FESSI	ONAL	TEAC	HER	LEADER	RSHIP						
16. You always part	icipate	in decis	ion ma	king v		colleagi						
A		D			SA		SD			N	[
17. You participate	regularl	y in PT	A meet									
A		D		5	SA		SD				N	
18. Your present Pr	incipal l	leadersh	ip prov			w up pri	_	or class	imple		itation	
A	D			SA			SD			N		
19. You attend scho			•									
A D		SA	A					SD			N	1
20. You always prac		tical tea	ching v			igues						
A	D			SA	:		SD			N		
21. Your collaborati	ve prof	essiona	l activit	ties ha		ou a go			•		1	
A		D			SA S		SD	SD			N	
SECTION D: GOV							MENT P	ROGR	AM			
22. Government pol	icies en	courage		to wor	k in teams	3	I G 4		- an			1 37
A			D				SA		SD			N
22 571					<u> </u>		<u> </u>		<u> </u>		001	
23. The government		which 6						oes you			m effi	cacy
A	D			SA	:		SD			N		
24 37: 1 1 2			1 11	1 -	. 1		1	•				
24. Your school ofte	en orgai	nizes sc	nool ba		edagogic s		s and conf		S		N.T	
A				D		SA		SD			N	
25 Vann - 1 1			1		1 1	1						
25. Your school cor	Stantly	organiz	es exch	nangeo SA	<u> </u>	ic iearni	ng progra SD	IIIS		N		
Λ	ע			S.P.	1		טט			IN		
26 Th1-:6	in C		.d 1		d 110 1		<u> </u>	16:4-1-	o1. 1	11.11.0	h	
26. The shift system cooperating teachin		na perio	ou nas r	eauce	eu your cla	ssroom	sizes; mu	iupiy w	orkic	ad ti	nus en	couraging
A cooperating teaching	D			SA	4		SD			l N	1	
11	٦			57	1		50			1	-	
SECTION E: THE	TEAC	пр т	TETT	ACV								
27. Professional co					vel of stud	lent end	ragement :	in learn	ino			
A A	D	ion mei	cases y	SA		icht eng	SD	iii icai II	mg	N		
				57	-					11		
28.You can effectiv	ely appl	ly pedas	gogic p	rograi	ns like the	CBA/E	E- Teachir	g in cla	ıss	1		
A	D			SA			AD			N		
1	1									1		

29. You can effec	tively m	anage and cor	ntrol vour clas	: c						
A	D	lanage and con	SA SA	55	AD		l N			
30. You find it eas	sier to in	nplement deci	sions in your	classroo	m					
A	D		SA		AD		N			
Je suis F Yaoundé 1. Je su établissement Sec cette étude' 'Mere TEST 1 : INFOR 1. Sexe : Masculin 2. Qualification A 3. Grade : PLEG 4. Longévité en se 5. Matière enseign Suivant la thème of faire en face à des des apprenants ler La collaboration p et apprentissage d Lisez les déclarati tique (√) dessus. Fortement désacce SECTION A : TI 6. Vous aimez l'er	is pour ondaire ci de vor MATIO	na, étudiante e la recherche e s à Yaoundé'' otre coopération DEMOGIATION DEMOGIATION DEMOGIATION DI LA	en sujet "La Votre réponsion RAPHIC DIPES II [20 ans et p Autre [peut être défies profession usive; discipl choses réunie choisissez une at 'D'accord (), ATION	en Facu collabor se à ces Autre llus ni comm nelles ; H ine. es en tan e réponse	lté de Sciation prof questions De le enseigne de le enseigne t que collè	ence de l'Ed essionnelles d va aller beaud gnants se croi le ; la gestion gues pour am demande de p	les enseig coup pour ent en leu de la clas éliorer l'e	r capacité à se ; le suivi		
D	DS	ment comme d	FD		FS		N			
7. Vous avez un	e bonne	e maitrise de	votre conter	u de ma	ntière		1			
D	DS		FD		FS		N			
8 Vos incitation s	colaires	s et votre pague	et de naiemen	it vous ei	ncourage					
8. Vos incitation scolaires et votre paque			FD	it vous c	FS		N	N		
					- · ·		1			
9. Vous collabore	z souvei	nt avec les coll	lègue sénaire	dans vot	re établiss	ement	l			
D			FD		FS		N			
10. L'école incite	rez-vous	s et votre assid	uité							
D	102 104	DS	FD	l F	FS	N				
						·				
Section B: LES F	PESOII	RCES DISPO	NIRI F							
11. Vos structure/				amour no	our enseigi	ner.				
D	1110 001100		DS	F		FS	N			
L D			Do					N		
Б			DS			15		N		
	ement a	une honne cer					nrentissao	·		
12. Votre établisse		une bonne cer	ntre TIC et de		ations inte		prentissag	·		
	ement a	une bonne cer					prentissag	·		
12. Votre établisse	DS		ntre TIC et de	es installa	ations inte		prentissag	·		

