THE IMPACT OF PEDAGOGIC SUPERVISION ON THE TEACHING AND LEARNING PROCESS IN SOME PUBLIC SECONDARY SCHOOLS IN MFOUNDI DIVISION

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To my family

CERTIFICATION

This is to certify that this thesis entitled "The impact of pedagogic supervision on the teaching and learning process of some selected public secondary schools in Yaoundé" is the work of GWANPUA DOHYA NAGUKED (19Y3396), submitted to the Department of Curriculum and Evaluation, Faculty of Sciences of Education, University of Yaoundé 1 and was under my guidance and supervision.

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LIST OF ABBREVIATIONS

AIDCAS	Attention, Interest, Desire, Conviction, Action and Satisfaction
ASCD	Association for Supervision and Curriculum Development
AU	African Union
CAMELTA	Cameroon English Language and Literature Teachers' Association
CBA	Competence Based Approach
CBC	Competence Based Curriculum
DAM	Democratic Administrative Movement
DEO	District Educational Officer
EFA	Education For All
GCE	General Certificate of Education
MDG	Millennium Development Goal
MINEDUC	Ministry of Education
MINESEC	Ministry of Secondary Education
NEF	National Education Forum
OECD	Organization for Economic Cooperation and Development
OFSTED	Office for Standards in Education Children's Services and Skills
RPSs	Regional Pedagogic Supervisors
UNICEF	United Nations International Children's Emergency Fund

ABSTRACT

The purpose of this study is to examine the impact of pedagogic supervision on teaching and learning process in selected public secondary schools in Mfoundi Division. This study was guided by four research objectives which enabled the work to be carried out successfully as the researcher was able to seek ways to improve on the different challenges facing the process of teaching and learning, thereby necessitated the need for pedagogic supervision. The study centred on four constructs of supervision - pedagogic planning, pedagogic monitoring, pedagogic evaluation, and pedagogic communication. A descriptive survey design was employed, and the sample population of the study included seven (7) government bilingual high schools with 1315 teachers of the English sub system of education. The researcher also used two main sampling technics which were the probability and the non-probability technics as a self- administered questionnaire were used to capture the views of teachers on the teaching and learning process. A regression method was the main method used in this study. The analysis of data collected revealed all four hypothesis- pedagogic planning, pedagogic monitoring, pedagogic evaluation, and pedagogic communication were all statistically significant on the teaching and learning process. Thus, the study concluded by indicating that the pedagogic supervisor can be blamed to a certain extent when the process of teaching and learning are not effective. As a result, the secondary pedagogic supervisors should always be selected not only considering accepted norms as academic and professional qualifications, but other aspects like evidence of potentials on supervisor training courses, and the candidates' knowledge on the subject matter. There should also be the urgent need to ensure that performance indicators should guide supervision, appropriate training throughout the supervisorial career, availability of handbooks, introduction of School Self Evaluation Forms (SSEF), supervision procedures and reports made available to principals, staff, and parents, which would improve upon supervisorial services in secondary schools in Mfoundi Division.

Keywords: pedagogic supervision, pedagogic planning, pedagogic monitoring, pedagogic evaluation, pedagogic communication, teaching and learning process.

RESUME

Le but de cette étude est d'examiner l'impact de la supervision pédagogique sur le processus d'enseignement et d'apprentissage dans certaines écoles secondaires publiques sélectionnées dans le département du Mfoundi. Cette étude a été guidée par quatre objectifs de recherche qui ont permis de mener à bien le travail car le chercheur a pu chercher des moyens d'améliorer les différents défis auxquels est confronté le processus d'enseignement et d'apprentissage, nécessitant ainsi la nécessité d'un encadrement pédagogique. L'étude s'est centrée sur quatre concepts de supervision - la planification pédagogique, le suivi pédagogique, l'évaluation pédagogique et la communication pédagogique. Une conception d'enquête descriptive a été employée et l'échantillon de population de l'étude comprenait sept (7) écoles secondaires bilingues gouvernementales avec 1432 enseignants du sous-système d'éducation anglophone. Le chercheur a également utilisé deux principales techniques d'échantillonnage, à savoir les techniques probabilistes et non probabilistes, car un questionnaire auto-administré a été utilisé pour recueillir les opinions des enseignants sur le processus d'enseignement et d'apprentissage. Une méthode de régression a été la principale méthode utilisée dans cette étude. L'analyse des données recueillies a révélé que les quatre hypothèses - la planification pédagogique, le suivi pédagogique, l'évaluation pédagogique et la communication pédagogique étaient toutes statistiquement significatives sur le processus d'enseignement et d'apprentissage. Ainsi, l'étude conclut en indiquant que le superviseur pédagogique peut être blâmé dans une certaine mesure lorsque l'enseignement et l'apprentissage ne sont pas efficaces. En conséquence, les superviseurs des écoles secondaires doivent toujours être sélectionnés non seulement en tenant compte des normes acceptées en tant que qualifications académiques et professionnelles, mais aussi d'autres aspects tels que la preuve des potentiels sur les cours de formation des superviseurs et les connaissances des candidats sur le sujet. Il devrait également être urgent de veiller à ce que des indicateurs de performance guident la supervision, une formation appropriée tout au long de la carrière d'encadrement, la disponibilité de manuels, l'introduction de formulaires d'auto-évaluation de l'école (SSEF), des procédures et des rapports de supervision mis à la disposition des directeurs, du personnel et des parents, ce qui améliorerait les services d'encadrement dans les écoles secondaires du département du Mfoundi.

Mots clés: encadrement pédagogique, planification pédagogique, suivi pédagogique, évaluation pédagogique, communication pédagogique, processus d'enseignement et d'apprentissage

CHAPTER ONE
INTRODUCTION

Education is an inseparable aspect of development that influences the socio-economic growth of a nation and the quality of life of its people (Enaigbe, Mkulu, 2021 & Ngole). The key institutional framework used to establish individual skills and expertise is called the formal educational system of a nation and acts as the continuum of an important ingredient for public services (Mansell et al., 2019). It is assumed that there is a need for educational stakeholders to supervise educational practices to achieve consistent beneficial outcomes to provide a proactive and quality educational system for individual community and national growth (Ampofo et al., 2019). The prerequisite for quality and efficient education therefore requires stable supervisory structures (Okendu, 2019). To that end, supervisory assessment of teaching staff helps educators to get the help they need to excel, evaluate, and consider the benefits and demerits of various educational approaches and strategies to ensure quality student success in schools (Mkulu, 2021, Ngole & Whetton, 2019;).

Pedagogic supervision ensures that adequate educational standards are met in schools and promotes the professional development of teachers to meet the learning needs of students (Ampofo et al., 2019; Mulatu, 2016). In addition, supervision is primarily seen as behaviourally oriented, process-focused educational leadership, contributes to organizational actions, coordinates interactions, provides for enhancements and maintenance of educational programs, and evaluates its achievements (Burke and Krey, 2018). Quality education can be achieved in schools by improving the quality of teaching and learning (Briggs, 2012). As a result, many nations are reforming pedagogic supervision because of its effectiveness as a key instrument for monitoring and improving the quality of education (Murage et al., 2017). It has become important because instructional supervision will enhance classroom practice and lead to the performance of students (Mulatu, 2016). There is no question that pedagogic supervision increases the academic performance of students, the quality of teachers and teaching, and helps supervisors to control the instructional work of teachers (Wanzare, 2020).

Pedagogic supervisors are obliged to educate, assist, and encourage teachers to meet the goals of supervision (UNESCO, 2017). The World Bank (2019) considers supervisory regimes to be the constant fields of change used by countries to improve their educational performance and

to mitigate the education problems associated with university education. In addition, supervision

represents all attempts by designated school administrators to provide teachers and non-teaching personnel with leadership (Akinwumi, 2020).

The role of a pedagogic supervisor is to direct and guide the teaching staff's work (Rashid, 2019). It means that principals are accountable for helping teachers do their job better by joint efforts (Kotirde and Yunos, 2015). They are important players in the judicious administration of human and material capital for the successful operation of schools. According to Kotirde and Yunos (2015), supervisors execute the following functions in the exercise of their supervisory mandate: a) mentoring inexperienced teachers to promote a supportive entry into the profession; b) raising teachers to minimum standards of successful teaching through daily coaching and in-service training; c) continuous development of case skills for individual teachers; d) working together with different groups of teachers to enhance the learning of students; and e) working with teachers to adapt and coordinate the school curriculum to meet the needs of students and to be on the path to approved education standards.

In addition, in the practice of the supervisory activities of principals, Egwunyenga (2016) believes that supervisory procedures such as classroom visitation and evaluation, inter-school visitation, seminars, and micro-teaching are generally carried out by school principals. In addition, major teaching supervision functions performed by principals include monitoring the attendance of teachers during classes, monitoring, and ensuring adequate preparation of lesson notes, verifying, and ensuring the adequacy of the work scheme and documentation of work records (Ayeni, 2019). The concepts of supervision and practical implementation, and special methods of supervision aims at promoting teaching and learning (Alila et al., 2016). These include knowledge of similar strategies; thorough supervision planning, monitoring, organising, evaluation, and communication techniques, and understanding of the supervisory process, respectively (Ankoma-Sey & Marina, 2016). In most countries' supervisory practices, interpersonal relationships are considered as the greatest advantage of all types of educational supervision, which are often needed to achieve quality outcomes (Mensah et al., 2020). Pedagogic supervision is seen as the process of checking the work of teachers to ensure compliance with regulations and procedures and maintain loyalty to higher authorities (Wanzare, 2020). Baffoe (2018) & Esia-Donkoh found that educational supervision is widely

practiced improving teacher motivation includes orientation of new teaching staff, reviewing the work record of teachers, provision of in-service instruction, observation of lessons and punctuality control.

Historical background

Supervision, as a field of educational practice with clearly delineated roles and responsibilities, did not fall from the sky fully formed. Rather, supervision emerged slowly as a distinct practice, always in relation to the institutional, academic, cultural, and professional dynamics that have historically generated the complex agenda of schooling.