15. Les attitudes collégiales de vos collègues encouragent vos pratiques en classe

FD

DS

D

14. Votre établissement a un espace personnel relaxé pour l'apprentissage interactif et le partage d'idées.

D		DS	DS			FD		F	FS			N	N		
		İ,													
SECTION															
D D	16. Vous participez toujours à la prise d				le décision avec d'autro			es collègues.			N				
		DS						15			- 11				
17 Vous no	rtioinoz	·áaulià	romont of	ıv ránn	iona d	la 1' A D	E								
17.Vous participez régulièrement aux réunio						ons de l'APE.			FS			N			
						12									
18 Votre Pi	roviseur	offre d	e bons pr	incines	de su	ivi nor	ır mise en	œu	vre d	le la clas	3				
D	18. Votre Proviseur offre de bons principes of D DS FD					1				FS	,		N		1
															1
19. Vous p	participe	suive	ent au réu	inions	scola	ire				L		I			J
D	DS		FD				FS			N					
20.Vous pr	atiquez t	oujour	s l'enseig	nemen	t critic	que ave	ec les autr	es c	ollèg	ues					
D		DS			FD			F	S			N			
SECTION										DEVEL	OPPE	ME	NT		
21. Les po	litiques s	colaire	es vous en		ge à tra		r dans des				1		-		
D				DS	DS FD			FS		N					
22. Les pol	itiques so		qui enco	ıragé la		rvisior	ı pédagog	_		odeler v	otre ef		ité d	le classe	
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22. 17. /	. 1 1'				1 /		. 1		,						
23. Votre é	tablissen	nent or	ganise so		ies ser DS	minaire	es et des c	onfe	erenc	es pedag	ogıqu	es.	N		1
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25. Vous êt	es inforr	ne ave	c les info	mation	ıs des	bourse	s intérieu	re e	t inte	rnationa	<u> </u>				J
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26. Les sys	tème de	décala	ge COVII) a réd	uit vo	s taille	s de class	, au	gmen	te la cha	rge de	trava	ail e	t encourager	
l'enseignen															
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SECTION															
27. La coll			essionnell	e augm	nente v	otre ni		ıgag	geme		eves e	n app		issage	1
D	D	S					FD			FS			N		1
28. Vous po	ouvez ap	plique	r efficace	ment le	es prog	gramm	es pédago	giq	ues c	omme A	PC/en	seign	neme	ent.	-
electronic e														1	
D		Ds			FD	FD			FS			N			
29.Vous po	uvez gér	er effi	cacement	votre o	classe	et conf	rôle votre	cla	isse						
D				DS		FD			FS			N			
20. 17.		C '	1			4- 17	_:_:_								j
30. Vous tr	ouvez pl	us taci	ie de meti	re en c	euvre	des dé	cisions								

APPENDIX 2:

Chi-square Distribution Table

d.f.	.995	.99	.975	.95	.9	.1	.05	.025	.01
1	0.00	0.00	0.00	0.00	0.02	2.71	3.84	5.02	6.63
2	0.01	0.02	0.05	0.10	0.21	4.61	5.99	7.38	9.21
3	0.07	0.11	0.22	0.35	0.58	6.25	7.81	9.35	11.34
4	0.21	0.30	0.48	0.71	1.06	7.78	9.49	11.14	13.28
5	0.41	0.55	0.83	1.15	1.61	9.24	11.07	12.83	15.09
6	0.68	0.87	1.24	1.64	2.20	10.64	12.59	14.45	16.81
7	0.99	1.24	1.69	2.17	2.83	12.02	14.07	16.01	18.48
8	1.34	1.65	2.18	2.73	3.49	13.36	15.51	17.53	20.09
9	1.73	2.09	2.70	3.33	4.17	14.68	16.92	19.02	21.67
10	2.16	2.56	3.25	3.94	4.87	15.99	18.31	20.48	23.21
11	2.60	3.05	3.82	4.57	5.58	17.28	19.68	21.92	24.72
12	3.07	3.57	4.40	5.23	6.30	18.55	21.03	23.34	26.22
13	3.57	4.11	5.01	5.89	7.04	19.81	22.36	24.74	27.69
14	4.07	4.66	5.63	6.57	7.79	21.06	23.68	26.12	29.14
15	4.60	5.23	6.26	7.26	8.55	22.31	25.00	27.49	30.58
16	5.14	5.81	6.91	7.96	9.31	23.54	26.30	28.85	32.00
17	5.70	6.41	7.56	8.67	10.09	24.77	27.59	30.19	33.41
18	6.26	7.01	8.23	9.39	10.86	25.99	28.87	31.53	34.81
19	6.84	7.63	8.91	10.12	11.65	27.20	30.14	32.85	36.19
20	7.43	8.26	9.59	10.85	12.44	28.41	31.41	34.17	37.57
22	8.64	9.54	10.98	12.34	14.04	30.81	33.92	36.78	40.29
24	9.89	10.86	12.40	13.85	15.66	33.20	36.42	39.36	42.98
26	11.16	12.20	13.84	15.38	17.29	35.56	38.89	41.92	45.64
28	12.46	13.56	15.31	16.93	18.94	37.92	41.34	44.46	48.28
30	13.79	14.95	16.79	18.49	20.60	40.26	43.77	46.98	50.89
32	15.13	16.36	18.29	20.07	22.27	42.58	46.19	49.48	53.49
34	16.50	17.79	19.81	21.66	23.95	44.90	48.60	51.97	56.06
38	19.29	20.69	22.88	24.88	27.34	49.51	53.38	56.90	61.16
42	22.14	23.65	26.00	28.14	30.77	54.09	58.12	61.78	66.21
46	25.04	26.66	29.16	31.44	34.22	58.64	62.83	66.62	71.20
50	27.99	29.71	32.36	34.76	37.69	63.17	67.50	71.42	76.15
55	31.73	33.57	36.40	38.96	42.06	68.80	73.31	77.38	82.29
60	35.53	37.48	40.48	43.19	46.46	74.40	79.08	83.30	88.38
65	39.38	41.44	44.60	47.45	50.88	79.97	84.82	89.18	94.42
70	43.28	45.44	48.76	51.74	55.33	85.53	90.53	95.02	100.43
75	47.21	49.48	52.94	56.05	59.79	91.06	96.22	100.84	106.39
80	51.17	53.54	57.15	60.39	64.28	96.58	101.88	106.63	112.33
85	55.17	57.63	61.39	64.75	68.78	102.08	107.52	112.39	118.24
90	59.20	61.75	65.65	69.13	73.29	107.57	113.15	118.14	124.12
95	63.25	65.90	69.92	73.52	77.82	113.04	118.75	123.86	129.97
_100	67.33	70.06	74.22	77.93	82.36	118.50	124.34	129.56	135.81

APPENDIX 3: Research authorization

REPUBLIQUE DU CAMEROUN

Paix – Travail – Patrie

UNIVERSITE DE YAOUNDE I

FACULTE DES SCIENCES DE L'EDUCATION *****

DEPARTEMENT DES ENSEIGNEMENTS FONDAMENTAUX EN EDUCATION



REPUBLIC OF CAMEROON

Peace – Work – Fatherland

THE UNIVERSITY OF YAOUNDE I

THE FACULTY OF EDUCATION

DEPARTMENT OF FUNDAMENTAL STUDIES IN EDUCATION

The Dean

N° 327 /22/UYI/FSE/VDSSE

RESEARCH AUTORISATION

I the undersigned, **Professor BELA Cyrille Bienvenu**, Dean of the Faculty of Education, University of Yaoundé I, hereby certify that **FRU BOMA**, Matricule **20V3038**, is a student in Masters II in the Faculty of Education, Department: *FUNDAMENTAL STUDIES IN EDUCATION*, Option: *EDUCATIONAL PSYCHOLOGY*.