Supervision is as old as mankind, but the systematic study of it is more recent. To comprehend the modern supervisory techniques, it is important to trace supervisory trends in the earlier periods of America (Kiamba, 2011). Soetopo (1984) mentioned that in the colonial era, around 1654, the activities of supervision emerged in the United States. The General Court of Chusetts Bay Colony stated that the leaders of the city were responsible for the selection and regulation of teachers' performance. This is considered as a forerunner to the emergence of the most basic concepts for the development of modern supervision. In Boston, in 1709, a committee of laymen came to know the methods used by teachers in their classes by visiting schools. Their task was not to improve teaching skills of teachers or fix fault made by teachers in their teaching, rather to know how capable teachers are in their teaching practice.

Bolin and Panaritis (1992), state that supervision emerged as a field of practice around the turn of the century. However, the first records of supervisors date back to the eighteenth century when laypersons were used to inspect or check on teachers to determine the extent to which they were doing their jobs. These persons or supervisors were often ministers, selectmen, schoolmasters, or other citizens of the community. Their method of supervision stressed strictly on control and close observation of the school facilities. This type of supervision continued in America from the American Revolution through the middle of the nineteenth century. Glanz (1995), indicated that by the end of the nineteenth century, individuals concerned with the inefficiency in schools transformed schools into streamlined central administrative bureaucracies. During this period, superintendents used supervision to legitimize their existence in the school system. Although changes were taking place in schools, supervision was still the dominant method used to administer schools.

In colonial New England, supervision of instruction began as a process of external supervision: one or more local citizens were appointed to inspect both what the teachers were teaching and what the students were learning. The supervision theme was to remain firmly embedded in the practice of supervision.

Early in the twentieth century, attempts were made to align supervision in schools with models of industrial management. Glanz (2015) stated that at this time in American history, the Industrial Revolution played a significant role in society. The Industrial Revolution strove to modernize America and removed inefficiencies within our industries. The field of education mirrored this belief; the movement emphasized the need for standardisation of educational methods. Schools were viewed as factories, where raw materials (children) could be transformed into valuable products. During this time, what has come to be known as scientific management was utilized both in schools and factories across America.

Although the methods used varied, the fundamental belief in education was that teachers were instruments to be used by administrators to realize the goals of the school. Reitzug (2013) indicates that little data suggests that supervisors in schools played any part of a supportive role. More often it seemed that supervisors kept teachers under close surveillance and there was minimal effort beyond monitoring to enable teachers to expand their professional skills. Payne (2014), author of the first published book on supervision stated that teachers must be held responsible for work performed in the classroom and supervisors as expert supervisors would oversee to ensure harmony and efficiency. Reitzug (2016) in his research of supervision indicates that supervision has been portrayed with the principal or supervisor as the expert superior to teachers and the teachers as deficient and voiceless, teaching a fixed technology.

In the second half of the century the field of supervision became closely identified with various forms of clinical supervision. Initially developed by Harvard professors Morris Cogan and Robert Anderson and their graduate students, many of whom subsequently became professors of supervision in other universities, clinical supervision blended elements of "objective" and "scientific" classroom observation with aspects of collegial coaching, rational planning, and a flexible, inquiry-based concern with student learning. In 1969 Robert Goldhammer proposed the following five-stage process in clinical supervision: (1) a pre-observation conference between supervisor and teacher concerning elements of the lesson to be observed; (2) classroom observation; (3) a supervisor's analysis of notes from the observation and planning for the post-observation conference;(4) a post-observation conference between supervisor and teacher; and

(5) a supervisor's analysis of the post-observation conference. For many practitioners, these stages were reduced to three: the pre-observation conference, the observation, and the post-observation conference. Cogan insisted on a collegial relationship focused on the teacher's interest in improving student learning, and on a non-judgmental observation and inquiry process.

As the field moved forward through the 1980's, 1990's, and early twenty-first century, models and conceptions of supervision have changed and emerged to extend democratic/collaborative methods of supervision. This was an attempt to try and disassociate the field of supervision from its bureaucratic and supervisory beginnings. However, there are authors who believe that supervision models although collaborative in nature are still control oriented (Blase and Blase 2016; Sergiovanni 2018; Glanz 2019).

In Africa, particularly in sub- Saharan Africa, pedagogic supervision could be traced to the 1982 Education Ordinance. The colonial masters' first attempt through colonial administration to establish any form of control and supervision over the development and growth of schools. In the ordinance, they provided for the establishment of a general board of education which was to appoint an inspector of schools in West Africa. It was from this appointment that manifested the beginning of the recognition of the need for a form of supervisory service in the educational system and to ensure that activities of teachers and even head teachers were put under scrutiny and to ensure they operate to achieve the goals set by the body.

The colonial masters first attempt through colonial administration to establish any form of control and supervision over the development and growth of the school. In sub-Saharan Africa supervision of instruction could be traced to the 1982 Education Ordinance. The ordinance established a general board of education to appoint a superintendent of schools in West Africa (Blasé & Blasé, 1999; Mohammed, 2014; Sergiovanni & Starratt, 2002; Sullivan & Glanz, 2000). It was this appointment that manifested the beginning of the recognition of the need for a form of supervisory service in the educational system and to ensure that the activities of teachers and even head teachers were put under scrutiny and to ensure they operate to achieve the goals set by the body (Wambui, 2015).

Pedagogic supervision of schools in Cameroon started as far back as 1907 when the missions owned most schools. Since education in Cameroon witnessed increased attention in the mid-1990s (Fonkeng, 2010), so are supervision practices. A key theme running through the reports

of both the National Education Forum (MINEDUC, 1995) and the Draft Document of the Sector-Wide Approach to Education (the Republic of Cameroon, 2005) is the need to strengthen teacher quality as part of a comprehensive strategy towards efforts aimed at improving the quality of educational services at the primary level. One of the strategies adopted by the government to improve and guarantee teacher quality is the appointment of Regional Pedagogic Supervisors (RPSs) for effective supervision.

The Ministry of Secondary Education, within the framework of its 2012 Road Map for the purpose of quality education for all children of school-going age and to meet up with the vision of an "Emerging Cameroon in 2035", emphasised the function of pedagogic supervision, at each level of education. In this regard, supervisors are required to carry out pedagogic supervision to improve teachers' output; at the central, regional, divisional, and sub-divisional levels (Tshabalala, 2013). Supervision of instruction is essential in promoting effective teaching and learning in schools. It focused on the improvement of teaching and learning and the professional development of teachers (Acheson, 1987).

The new vision of pedagogic supervision in Cameroon's educational systems seeks to attain these objectives. To achieve this, each supervisor should set a goal and prepare corresponding observation and monitoring tools before going to the field. Thus, supervision means identifying problem areas of teachers/supervisees, proposing solutions, ensuring continuous monitoring, and evaluating the degree to which recommendations are being implemented. Pedagogic supervision should empower all stakeholders so the secondary education system can be more effective, contributing to Cameroon's emergence by 2035. The pedagogic supervision system comprises several levels. Each level constitutes an essential part of the system. The system is structured thus: central, regional, divisional, sub-divisional, school clusters, and schools and non-formal education (Pedagogic Supervision Manual, 2012).

Educational administrators as supervisors are also charged with the pedagogic, administrative, social, financial, and functions of schools (Mbua, 2003). Not only do pedagogic supervisors correct, direct, and assist teachers in the teaching and learning process in schools to improve student learning and success rates, but they are also expected to promote teachers' professional growth and career enhancement through supervisory duties (Tshabalala, 2013). As found in the literature, the rationale for instructional supervision is to ensure quality in education and to

promote teachers' professional growth, which in return yields higher academic achievements and increases success rates of learners with competencies and skills (Blasé & Blasé, 1999; Sergiovanni & Starratt, 2002; Sullivan & Glanz, 2000; Mohammed, 2014).

The aim of pedagogic supervision is to improve instruction to provide quality and better education (Nolan, 2004). Supervision involves monitoring teachers' work performances and providing feedback by using beneficial and suitable strategies that enable the correction of weaknesses in classroom practices to encourage professional growth and better the flow of quality educational activities and services. Pedagogic supervision is, therefore, a necessary process which entails a combination of activities concerning a school's teaching and learning process for the improvement of teaching-learning quality in a school system (Gongera, 2013; Habimana, 2008).

Bondi (2002) and Wiles mentioned that supervision as a process is facilitated by leadership through which teachers get help in counselling, planning, and talking with each other about how to improve the teaching-learning situation in school. Therefore, for many educators, the purpose of supervision in education is to enhance teaching-learning activities in schools, known as "supervision of instruction" (Mohanty, 2008; Thakral, 2015). Though other necessary and vital goals of supervision may be to help teachers improve their work performances and to provide vital ethical, career enhancement, and professional leadership (Hoover, 2004 & Nolan; Southworth, 2002; Zepeda, 2007).

The primary goal of pedagogic supervision is to instigate best practices in the teaching and learning process in order to increase the learning outcomes of students through high academic achievements and high success rates. Therefore, the importance and significance of supervision in education and in teachers' work performances and professional growth cannot be overlooked, as indicated in the literature (Blasé & Blasé, 1998; Glatthorn, 2007; Glanz, 2000 & Sullivan; Sergiovanni & Starratt 2002, Tshabalala, 2013).

Contextual background
Secondary education in Cameroon has witnessed increased attention since the mid-1990s, evidenced by the 1995 National Education Forum and the February 2005 technical committee meeting in Yaoundé, involving all the Ministries of Education (Basic, Secondary, and Higher Education), with technical assistance from the Ministries of Economy and Finance, Planning

and Regional Development, Labour and Professional Training, and UNESCO to reflect on a sector-wide approach to education in the country.

A key theme running through the reports of both the National Education Forum (MINEDUC 1995) and the Draft Document of the Sector-Wide Approach to Education (Republic of Cameroon 2005a) is the need to strengthen teachers' quality as part of a comprehensive strategy towards efforts aimed at improving the quality of educational services. Law No. 98/004 of 14 April 1998 (based on the recommendations of the National Forum) in its Chapter III, Section 2:1, refers to teachers as the guarantors of quality education (Republic of Cameroon 1998). Paying attention to teachers is very important against the backdrop of demographic and economic changes.

According to the Draft Document of the Sector-Wide Approach to Education (National Development Strategy 2020-2030; Republic of Cameroon 2005a), most of the population is relatively young, with 45 per cent below 15 years and 64 per cent below 25 years. These demographic changes will translate to increased demand for secondary school education and increased demand for quality teachers. One of the strategies adopted by the government to improve and guarantee teacher quality is the appointment of Regional Pedagogic Supervisors (RPSs) for each subject area.