The concerned is carrying out a research work in view of preparing a Master's Degree, under the supervision of Pr. MBEDE Raymond. Her work is titled « The effectiveness of professional development-teachers collaboration in promoting the teaching-learning transaction: A case of GBHS Mendong/Mbalgong Yaoundé ».

I would be grateful if you provide her with every information that can be helpful in the realization of his research work.

This Authorization is to serve the concerned for whatever purpose it is intented for.

Done in Yaoundé, le 2.9. AVR. 2022.

For the Dean, by order

APPENDIX 4: Internship Authorization

REPUBLIQUE DU CAMEROUN

Paix – Travail – Patrie

UNIVERSITE DE YAOUNDE I

FACULTE DES SCIENCES DE L'EDUCATION

DEPARTEMENT DES ENSEIGNEMENTS FONDAMENTAUX EN EDUCATION



REPUBLIC OF CAMEROON

Peace – Work – Fatherland

THE UNIVERSITY OF YAOUNDE I

THE FACULTY OF EDUCATION

DEPARTMENT OF FUNDAMENTAL STUDIES IN EDUCATION

The Dean

N°328 /22/UYI/FSE/VDSSE

INTERNSHIP AUTHORISATION

I the undersigned, **Professor BELA Cyrille Bienvenu**, Dean of the Faculty of Education, University of Yaoundé I, hereby certify that **FRU_BOMA**, Matricule **20V3038**, is a student in Masters II in the Faculty of Education, Department: *FUNDAMENTAL STUDIES IN EDUCATION*, Option: *EDUCATIONAL PSYCHOLOGY*.

The concerned is carrying out an internship in view of preparing a Master's Degree, under the supervision of Pr. MBEDE Raymond. Her work is titled « The effectiveness of professional development-teachers collaboration in promoting the teaching-learning transaction: A case of GBHS Mendong/Mbalgong Yaoundé ».

I would be grateful if you provide her with every information that can be helpful in the realization of his research work.

This Authorization is to serve the concerned for whatever purpose it is intented for.

Done in Yaoundé, le. 29 AVR 2022

For the Dean, by order

BIBLIOGRAPHY

- Adam. C. (2002). Psychology for Dummies street. Wiley Publishing Inc.
- Amin E.M. (2004). Social Science research conception methodology and analysis.

 Makerere University Press.
- Anja. S. and Fonche. P. (2004). A synoptic view of curriculum Evolution and practice. Fornab Polytechnic Press.
- Ashu, F.E., (2020). History of Education in Cameroon. University of Buea.
- Aye, A.M.L. (2021). The relationship between teachers' efficacy and classroom management. Journal of Educational Practice.
- Attah, N.E. (2021). The impact of management on teachers' classroom management effectiveness in Public Secondary schools in Abuja. University of Abuja.
- Achimbe, E.A., (2006). "Socio-Pragmatic Constraints to Native or Indigenous Language Education in Cameroon". University of Munich.
- Attah, N.E. (2021). The impact of management on teachers' classroom management effectiveness in Public Secondary schools in Abuja. University of Abuja.
- Achimbe, E.A., (2006). "Socio-Pragmatic Constraints to Native or Indigenous Language Education in Cameroon". University of Munich.
- Abessolo, O. R. L. (2017). La qualité de l'environnement scolaire et l'efficacité de l'enseignant dans le département du Nyong et So'o. Universite De Yaounde 1
- Bandura, A. (1997), Self-efficacy, the exercise of control. Freeman
- Bandura, A. (2007), Auto-efficacité. Le s, entiment d'efficacité personnele. (2eme edition).
- Bonstingi, J.J. (1992). Schools of Quality- An introduction to total quality Management in
- Education Association for Supervision and curriculum Development. Columbia, U.S.A.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain, Educational Researcher, 33
- BRANDI, H.C. (2018). Educational policy influence on efficacy: Teachers belief in the ability to change educational policy. International Journal of teacher Education. U.S.A.
- Conzemius, A., & O'Neill, H. (2002). *The handbook for smart school teams*. Bloomington, IN: Solution Tree.
- Creswell, J. (2006). Qualitative inquiry and research design: Choosing among five