The responsibilities of Regional Pedagogic Supervisors are contained in Decree No. 2005/139, organized by the Ministry of Secondary Education (Republic of Cameroon 2005b). Interest in the secondary education subsector aligns neatly with national and international education initiatives, notably the African Union's Second Decade of Education for Africa (2006–2015), and Draft Plan of Action (African Union 2006).

Pedagogic supervisory practices aim to guide teachers on the right track, which would activate teachers' efficiency and productivity since it encompasses, checking attendance, developing, and designing curriculum and work schema, lecture delivery patterns, preparatory lecture drills, planning and managing school resources, developing effective communication (School-based Management Document, 2006). This would be, in turn, transmitted to the teachers and, consequently, the students, hence providing opportunities for students' growth and character building. In view of the above, the importance of supervision increases as the supervisors

inspect various aspects of the educational system, such as the pedagogy, the administration, the instructional methods, and the curriculum implementation.

In the last decade, educational research efforts concerning effective schools have focused on identifying the characteristics of an effective school and establishing specific criteria for measuring effectiveness. Pedagogic supervision has been given due credit for better educational achievements. According to Osakwe (2010), pedagogic supervision offers guidance to teachers through their supervision, and thus, school objectives are achieved through effective teaching and efficient learning. In this regard, pedagogic supervision assists teachers in refining their competencies essential for better teaching and learning processes (Heaton, 2016).

Conceptual background

Supervision: The concept of supervision is broader, encompassing two interconnected levels in institutional supervision, focusing on the mediation of the teacher's professional development, as well as on the organizational development of the school (Glickman et al., 2017). According to different supervisory scenarios, the joint work of class observation, with supervisors and teachers working together, generally presents cycles of observation – action-reflection that are specific to action-research (Zepeda, 2017). Supervision is an effective method that could help achieve good results.

As far as teaching and learning are concerned. This means that it is very important for teaching and learning procedures to be constantly monitored and reviewed to ensure the total achievement of the objectives. It is for this reason that pedagogic supervision and instruction in the basic school is very necessary (Kweku and Eric, 2014).

Pedagogic Supervision: The concept of pedagogic supervision has evolved over time in relation to the purposes of educational intervention. Gradually, following international trends, pedagogic supervision has taken on new meanings, including continuous teacher training. According to different supervisory scenarios, the joint work of class observation, with supervisors and teachers working together, generally presents cycles of observation- action-reflection that are specific to auto-research (Zepeda, 2017).

Supervisory Planning: Planning expert Louis A. Allen in Hasibuan (2018) explains that planning is an activity carried out by a leader or manager to think far ahead, considering all obstacles and obstacles that might occur and make decisions at this time. There are seven activities that must be carried out in planning, namely: forecasting, establishing objectives, programming, scheduling, budgeting, procedure development, determination, and interpretation. According to Ehren (2016), planning can be defined as the process of setting goals, developing strategies, outlining the implementation arrangements, and allocating resources to achieve those goals. It is important to note that planning involves looking at a number of different processes: Identifying the vision, goals or objectives to be achieved, Formulating the strategies needed to achieve the vision and goals, Determining and allocating the resources (financial and other) required to achieve the vision and goals, Outlining implementation arrangements, which include the arrangements for monitoring and evaluating progress towards achieving the vision and goals (Glickman et al., 2017). Planning helps define what an organization, programme or project aims to achieve and how it will go about it (Mngomezulu & Bhengu, 2015).

Monitoring function of supervisor: Ndungu, Gathu, and Bomet (2015) define monitoring as an activity that incorporates constant and systemized checking and keeping under scrutiny a program/project that is implemented to improve on the standard of teaching and learning. Kyalo, Mulwa and Nyonje (2015) posit that monitoring is imperative as it guarantees the implementation of the program/project based on plan. It aimed at seeing to it that the project or program plan is followed consistently. For quality teaching and learning outcomes to be achieved, the school principals must put in place and enhance practices that increase monitoring (Ibrahim & Benson, 2020). Monitoring helps school principals to discover the needs of the learners and difficulties encountered by the teachers as they dispense knowledge (Mngomezulu & Bhengu, 2015). Ahumada, Campos, Guerra (2016), Leiva, & Montecinos, asserts that monitoring practices should be more than just formal method of complying with rules/policies but should give information concerning the strengths and weaknesses of a project/program.

According to United Nations Development Programme (2019), monitoring can be described as the continuous process through which the stakeholders get consistent feedback on the developments towards attaining the common objectives of the policy or programmes which were implemented. Various public administration scholars deem monitoring as a process used

to assess the developments because of a programme of action which was implemented to address certain issues, in public institutions or a company. Monitoring focuses more on asking questions such as "are we on the right track towards our goals?", "is our programme meeting all our projected mandates and goals at a certain time and period?". A monitoring process can either be limited or broader, the difference is, a limited approach to monitoring in most cases concentrates on the assessment of the programme and tracks the use of the resources, while a broader approach to monitoring focuses on measuring the strategies and activities implemented by officials and also endeavouring to explore what other approaches can be exploited to ensure positive development on the policies and programmes implemented (UNDP, 2019).

Pedagogic Evaluation: Martens and Ginsberg (2019) claim that evaluation is a systematic application of social research methods to assess the strength and weaknesses of social interventions, including programmes, policies, personnel, products, and organisations. The Public Service Commission (2018) contends that evaluation is a measurement of either an on-going or completed project, policy, or programme by assessing its design, results, impacts, outcomes implementation, as well as the resources employed to accomplish the programme. Blokdyk (2020) defines evaluation as a process of establishing a measure to gauge, the extent to which policy needs and results have been achieved and scrutinise and outline the reasons for any dissimilarities and irregularities, based on the evidence versus the output.

Edwards (2018) &Gosling conceptualise evaluation as an exercise that assesses to what extend has the projected objectives and impacts of the intervention were achieved. In the essence of socio-economic policies, programmes, initiatives or projects, evaluations play a very pivotal role in determining the worthiness, relevance, and fulfilment of the objectives, mandates, effectiveness, impact, sustainability as well as the development efficiency.

Pedagogic Communication: Communication is intended to convey information, instructions, advice, feelings, opinions, and facts correctly and accurately from one person to another or a group of people (Dobbelaer; Franssen, 2017; Godfrey; Penninckx et al., 2014). The above description of communication describes or explains precisely what a supervisor does to the teacher and justifies the need for good communication. The greater the uncertainty of the tasks to be coordinated, the greater the need for information (Dobbelaer, Franssen, 2017, Godfrey, & Penninckx et al., 2016). The description of communication explains precisely what a supervisor

does to the teachers and justifies the need for good communication. Good communication helps stimulate enthusiasm and raise the interest and motivation of those to whom they are directed, such as staff, students, parents, and friends (Baxter, 2017; Ehren, 2014 & Nelson). Communication is not an inborn thing; every supervisor must learn how to communicate. These methods include clear speaking and writing. This is so because it offers an additional concept for examining the school as an organisation, particularly the teachers.

Teaching and learning process: Teaching and students' performance in education is considered the most important factor in developing an individual's knowledge and learning ability. In this regard, education is a two-way process–particularly teaching and learning (Guerriero, 2014). Teaching and learning are important factors that highlight the foundation for development. The learning ability of students is supported through the quality of teaching. Effective and successful teaching are the two basic characteristics that indicate the quality of teachers (Hegde & Cassidy, 2019). Quality teaching is a key factor influencing the development of quality outcomes among learners. Garnett (2018) and Olofson highlighted the fact that quality teaching considers the needs of diversified students belonging to different cultural and ethnic groups who have different backgrounds, languages, and genders. Quality teaching is flexible in practice, and the teaching requirements are matched to the learners' diversity. Teachers are a major component of the education system as they are the ones who imparts education to students. Without the teacher, the learning process cannot be completed (Abdu-Raheem, 2015).

Theoretical background

This study examines two important theories in the aspect of supervision to provide an overview of task management. The theories examined were Taylor's (1911) Scientific Management Theory for classical management and Human Relations theory Elton Mayo (1930s).

Taylor's Theory of Scientific Management (1911)

The Scientific Management Theory focuses on individual efficiency and productivity. The father of this theory is Fredrick Winslow Taylor (1890-1940), from his text Principles of Scientific Management (1911). His proposal was to apply principles of the scientific method to the practice of management. His influence is such that the scientific theory of management is often referred to as Taylorism. Management theory, introduced over the past 100 years has

successfully influenced the world on how management interacts with their subordinates. Norazmi et al. (2019) stated that the introduction of ideas in this theory is concerned with the main purpose of producing productive employees. In realising that goal, this theory has analysed and synthesised the work procedures of management and employees. Mohd Norazmi et al. (2021) stressed that management needs to be prudent in placing where an employee should be the types of tasks that are appropriate for the employee and the needs to be met. Zaid et al. (2020) explained that this theory does not fully burden employees in the production of productivity because they are entitled to be rewarded commensurate with their work, a balanced division of tasks as well as the right to scheduled rest while working. In the context of supervision, administrators should understand this theory by emphasising the stated principles of time and movement to enhance effective teaching and learning process of teachers as well as make them satisfied in their work.

Yusaini et al. (2021) stated that in the pursuit of productivity or output, effectiveness and job satisfaction can be achieved if management adopts the scientific management methods proposed in this theory. In designing quality management while looking after the welfare of employees, this theory emphasises on three aspects, namely quality, flexible time, and motivation. Isaac et al. (2021) state that proper quality and training can realise this goal. However, another aspect that needs to be considered is the balanced division of tasks between employees and supervision.

Human Relations Theory (Elton Mayo 1933)

Human Relations Theory of Management was developed from an empirical study of Elton Mayo and his associates such as Dixon, Follett & Roethlisberger, who carried out the study at the Hawthorne Plant of Western Electric near Chicago, United States between 1920s and 1930s (Ajayi & Ayodele, 2011; Barnard, 1938). The empirical research was designed to test the influence of human relations on work behaviour (Mayo, 1933).