- traditions. Thousand Oaks, CA: SAGE Publications.
- Creswell, J. (2012) Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: SAGE Publications.
- Crosby, J. (2007). A beginning professional learning community: Understanding teachers' perception
- Cameroons Constitution (1996). Law No. 96-06, 18th January 1996. the National Printing Press.
- Carnoy, M., (1999). Globalization and Educational Reform. What Planners need to know. Paris, UNESCO Publication.
- Chapman, C. (2012). School effectiveness and improvement research, policy and practice: Challenging the Orthodoxy. NY: Routledge.
- CONFEMEN (2016). The quality of Education as a challenge to all. Directions and perspectives
- Crosby, J. (2007). "A beginning of professional learning community:

 Understanding teachers' perceptions". (Unpublished doctoral Thesis).

 Walden University, St. Paul.
- C.T.Q. (2011). Improving teachers working conditions. Scribrr from htt://www.teacherworkingcondition.org.
- Crafton, L., & Kaiser E. (2011). The language of collaboration: Dialogue and identity in teacher professional development. Improving Schools 14(2), 104-116.

 Scibrr: 10.1177/1365480211410437
- Dewey, J. (1967). Democracy and education. New York, NY: The Free Press
- DuFour, R. & Marzano, R., (2011). Leaders of learning: How district and classroom leaders improve student achievements. IN: Solution Tree.
- DuFour, R. DuFour, R., Eaker, R. & Many, R. (2010). *Learning by doing: A handbook* for professional learning communities at work. Bloomington, IN: Solution Tree.
- DuFour, R.& Eaker, R. (1998). Professional learning communities at work: Best practices for enhancing student achievement, IN: National Educational Service.
- Dandekar & Makhija, (1988). Psychological foundations of Education. Mandras.
- Davies, B. (2007). Developing sustainable leadership. London: Paul Chapman publishing.
- Day, C. (2007). Effects of national policies on teachers' sense of efficacy and professionalism: Findings from an empirical study from Portugal and England. Journal of teacher Education.

- Evans L. (2008). Professionalism, Professionalism and the development of educational professionals. British Journal of Educational studies, 56(1), 10-21
- Evans. L. (2011), "The shape" of teachers' professionalism in England, professional standard as performance management, professional development and change proposed in 2011 white paper. British Educational Research Journal.
- Ebot, F. A. (2017). Professional development and teachers' effectiveness in the teaching of ICT in primary schools in Yaounde I Sub- Division. Faculty of Education. University of Yaounde I.
- Etron, B. (1979). "Boottrap method; Another look at jackknife". Ann. Statistics. (1) 1-26 http://doi.org/10.1214/oos/1176344552

https: 11doi.org/10.1111/13365-2656.12382.

- McLeod, S. A. (2019). What a value tells you about statistical significance. Simply psychology.
- Philips, J. (2003). "Powerful learning: Creating learning communities in urban school reform".
- Journal of Curriculum and Supervision, 18(3), 240-258. Scribrr from www.jan.ucc.nau.edu/~coesyl-p/principle7-article2.pdf
- Ferant, J.S. (1980) Principles and practice of Education, (New Edition)
- Fonkeng. E. (2007). The History of Cameroon 1884-2004. Edwin Mellen Press Ltd.
- Fouda, E.R. (2019). « L'ergonomie scolaire de l'APC et la qualité de résultats des Élèves dans les establishments d'enseignement Secondaires public de Yaounde: Case di CETIC et Lycée de Ngoa-Ekelle. Faculte de science de L'education". Universite de Yaoundé I.
- Goldstein. M.A. (2015). Teachers' perception of the influence of teacher collaboration on teachers' morale. PhD Dissertation. Walden University
- Grand and Osanloo. A. (2014). *Understanding selecting and integrating a theoretical framework in research dissertation*: Creating a blue print for 'House'
- Howe, R. JM. (2007). 'A study of teacher collaboration in a dependent school-within school: How do teachers perceive their collaborative process and its effect on instruction?'' Unpublished doctoral dissertation, University of Massachusetts.
- Kemp, E.J. (1977). Instructional Design. CA: Fearon Publishers.
- Krejcie, R.V.& Morgan, D.W., (1970). Determining the sample for research activities. Educational and Psychological measurement.
- Kang, Z. (2008). Identity, lifelong learning and narrative. PhD Thesis.
 - University of Exeter Pollak, C.J. (2009). "Teacher empowerment and