Human Relation Approach became popular in the 1940s and early 1950s. It brought to managers' attention about the important role played by individuals in determining the success or failure of an organisation (Indabawa & Uba, 2014). The theory originated from the Hawthorne studies (plant) of the Western Electrical Company, Chicago conducted in 1940s (Kandula, 2016). The Human Relations approach made relationships between employees and

supervisors the most salient aspect of management. It advocated the training of people in behavioural sciences such as clinical and social psychology to emphasize building collaborative and cooperative relationships between supervisors and workers. The two key aspects of human relationships approach are employee motivation and leadership style (Gomez & David 2012). The theory assumes that workers as human beings are social beings with social as well as material needs. People will be motivated to work if the work conditions are favourable. It also emphasises that the workers' understandings, beliefs, motivations, cognition, responses to situations, values, and other similar factors may affect the working behaviour. Workers in all organisations tend to develop informal groups that work along with the supervisors and can help or object supervisors. Apart from that communication, influence and motivation are all important relationships especially between supervisor and the worker. In addition, workers must be involved in supervision and decision making (Indabawa &Uba, 2014).

Showing concern for the workers by pedagogic supervisors increase their satisfaction needed to improve teaching and learning (Indabawa &Uba, 2014). The direct interaction between the teacher and the supervisor emphasises an accurate understanding of practices and specifically, identifies areas of improvement (Cogan, 1973 & Goldhammer, 1969). The school is built around the teachers and must take into consideration their understandings, feelings, and attitudes (Kandula, 2016). It is stated that the function of the supervisor under Human Relations theory is to facilitate cooperative goal attainment among followers while providing opportunities for their personal development and growth (Blanchard, Hersey & Johnson, 2017). Therefore, to ensure a positive result of improved teaching and learning, the school climate must contain trust, mutual respect, and a willingness to
work collaboratively (Hoover, 2014 & Nolan).

Pedagogic supervisors need to make the use of techniques such as effective supervision through support, teacher counselling and to give teachers more opportunities to communicate on the job (Indabawa &Uba, 2014). This means any school supervisor's attempt to change teaching behaviours requires social support as well as intellectual stimulation by working with colleagues not superiors, and by creating in teachers a sense of inquiry and experimentation (Forsyth, 1986 & Hoy). It is also assumed that communication improves relationships within an organization, especially between superior and subordinate. Effective communication channels should be developed between the various levels in the hierarchy, emphasising democratic rather than authoritarian leadership (Lunenburg & Irby, 2013).

Statement problem

Cameroon's education system has placed lots of emphasis on the teaching and learning process in the secondary school curriculum, the nature of the subjects, and the need for teachers to effectively transmit knowledge, skills, and attitudes to the learners (Porter 2015). The teaching and learning process in most secondary schools in Cameroon has been at the core of concern because of some challenges affecting it. Some of these challenging factors are the difficulties most secondary school teachers face in implementing the Competent Base Approach (CBA). Many secondary school teachers have expressed frustration over the uncertainty of CBA in domains such as lesson planning and developing schemes of work. Teachers have difficulties in differentiating between objectives and outcomes. According to the Cameroon English Language and Literature Teachers' Association (CAMELTA) 2015 and Nforbi & Siewoue (2015), most African countries have failed to equip prospective teachers with the skills they need to effectively implement CBA in the process of teaching and learning process in their classrooms, inadequate use of teaching-learning materials.

According to Kathryn (2017), many teachers lack adequate training in Competency Based Curriculum (CBC), knowledge content and teaching methodologies. This is in line with Ayoub, Ikupa, 2013 & Rugambuka,, who identified a lack of knowledge in assessing and management of a competency-based classroom and difficulty in lesson plan preparation in a CBA format. Bilibi (2018); Cheptoo (2019) identified the following challenges teachers face to effectively implement quality teaching and learning process in Africa, the available teaching and learning equipment are outdated, the large student population, and the inability of students to learn using learner-centred teaching methods. Kotirde and Yunos (2014) substantiate the above challenges by indicating that the concern for improved teaching and learning has been at the core of the motivating forces for reforms in education and achieving quality in education has increasingly become crucial in strategic improvement plans for developing countries.

These reforms include Millennium Development Goals (MDG); Sustainable Development Goals (SDG); Education for All (EFA); and Education 2030 Agenda, which reflects the fourth SDG (De Grauwe, 2016). Many problems face the nation's secondary schools regarding the teaching and learning process. These challenges necessitate the need for pedagogic supervision to improve the quality and effectiveness of the teaching and learning process. In view of this,

this study seeks to examine the impact of pedagogic supervision on the teaching and learning process in some selected secondary schools in Mfoundi Division.

Main objective

The main objective of this study is to examine the impact of pedagogic supervision on the teaching and learning process in some selected secondary schools in Mfoundi Division.

Specific Objectives

Specifically, this study aims to:

- ➢ Assess the impact of the supervisory planning on the teaching and learning process.
- ➢ Investigate the impact of supervisory monitoring on the teaching and learning process.
- ➢ Examine the impact of supervisory evaluation on the teaching and learning process.
- ➢ Examine the impact of supervisory communication on the teaching and learning process.

Research Questions

1. What is the effect of supervisory planning on the teaching and learning process?
2. What is the effect of supervisory monitoring on the teaching and learning process?
3. What is the influence of the supervisory communication on the teaching and learning process?
4. What is the outcome of the supervisory evaluation on the teaching and learning process?

Research Hypothesis

H_{a1}: Supervisory planning have a statistically significant effect on the teaching and learning process.

H_{O1}: Supervisory planning have no statistically significant effect on the teaching and learning process.

H_{a2}: Supervisory monitoring have a statistically significant effect on the teaching and learning process.

H$_{O2}$: Supervisory monitoring have no statistically significant effect on the teaching and learning process.

H$_{a3}$: Supervisory evaluation have a statistically significant outcome on the teaching and learning process.

H$_{O3}$: Supervisory evaluation have no statistically significant outcome on the teaching and learning process.

H$_{a4}$: Supervisory communication have a statistically significant influence on the teaching and learning process.

H$_{O4}$: Supervisory communication have no statistically significant influence on the teaching and learning process.

Significance of the study

Pedagogic supervision is a common phenomenon through which quality education and sustainable community development can be achieved. Ensuring effective pedagogic supervision in schools nowadays appears to be an absolute necessity. Thus, the role and functions of pedagogic supervision
will always be emphasised since it serves as a driving force behind teachers' professional growth and development and equally increases the overall performance of students and the school.

The scientific implications lie in the fact that this study's results will help enrich the already existing literature on pedagogic supervision and its impacts on the teaching and learning process. Since pedagogic supervision is a challenging issue in Cameroon, this study will provide a literature review on the topic to younger generations who intend to dwell in the field of pedagogic supervision. This is because of many drawbacks observed in schools and overall education that show that there is a need to address issues related to pedagogic supervision.

The results of the findings in this study will enable the government, policymakers, educationists, and all those involved at the strategic or top management to make more informed decisions and develop effective strategies through which the goals and objectives of pedagogic supervision will be achieved with ease. This study is expected to provide the different ministries, especially the Ministry of Secondary Education, with information that can be used to establish proper policy guidelines regarding pedagogic supervision in Cameroon. It will

equally identify areas which need improvement and where actions must be taken since pedagogic supervision is seen as an indispensable tool in addressing, guiding, advising, refreshing, stimulating, and directing teachers' efforts towards the achievement of the overall goals and objectives of education in Cameroon.

The results of this study will equally be useful by supervisors in Cameroon, as it will permit them to execute their functions with ease and simplicity. This is because they have a vital role to play in achieving quality education for all and sustainable community development since they must make sure that the decisions and strategies taken at the strategic level of education are well implemented at the operational level of education. They equally have an obligation to forward the challenges identified in the field for further action.

The managers and principals of teaching and learning institutions in Cameroon would find this study informative and useful to them in their daily operations, such as guiding, advising, stimulating, refreshing, supervising, inspecting, and directing the different initiatives of their subordinates towards the achievement of the overall educational policies. The study will equip managers and principals with supervisory skills and techniques and how they can be used in the realisation of the goals and objectives of education. This is because principals and head teachers are regarded as supervisors in their respective institutions and, therefore, must work relentlessly to achieve predefined objectives. And by so doing, they are obliged to possess skills and supervisory techniques to accomplish their missions properly. Thus, this study will equip them with the necessary supervisory techniques and skills as well as how to use them effectively and efficiently.

This study will enable teachers in public and private schools in Cameroon and elsewhere to be aware of the necessity of performing their job properly. It is believed that teachers are at the summit of education and that their behaviour directly affects the result and performance of teaching and learning institutions worldwide. Therefore, this study will enable teachers to be aware of their roles in achieving quality education and sustainable community development. Thus, the result of this study will permit teachers to make more informed decisions, enhance their professional growth and development, and direct their effort toward the realisation of educational goals and objectives.

Scope/delimitation of the research study

This study is delimited to pedagogic supervision in selected public secondary schools in Mfoundi Division focusing on the English sub system. It is also delimited to supervisory functions to enhance teaching and learning process. This study focuses on four constructs of pedagogic practices which are: supervisory planning, supervisory monitoring, supervisory evaluation, and supervisory communication. This study focuses mainly on teachers who are the guarantors of education.

Operational definition of terms

Quality education: Quality education specifically entails issues such as appropriate skills development, provision of relevant school infrastructure, equipment educational materials and resources.

Effective teaching and learning: This the knowledge, strategies, processes, and behaviours which lead to good student outcomes.

Instructional supervision: These are a set of activities which are carried out with the purpose of making the teaching and learning better for the learner.

Public school: All schools that is managed and funded by the government.

Strategies: These are planning, communication, monitoring and evaluation practices and mechanisms adopted by the supervisors with the aim of achieving effective outcomes.

Teaching and learning Outcomes: Refer to performance of students in the national examination (GCE).

Organization of the Study

The study is organized around five chapters. Chapter one is an introduction and background to the study while chapter two reviews relevant literature related to the study. Chapter three is a research methodology where research approach design, sample, and sampling techniques as well as data collection methods are explained. Chapter four presents, analyses, and discusses

data collected from the study using various research methods techniques. Chapter five has the summary, conclusions, and recommendations of the study.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

This chapter consist of the conceptual framework of supervision, pedagogic supervision, teaching and learning process, the relationship between pedagogic supervision, teaching and learning process. This section also covers the review of literature and review of objectives (pedagogic planning, pedagogic monitoring, pedagogic communication, and pedagogic evaluation)

Conceptual Framework

Concept of Supervision

The term supervision is derived from word "Super video" meaning to oversee, Adepoju (2018). It is an interaction between at least two persons for the improvement of an activity. It is also a combination or integration of processes, procedures and conditions that are consciously designed to advance the work effectiveness of individuals and group. Etymologically, Echols (2016) states that the word supervision was derived from the English language which means supervision. In addition, Oteng (2017) believed that the use of the word is interpreted as directing supervision or guidance. Supervision activities put more emphasis on the value of humanity (Mudawali and Mudzofir, 2017). As such, elements of coaching are a major goal in supervision activities, not looking for faults, but with the intention to be able to provide information to repair the parts which are lacking in the event or the implementation process of supervision (Mufida, 2019).

Semantically, many experts define the term supervision, but the principle has the same meaning and understanding. According to Wiles (2015), Supervision is assistance in the development of a better teaching-learning situation. Poerwanto (2017) defined supervision as an activity of coaching designed to help teachers and other school officials to do their jobs effectively. While Mantja (2017) said supervision is defined as an activity of supervisor that is carried out to repair the teaching and learning process with basically two purposes to be realized: repairing the learning process and improving the quality of education. Karugu (2018), Olembo,& Wanga define supervision as a process of interacting with teachers to improve the provision and actualization of learning opportunities for students, a process of guiding and influencing teachers and learners to achieve educational goals. Supervision according to Obagah (2018) is

the process of bringing about improvement in instruction by working with the people who are working with students. He went further to say that supervision is a process of stimulating growth and means of helping teachers help themselves.

The concept can be applied to either academic and administrative functions (Mohanty, 2018) of school heads, school administrators, educational administrators, or those who manage education at various levels or sectors. In a school setting, there are differences between the academic and administrative functions of supervision. Whereas the academic aims of supervision include tasks such as: monitoring of instruction, guiding teachers to improve the teaching and learning process, assessment of students' learning outcomes, evaluating goals of programs, and many others, the administrative goals of supervision aimed at proper management of the school facilities and resources (Thakral, 2015).

The aim of pedagogic supervision is to improve on instruction to provide quality and better education (Nolan, 2018). In supervision, the supervisor needs to seek the buy-in, cooperation, and collaboration of those being supervised. Such cooperation is aimed at assisting supervisors in becoming successful in performing their supervisory tasks. Supervision involves the practice of monitoring work performances of teachers and providing feedback by using benefiting and suitable strategies that enable correction of weaknesses in classroom practices to encourage professional growth and better the flow of quality educational activities and services. Pedagogic supervision is therefore a necessary process which entails a combination of activities concerning the teaching and learning process of a school for the improvement of teaching-learning quality in a school system (Gongera, 2019; Habimana, 2018).

Bondi (2018) and Wiles mentioned that supervision as a process is facilitated by leadership through which teachers get help in counselling, planning, and talking with each other about how to improve the teaching-learning situation in school. It entails leadership, communication, curriculum development, capital development and a dynamic cooperative enterprise between instructional supervisors and teachers. Therefore, for many educators, the purpose of supervision in education is to improve teaching-learning activities in schools known as "supervision of instruction" (Mohanty, 2018; Thakral, 2015).

Though other necessary and important goals of supervision maybe to help teachers improve in their work performances and also for providing vital ethical, career enhancement, and professional leadership (Nolan & Hoover, 2014; Southworth, 2012; Zepeda, 2017), the primary

goal of supervision of instruction is to instigate best practices in the teaching- learning process in order to increase the learning outcomes of students through high academic achievements and high success rates. Therefore, the importance and significance of supervision in education and in teachers' work performances and professional growth cannot be overlooked as indicated in the literature (Glatthorn, 2017; Sergiovanni & Starratt, 2020; & Tshabalala, 2018).

In view of these, it was obvious that the word supervision implies many meanings, but it contains key issues like helping, caring, directing, assessing, coaching, improving, developing, and repairing. In other words, the meaning of the term supervision is opposed to supervising, checking, punishing, prosecuting, inspecting, correcting, and blaming.

Types of Supervision

The type of supervision solely depends on the size of the school, nature of supervision and areas to be covered. Iloh (2016) affirm that there are various types of supervision. These include.

- Basic/full scale supervision.
- Routine supervision.
- Follow up supervision.
- Emergency supervision.
- Developmental/Grant-in-aids supervision.
- Accreditation supervision.
- Internal supervision.

Basic/Full Scale Supervision: As the name implies, it involves the process whereby a team of seasoned and competent teachers duly drafted as supervisors from the Ministries of Education, the Post Primary and Primary Schools' Boards, as well as some senior and experienced teachers deployed from different schools are ear-marked to visit schools to check the general schools' environment, the teachers' performances in terms of classroom instructions, record keeping, students works and appearances. It is called basic supervision since it is the major and fundamental kind of supervision which touches on all the principles that guide instructional improvement. The visiting schools are always informed for its effectiveness**.**

Routine Supervision: It is the process of supervising the performances of schools, teachers lesson presentation, instructional materials, methodologies utilized and evaluation procedures at regular intervals. It could be done occasionally by a single supervisor or few supervisors from the ministry of Education or the school administrator or competent teachers selected to demonstrate teaching or observe instructional processes as presented by teachers while others observe to see whether they are performing well.

Follow-Up Supervision: Follow-up as the name implies is the type of supervision which takes place after a major inspection has been carried out and the feedback calls for another to check if corrections or advises had been affected. A follow-up supervision is necessary to ascertain whether the advice and suggestions given in the report have been adhered to. Supervision is usually brief and to the point of interest. During this supervision, the supervisor may not write report again.

Emergency Supervision: This type of supervision occurs when something unusual happens in a school. It may arise due to request/petition to education authorities by the school or due to public/parents petitions. On these requests, a team of supervisors may be sent to the schools to carry out thorough investigation or interact with the staff in the affected schools.

Developmental/Grant-in-Aid Supervision: This is the type of supervision that is carried out mainly on request by the school authority, Ministry of Education or Education Boards. It is a special type of supervision which takes place when the government wants to upgrade schools or ascertain the progress and level of development of a school and to find out what needs to be done in terms of facilities and equipment provisions.

Accreditation Supervision: As the name implies, it is a kind of supervision which is carried out in a school who wants accreditation either for approval to offer certain subjects for certificate examination or to be up graded. This activity is carried out once in every five years for higher institutions and before any school can enrol students for external examinations especially in science subjects.

Internal Supervision: This is the type of supervision internally planned, organized and coordinated by the school heads and the senior teachers. Here, some competent and experienced teachers are selected from within in a conference like forum to demonstrate to all teachers especially the newly employed and incompetent teachers how effective classroom instruction should be.

Process of Educational Supervision

Effective and constructive supervision demands the understanding of the basic techniques guiding the supervision process in educational administration in both public and private sector. For effective supervision to be facilitated, the processes and procedures of meeting the identified objectives must be carefully drawn and understood.

According to Ogunsaju, 2012, those processes include:

- Planning
- Organizing
- Controlling
- Self-performance standard
- Appraise performance.
- Communicating
- Motivating
- Decision making

Planning: This is concerned with the establishment or development of clearly defined objective of what supervisor in education intend to achieve as well as the means of achieving them. It involves the collection of relevant information that tend to guide the supervisor towards discovering the needs of potential supervisees.

Organizing: This is the development of a formal structure of carrying out supervisory duties within the educational sector to achieve the stated goals and objectives of the school. To achieve this, attention should be given to the right amount of time, manpower and funds for supervision.

Monitoring: This is seeing that every activity conforms with the established rules guiding supervision. Again, keeping and locking educational objectives with the intention of readily implementing corrective action strategies when school strays too far from objectives.

Set Performance Standard: This is the process where the supervisor formulates ideas and statements that gives the direction and goals to behaviour and efforts of the supervisees.

Appraise Performance: This involves the assessment of strengths, values, cultural and professional development needs of the supervisees and the expectation of stakeholders' interest. The supervisor should also acknowledge their strengths and limitations in meeting the identified needs of the supervisees.

Communicating: This is concerned with designing of information channels and networks as well as supplying of vital information for the supervision. Here, the process may be viewed as two- way communication between the supervisor and the supervisee.

Motivating: This implies getting extra effort from the supervisees without compromising their moral. It is a process of arousing enthusiasm of the supervisees for the purpose of instructional and overall improvement of the school.

Decision Making: This involves developing a process through which a course of action is consciously chosen among available alternatives. Every action in supervision involves decision making process in order to arrive at effective decision which will achieve the desired result.

Functions of pedagogic supervisor

Wilcox and Gray (2016) assert four primary functions of pedagogic supervision as control mechanism to govern and to control school.

Figure 1: Primary functions of pedagogic supervision
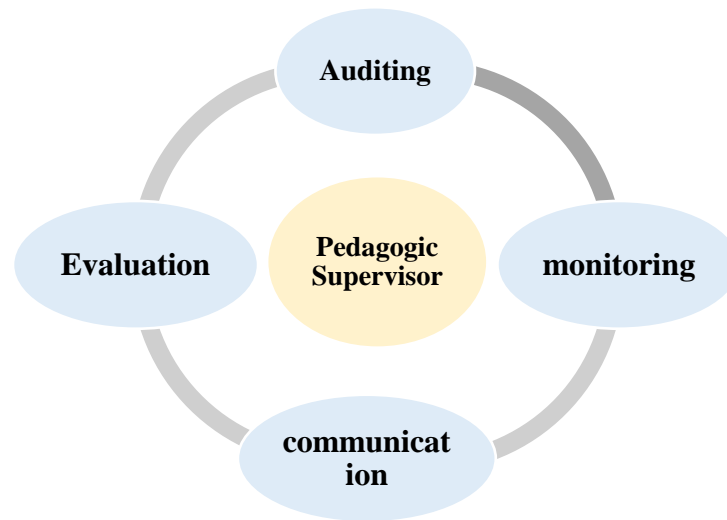
Source: Wilcox and Gray (2016, p23)

⇨ Supervision as evaluation placed its concern in assessing and making judgment on school in ensuring that school is accountable for the action and education provided.