- collaboration enhances student engagement in data-driven environments". (Unpublished Doctoral Thesis). Dominican University, San Rafael, CA.
- Law NO. 2004/002 OF July;2004 fixing rules relative to the organization and functioning of private institution.
- Mangal S.K. (2007). Essentials of Educational Psychology, Prentice Hall of India.
- Marzana R. & Costa. A. (2007). How collegiality and team work leads to real professionalism learning (*The national education Magazine*). July 2007, p25.
- Ministries of Education (MINEDUB, MINESEC, MINESUP, MINEFOP and MINEFFI) (2004" Cameroon Macro-Economic Plan" 2005-2015).

 Yaounde, Cameroon.
- Ministry of Education (MINEDUC) (1998). The school Guidelines Law No. 98/004 of April 14, 1998, Yaounde: MINEDUC.
- Nsamenang, A.B. (2011). *Hand book of African Educational Theories and practices*. Human Development Resource Centre (HDRC)
- Nsamenang. A. B. (2004). The teaching learning transaction: An Afrocentric approach to Educational Psychology. Anoh publishers.
- Nadelson, L.S., Booher, L, Turley. M (2020). The role of teacher leadership and effective classroom management. Leadership in Education Journal.
- Pugach, M, & Johnson, L. (1995). "Collaborative practitioners' collaborative schools". Denver, CO: Land Publishing Company
- Pomson, A. (2005). One classroom at a time: Teacher isolation and community viewed through the prism of the particular. Scribrr: 10.1080/00216240600561866
- Schauble, L & Glaser, R. (19960). *Innovative in learning*. Mahwah, NJ: Erlbaum
- Shey, B.B. (2017). Collective promotion and the teacher's efficiency in primary schools in Bui Division. Faculty of education. University of Yaounde I.
- Suebang, A. R. (2016). Vocation Cher les enseignants et efficacité interne du Système Éducatif Camerounais : Étude menée dans Les Lycée Enseignement De Yaoundé II. Faculté de Science de l'education. Université de Yaoundé I.
- Tchombe, T. and Agbor, M. (2005). *Models of* Teacher *Education*: The Case of Cameroon, Faculty of Education, University of Buea.
- Tchombe, T.M. (2004). *Psychological parameter in teachings*. Presses Universitaire D'Afrique

- Tchombe, T.M. (2005). *Structural Reforms in Education in Cameroon School of* Education, University of Yaounde, Cameroon.
- T.M.N Ndongko, T and L.I. Tambo (Eds) (2000) Educational Development in Cameroon 1961-1999.
- Tambo, L. (1995). Models and Practice in initial Secondary Teachers Education in Cameroon. (*Teacher Education Quarterly*), winter 1995.
- Tamukong, J.A. (2004). Towards better management of public Education in Cameroon: The case of decentralized councils for African Development, NO. 2., Vol. xxix, No 2, 2004.
- Tchombe, T.M. (2000). Growth and development of teacher Education in Cameroon in UNESCO (1961). Conference of African Reforms in Education in Cameroons School of Education. University of Yaounde, Cameroon.
- Tchombe, T.M. (1997). Structural Reforms in Education in Cameroon. scribrr at http://www.educationdev.net/education/Docs/Cameroon.
- Tchombe. T.M. (1998). Progressive Transformative Teacher Education in Cameroon. Scribbrr at http://www.ejornal.aiaier.net.
- UNESCO (1990). The Jomtien Declaration of Education for ALL, Paris: UNESCO
- UNESCO (1994). The Salamanca statement and framework for Action on Special Needs Education, UNESCO
- UNESCO (200). The Dakar Framework for action on Inclusive Education, Dakar.
- Wolfolk Hoy, Anita, & Megan, T. (2002). The influence of resources and support on teachers' efficacy belief. Educational Journal Publication.
- Woods, K.D. (2020). Teachers technological efficacy: The relationship amongst generations, gender, subject area of Secondary school teachers. Liberty University.
- www.simply psychology.org/p-value. Html.