⇨ Supervision as auditing' is intended to ensure schools' adherence towards the educational policy, standards, and legislation established by the educational authority and government, in which the compliance towards such standards can guarantee a minimum level of educational quality has been practiced.

⇨ Supervision as a disciplinary power' reflects the history of pedagogic supervision at the end of 18th century in which institutions are governed and controlled by central government. Therefore, a control mechanism system like pedagogic supervision has been introduced to govern schools and to inculcate certain bureaucratic values into the schools (Glanz, 2015).

⇨ Supervision as a form of social action' can be described by understanding the interaction that occurred and involved in its process, that encompasses the relationship and communication between supervisors as the persons in charge that performed the

supervision and the inspected key actors, which are teachers, head teacher or principals and sometimes students.

Pedagogic supervision however has extended its functions in serving school that might contribute to school improvement. From primarily focused to assess and making judgment on school, supervision practices has transformed in concentrating more to the advisory role in helping school specifically teachers and school managers on good practice (Hartley, 2017). Such advisory role indicates that supervisors has taken the role in assisting both teaching and the school managerial area of school. Through instructional supervision that took place during supervision, the teachers can learn to improve by the guidance provided by the supervisor (Glanz, 2015). Such form of supervision can help school by empowering teachers to undertake their role and fulfilling the objective in lesson delivery (Haris et al., 2018). The interaction between supervisor and head teacher may also develop the capacity for school to improve as head teacher that accompany supervisors during the supervision visit and classroom observation can learn from the comments given by the supervisors (Ehren et al., 2013). Therefore, this process can transfer the insight to the school stakeholders that can help school to improve their performance.

Principles of Educational Supervisions

According to Iloh et al (2018), modern supervision is guided by major rules which make instructional processes and procedures more effective and efficient. This principle includes flexibility, democracy, cooperation, positive and constructive in nature, emphasize on quality management and creative and scientific in nature.

Principle of Flexibility: Supervisors and supervisees should be flexible to land on smooth spot for no man is all knowing. Their views and perception on school policies, objectives, programmes, structures, and procedures must be flexible to accommodate innovation. Rigidity creates situation of flexing muscles and stagnancy. Both sides should be ready to accept one another's ideas and viewpoints.

Principle of Democracy: For the effective supervision of instructional processes, there must be freedom of speech, participation, consultation, and suggestion. The talent and potential of supervisors and supervisees must be utilized because experience is not the birth right of only one person. This principle is in line with the philosophy of democratic style of leadership, which emphasizes the need to use the efforts of all the members of the organization to improve school instruction and administration. There must be dialogue. Supervisees/teachers are human beings trained to impact knowledge, so they will accept suggestions communicated in friendly atmosphere. This principle of democracy holds that individuals should be involved in decisions that affect them for full cooperation.

Principle of Cooperation: In most cases, human beings always react negatively when not carried along in decisions that will affect their lives. Supervision of instruction should involve the supervisors school administrators, teachers, and others for the achievement of stated instructional objectives. This principle holds that for the effective promotion of instructional processes and development of the available human resources in the school system, there must be effective communication between the supervisors and supervisees, realizing that when two elephants fight, the grass (learners) usually suffers. There should be warm participation by all the human resources concerned.

Principle of Positive and Constructive in nature: Supervision is positive and not fault finding with the teacher. It encourages constructive and critical thinking among teachers and discourages flattering and bias. Modern supervisors give good remarks, encouraging constructive criticisms and appreciable comments on good work done by teachers. They show the ways and means for improvement when they find fault with teachers.

Principle on Quality Management: Supervision is fundamental to educational improvement, keen study, and analysis for the improvement of the total teaching learning situation. Thus, supervision is concerned with all aspects of education as it stresses on total quality management of the educational system.

Supervision is fundamental to educational improvement, keen study, and analysis for the improvement of the total teaching learning situation. Thus, supervision is concerned with all aspects of education as it stresses on total quality management of the educational system.

Principle of Creative and Scientific in nature: Supervision is creative hence it is to find out the best in teachers to manifest their innate talents, stimulate their initiative, encourage their originality and self-expression for the improvement of education process. Its scientific nature helps to make supervisors report precise, systematic, and objectives thereby bringing improvement in teaching learning process.

Teaching and Learning Process

Teaching is an interactive process between the teacher and the students. There are several definitions from some experts. Bennion (2015) stated that teaching is the process of training an individual through the formation of habits, the acquisition of knowledge, the inculcation of ideas, and the fixing of permanent interests. Suresh (2014) defined teaching as an interactive process, primarily involving classroom talk which take place between teacher and pupils and occurs during definable activities. According to Brown (2018) teaching is defined as showing or helping someone to learn how to do something, giving instructions, guiding in the study of something, providing with knowledge, causing to know or understand. Based on the definitions above, teaching is a process of helping the students to gain or acquire knowledge in a learning activity that is guided by teacher.

Principles of Teaching

The learner should subscribe to and understand the purpose of the subject.

⇨ The student should have desire to learn.

⇨ The teacher should keep friendly and informal relationship with students.

⇨ The physical condition should be favourable and appropriate to the learning situation.

⇨ The teacher should involve the learners so that they participate and accept responsibility for the learning process.

⇨ The teacher should make use of the learner's experiences.

⇨ The teacher should prepare ahead of the class, keep his teaching aids handy and should be enthusiastic about teaching it.

⇨ The method of instruction should be varied and appropriate.

⇨ The teacher should update his notes with the availability of new knowledge on the topic of subject.

Learning Process

Learning is related to the cognitive process. Brown (2016) argued that learning is not only a machine-like process. It also necessitates cognitive operation by learner. As opposed to rote learning, this is called meaningful learning. The learner relates meaning to knowledge, information, or subject matter to be learned. This type of learning may be useful in the acquisition of knowledge and long-term memory. Smaldino (2017) stated that learning is the development of new knowledge, skills, or attitudes as an individual interacts with information and the environment. To explain the concept of learning, it is an active process on the part of the learner. Hence, learning experience is not attained by mere physical presence in a learning situation. It is what the participant does (that is, his reaction) in the learning situation. He must give undivided attention to the instructor and deep-through for getting the facts, understanding their meaning, and to see their application to his needs and problems. Effective learning experiences, therefore, can be best gained in effective learning situations provided a skilful instructor who knows what he wants, who has the material to accomplish his goals and the skills to use them effectively. Brown (2016) lists the components of the definition, breaking it down into subparts:

⇨ Learning is acquisition or getting.
⇨ Learning is the retention of information or skills.
⇨ Retention implies storage systems, memory, and cognitive organization.
⇨ Learning is relatively permanent but subject to forgetting.
⇨ Learning involves some form of practice, perhaps reinforced practice.

Based on the definitions from some experts above, it can be concluded that learning is an activity of getting knowledge from teacher or environment and it can happen anywhere and everywhere. Learning can take place in many different settings. Simply stated, the learning setting is the environment or physical surroundings in which learning is expected to take place. In addition to the classroom, learning also occurs in the laboratory (computer lab, science lab, or language lab), library, media centre, playground, field trip site, theatre, study hall, and at home. Learning environments vary in size, layout, lighting, and seating arrangement, and orientation of the teacher and learner.

Learning is a coordination of environment in which all the elements necessary for promoting learning are present; namely,

⇨ Instructor
⇨ Learner
⇨ Subject matter
⇨ Teaching materials and equipment's
⇨ Physical facilities.

Figure 2: Elements of Learning Process
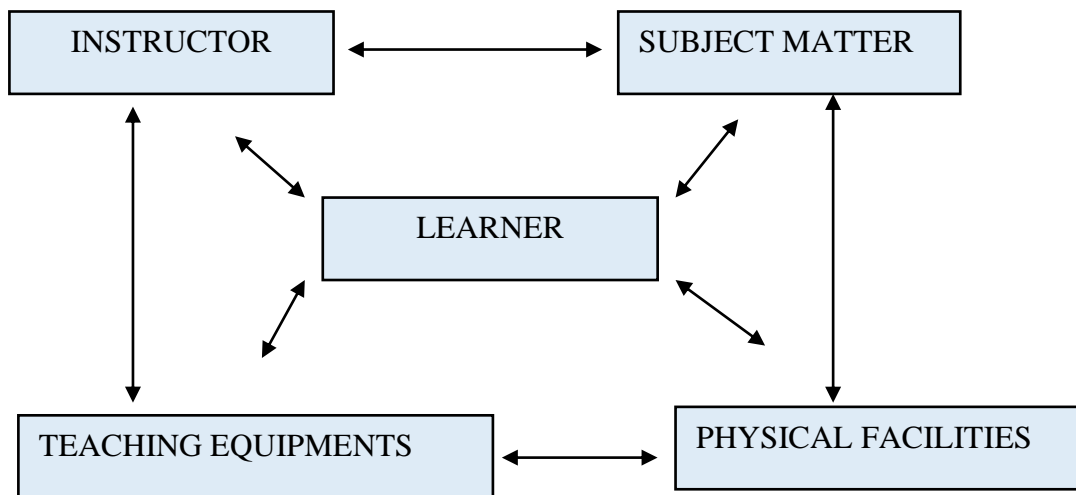
Source: Brown et al (2016, p12)

The figure above is a symbolic representation of the reaction; the learner makes to the other elements and the way these five elements react to each other.

To have an effective learning situation, these five major elements should satisfy the following conditions:

Instructor should:
⇨ Have clear objective and know the subject matter in an organised manner.
⇨ Be enthusiastic, interested in the subject, and be able to communicate with learners.
⇨ Be prepared, prompt, friendly, and courteous.
⇨ Set a good example of a good leader and teacher.

⇨ Be skilled in the use of teaching materials and equipment, as well as a teaching plan.

Learning should:
⇨ Have need for information.
⇨ Be interested.
⇨ Be capable for learning.
⇨ Use of information gained.

Subject matter or content should be:
⇨ Pertinent to learner's needs
⇨ Applicable to real life situations
⇨ Well organized and logically presented.
⇨ Challenging, satisfying and significant to the learners
⇨ Fits into overall objectives.

Physical Facilities
⇨ Free from outside distractions
⇨ Conducive atmosphere for learning.
⇨ Well lighted and spacious.
⇨ Comfortable and well organised furniture.

Teaching equipment
⇨ Meet the needs effectively.
⇨ Readily available.
⇨ Each item used skilfully.

The nature of each of these elements, their relationship to each other, their role in the educational process must be thoroughly understood by the instructor and skill developed by him in handling them. Effective learning situations are created through the skilful use of appropriate teaching methods and techniques.

Teaching - Learning Process

Teaching-learning is a continuous process consisting of various steps. It is difficult to separate steps from one another. According to Wilson and Gallup (2018) the following are the steps in teaching-learning process (AIDCAS).

Figure 3: Teaching and Learning Process
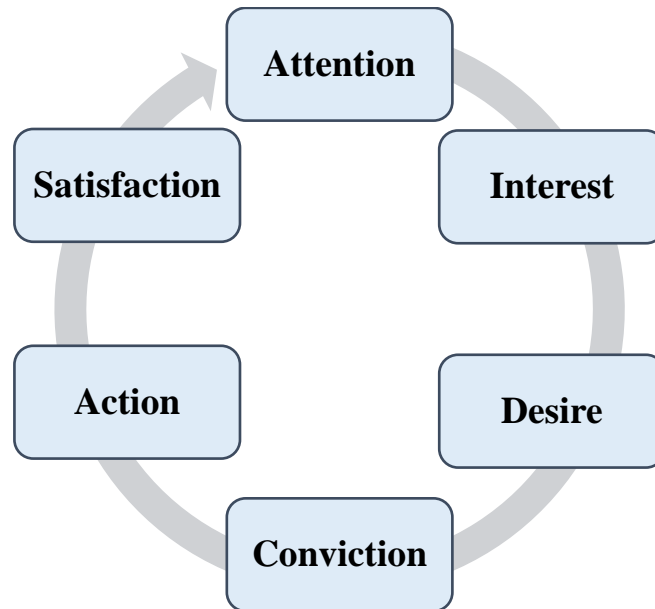
Source: Wilson and Gallup (2018 p14)

Attention: The first task of the teacher is to attract attention of the learner to the new and better ideas.

Interest: Once attention has been captured it becomes possible for the teacher to appeal to the basic needs or urges of the learners and arouse his/her interest in further consideration of the idea

Desire: The desire is concerned with continuing learners' interest in the idea or better practice until interest becomes a desire or motivating force.

Conviction: Action follows desire, conviction of the people, and prospects of satisfaction. In this step, the learner knows what action is necessary, and just how to take that action. He also makes sure that the learner visualizes the action in terms of his own peculiar situation and has acquired confidence in his own ability to do things.

Action: Unless conviction is converted into action the efforts are fruitless. It is the job of the teachers to make it easy for the learners to act. If action does not quickly follow the desire the new idea will fade away.

Satisfaction: This is the product of the process. Follow-up by the teachers to helps the students to learn to evaluate their progress and strengths. Satisfaction helps to continue his/her action with increased satisfaction. Satisfaction is the motivating force for further learning.

Effective Teaching and Learning

Teachers' effectiveness plays an important role in teaching –learning process. An effective teacher does not create image to the students, rather help the students to create the image of their own by understanding the problems of the students and helping them, making the subject interesting, controlling the class and being fair with the students while dealing with them. Teachers' effectiveness is an area of research which is concerned with relationship between the characteristics of teachers, teaching acts and their effects on education and discriminating between effective teachers. According to Barr (2019) a teacher is said to be effective when he or she has attained the necessary competence in their roles and functions such as preparation and planning for classroom management, knowledge of subject matter, teacher characteristics and their interpersonal relationship. Maximizing teacher effectiveness is a major goal of education.

Teacher effectiveness is the product of several variables namely academic, subject mastery, intellectual level, love for children, job satisfaction, teaching experience, professional growth, age of teacher, techniques used in teaching etc. Among all these variables the most important variable is teacher's knowledge, personality and above all his interaction with the students, so effective teachers are those who can demonstrate the ability to bring about intended learning outcomes that enable them to achieve the desired results for their students. The task of the excellent teacher is to stimulate apparently ordinary people to usual effort. The tough problem is not in identifying. It is in making winners out of ordinary people. Barr (2019) remarked, "Teacher effectiveness may be essentially a relationship between teachers, students and other persons concerned with the education, understanding all affected and facilitating aspects of immediate situation." Bending (2018) found significant relationship between the rating of a teacher and his student's achievement. Good (2018) observed teaching effectiveness as the

degree of success of a teacher in performing instructions and other duties specified in his/her contract and demanded by the nature of his position.

Flander and Simon (2012) defined teacher effectiveness as an area of research which is concerned with relationship between characteristic of teacher's teaching act and their effect on the educational outcome of classroom teaching." Ryan (2015) described it as "Teaching can be effective to the extent the teacher act in ways that are favourable to the development of basic skills, understandings, work habits, desirable attitude, value judgment and adequate personal adjustment of the students. Anderson (2015) described it as, "An effective teacher is the one who quite consistently achieves goals, which, either directly or indirectly, focus on learning of their students. Medley and Shannon (2016) recommended that all evaluations of teachers be based on information about teacher effectiveness but noted that as direct information about teacher effectiveness is not available, many teacher evaluations are based on information about teacher competence or teacher performance.

The Role of Pedagogic Supervisors in improving Teaching and Learning.

This section discusses the role of pedagogic supervisors in improving teaching and learning. It discusses four main roles as follows: supervision in role and classroom observation, professional support, advisory role, and provision of feedback. It is argued in this study that these roles of pedagogic supervision if properly observed will facilitate the work of the teacher and enhance the student's achievement in schools.

Supervision Role and Classroom Observation: Pedagogic supervisors are also expected to provide a continuous monitoring, reviewing, and assessing the attainment and progress of students (Nkinyangi, 2016). Just as teaching and learning activities are the teachers" core functions, school supervisors" core function is to inspect the schools. It is meaningless for supervisors to visit the school, without checking what is going on in classrooms setting. Pedagogic supervisors are to ensure that teachers are doing their job and that students are receiving what they are supposed to acquire as learning experiences. Learmonth (2016) contends "we have the responsibility to provide all children with best possible education and pedagogic supervision is an important source of information about how successfully this aim is being achieved". Learmonth believes that pedagogic supervision is both a tool for accountability and as a powerful force for school improvements.

In this regard, pedagogic supervisors must play that role by ensuring the quality of students' learning. They also need to assess whether the school successfully meets its targets in terms of learning outcomes and students' experiences that lie at the heart of quality assurance in schools (Matthew & Smith, 2015). The area of concern of pedagogic supervisors should be on teaching and learning and direct classroom observation to witness how learning is operationalised (Matthew & Smith, 2015; Chapman, 2014). But this should be done with care as pedagogic supervisors cannot change teachers just for two or three days of their stay in pedagogic supervisions.

As argued by Black and Wiliam (2013) classroom is a black box where someone may not see what takes place inside until she/he goes in. This is the borrowing of the knowledge from the engineering and business world, of inputs, process and outputs into classroom setting (Neave, 1987; Black & Wiliam, 2013). Stressing the importance of classroom observation Black and Wiliam argue that:

Learning is driven by what teachers and students do in classrooms. A focus on standards and accountability that ignores the processes of teaching and learning in classrooms will not provide the direction that teachers need in their quest to improve (2014).

Although the statement faces the problem as learning does not necessarily take place in classroom setting alone. Students learn in various ways such as through emulation on what is considered good behaviour from teachers and other people/members in the society. Yet, it is admitted that pedagogic supervisors are to fulfil this obligation of making classroom observation to offer a support to teachers where they can discern the need to improve and the areas of weakness. This does not mean that pedagogic supervisors know better than teachers, but it is argued that the process will enhance the sharing of what should be the solutions of the identified problems. Moreover, pedagogic supervision is designed to assess whether the school successfully meets its targets in terms of learning outcomes and students' experiences (Matthew & Smith, 2015). To Matthew and Smith, assessment in classroom lies at the heart of quality assurance in schools. For that purpose, the emphasis is stressed on classroom evaluation and the way teaching and learning is to be operationalised to ensure the quality of what is delivered to the students by teachers.

Professional Support for Teachers: Pedagogic supervisors, in whichever education system, and in the education system, are expected to provide professional support to teachers. They are also supposed to ensure that teachers use different teaching and learning approaches appropriate to the student' needs. Moreover, they are to develop students' knowledge, understanding and skills in all curriculum areas (Nkinyangi, 2016). But, to what extent pedagogic supervisors are competent enough in all curriculum matters. This is a big challenge to them. In addition, they need to encourage students to develop a positive attitude towards learning. In this regard, as stated earlier, students should be encouraged to learn how to learn (Lomax, 2015; Coombe et al., 2016). The other challenge is to see the extent to which pedagogic supervisors could talk with students. The process may encourage the students to learn to unfold their fullest potentiality rather than concentrating too much upon teachers. Since learning involves students, then talking with them too may reveal some of the ways in which their learning could be improved.

However, as observed by Nkinyangi (2016) pedagogic supervisors and quality assurance bodies have been limited in terms of professional support to teachers. To Nkinyangi, quality assurance officers go about their duties as fault finders, seeking to find mistakes rather than checking if there are problems affecting curriculum implementation and suggesting the way to overcome them. Also, Nolan and Hoover (2015) contend that many pedagogic supervisors tend to emphasise accountability at the expense of professional growth which results in poor or marginal teacher performance. It is the role of pedagogic supervisors in Tanzania that they become facilitators and supportive entities in the curriculum implementation and not concentrating on the weak points of teachers without supporting them on how to solve problems.

Advisory Role: Various studies like that of Collie & Taylor, (2014), Coates et al., (2015), Doerr, (2014) and Lopez, 2017) suggest the need for pedagogic supervisors to encourage the staff to build a teamwork spirit so as the core function of the school to be realised. They also need to advise teachers to make the best use of the available facilities both within the school and in the wider community and encourage self-evaluation with the support of teaching and learning process. Ehren and Visscher (2014) contend that, if the primary aim of pedagogic supervision is school improvement, the pedagogic supervisors are more likely to act as "critical friends", getting to know well and offering advice and strategies for development. The challenge as well is to what extent pedagogic supervisors provide the constructive

recommendations and not just mere comments. Their credibility and acceptance to teachers will heavily be dependent upon their reliable and attainable comments (Chapman, 2016).

Earley (2018 witnesses that teachers tend to value supervisors who behave professionally and who are in tune with school's aims, purposes, and values and who can understand the context. Although this as well should not be taken for granted for school supervisor to comply with whatever the teachers have. They need a critical self, wider understanding and wisdom when dealing with teachers. Also, it will be of value if pedagogic supervisors illustrate both the causes of bad performance as well as its remedy as suggested by (Ehren et al., 2015). This could be the value-added kind of support as argued by Earley (2018), MacBeath and Martimore (2016) and Wilcox (2015). Teachers will be able to respond to the findings and track the strategies for change and improvement when their problems are clearly pinpointed and supported. In this case the likelihood that a school will succeed in teaching and learning depends on such internal features such as cooperation between teachers and the organisation of learning and the context of the school (Ehren et al., 2015).

Providing Feedback: In actual sense pedagogic supervisors have the responsibility to provide the feedback both to the government and the school stakeholders. These are school owners, teachers, parents, and other people responsible for education in a particular setting. Various scholars have different views on how feedback from the pedagogic supervision can be of use for school improvement purpose (Ehren et al., 2015; Wilcox, 2014). It has been argued that; the feedback provided by the pedagogic supervisors do not necessarily lead to school improvement. There are several pre-requisites for feedback to have positive results. These include among other things; the school needs to experience the feedback as relevant, understandable, clear, and useful. Again, it is argued by Gray and Wilcox, (2014) cited by Ehren et al., (2015) that the "feedback from pedagogic supervisors has a larger chance of being used when teachers are involved in recommendations and when support is given to school" rather than recommending without any support. According to Chapman (2015), for feedback from pedagogic supervisors to impact on classroom improvements, it relies heavily on three factors. First, the ability of pedagogic supervisors to identify areas for improvement, second, the effective communication with the teacher during interaction and third, the teacher should be willing to the suggestions and be able to implement the recommendations.

In supervision, feedback will work towards improvement in teaching and learning when schools have insights in their own strengths and weaknesses. This is why scholars such as Ehren et al., (2015), MacBeath and Martimore (2014) and Webb et al., (2016) advocate the self-assessment and evaluation for the schools. However, studies like that of Hargreaves (2015), Learmonth (2018) and Wilcox (2017) share the common view about what type of pedagogic supervision that should be carried out. To them the most effective pedagogic supervision of a school comes by neither internal self-evaluation nor external supervision. Some combination of both probably serves the purpose and does the job better in promoting school improvement than either alone.

Moreover, Matthews and Smith (2015) and Learmonth (2017) consider pedagogic supervision as external monitoring/evaluation as the mechanism to complement the internal procedures such as self-evaluation and staff appraisal. Both promote school improvement and satisfy the demands for accountability. For a government to be true to its educational philosophy, pedagogic supervisors should report on how schools see themselves, not just on how the pedagogic supervisors judge the schools (Hargreaves, 2015). Although it is very difficult sometimes for a person to reveal all her/his weaknesses when she/he knows that her/his work is evaluated. To MacBeath (2016) to have a standardised perspective of determining a successful school, there is a need of an external evaluation to provide the criteria that can aid the comparison with internal self-evaluation. According to MacBeath (2016) self-evaluation should be a servant of pedagogic supervision (external) that set a comparative standardised perspective.

Supervisory Planning and it influence on effective teaching and learning.

To support the smooth implementation of supervision by the pedagogic supervision, planning, implementation, and supervision or control from the supervisor is required. Supervision planning can be said to be good if it meets five W and one H, namely What, Who, Why, Where, When, and How (Annía et al.: 2018; Ahmad & Ahmad, 2019; Hartanto & Purwanto: 2019; Villalobos et al.: 2019). This means that the pedagogic supervision must plan what is supervised, who, why, when, where, and how the supervision is carried out. With this plan, there will be an understanding of the meaning and function of supervision (Moradi et al.: 2014). On the other hand, good supervision from the pedagogic supervisor will be able to improve the performance of subordinates, and in the end, employee satisfaction with their work will increase (Gumus et al.: 2018).

This is in line with the results of research conducted by (Sukier et al.: 2020) there is a significant positive relationship between the pedagogic supervision and teacher job satisfaction. Based on these results, it means that supervision conducted by the supervisors increase teacher satisfaction at work. If supervision by the supervisor can increase the professionalism of teachers, teacher's job satisfaction can increase. In the implementation of supervision, there are several important things that must be met so that supervision is able to achieve maximum results. Like the results of research conducted (Faikhamta & Clarke: 2018; Ramírez et al.: 2018; Sukier et al.: 2020) found that the level of supervisor motivation will affect the results of supervision. In addition, research conducted by (Moradi et al.: 2014) also found that the teachers hoped that in the implementation of supervision supervisors should position themselves as learning partners and make the supervision process a shared responsibility to create a family but still have professional relationship. Furthermore, in the implementation of supervision, there must be a collegial relationship between supervisors and supervised teachers where supervisors can help teachers to improve their performance not just looking for teacher's errors without providing clear input and assistance (Ahmad & Ahmad 2018; Kemmis et al. 2014).

Figure 4: Characteristics of Instructional Supervision Planning
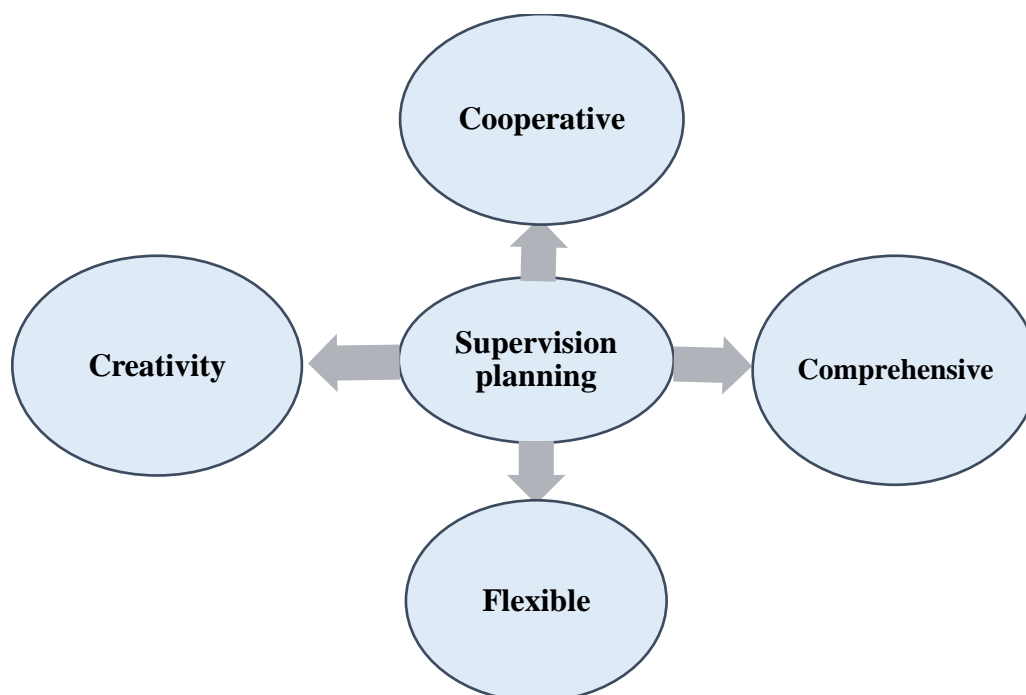
Source: (Prestiadi, 2020, p21)

Supervision process must be planned and implemented based on the needs of the teacher (Prestiadi, 2020). In simple terms, this concept explains that real supervisors cannot apply the same planning from one teacher to another, or in other words, there is no appropriate measuring point in compiling a supervision program, especially in determining problems and ways to solve them. For example, when a supervisor has completed a task in helping a problematic teacher, then other teachers have problems, then a supervisor cannot immediately apply the same model because he thinks the model has succeeded in fixing the problems of a previous teacher. This is what is called no standard planning in the supervision process, everything must depend on the needs of the teacher.

Supervision planning must be creative. This means that in planning supervision, not only using one model for several purposes and circumstances. This is due to differences or characteristics of different schools so that the problems they have are different from one school to another. Quality improvement in the aspect of education is inseparable from meeting the needs of students, the needs of teachers and education personnel, as well as the special goals of schools that must be based on the education unit level curriculum. This aspect then needs to be an important concern for a supervisor in the planning process or when preparing a supervision program (Budi, 2020).

Supervision planning must be comprehensive. The point is that as a unified whole, the learning process can be identified into a component that is interconnected with one another, such as teachers, tools, methods, facilities, and students. These things are interrelated or related, so this also becomes a demand for a supervisor to be able to pay attention thoroughly to the planning process or program preparation so that the main goals such as curriculum goals and national education goals can be achieved effectively and efficiently (Lalupanda, 2019).

Supervision planning must be cooperative. The principal acts as a supervisor who is responsible for the professional growth of teachers. The education process is a system that involves all components of the school, not just a teacher, or just the principal. Needs identification requires a variety of experiences and thoughts to be more efficient (Imron 2021, Prestiadi & Wardhani). The implementation of supervision activities by supervisors requires encouragement from other people, other staff members, so that planning also requires encouragement from people who are directly related to their implementation. Not only that, structuring a comprehensive plan requires extensive knowledge and thinking. The supervisor as a planner is a leader and mentor

in group collaboration and not a single decisionmaker. Supervisors as leaders must be able to urge others to take the initiative and be able to use the initiatives of others. Therefore, the planning aspect of cooperative activities is very important (Nurulita, 2021).

Flexible supervision planning. The supervision plan shall provide for the freedom to act according to the teacher's needs. A wise supervisor is not fixated on the ways of delivering the goals he has planned but always tries to adapt them to the teacher's conditions. This flexible planning character is meaningless if the goals formulated in the plan are not clear and concrete. The objectives must be clear and concrete, detailed, and the means of delivery must be calculated (Bhayangkara, 2020). Supervisors must be able to adapt the plan to new situations that arise.

Factors Required in Supervisory Planning.

According to (Fitria, 2019 & Kristiawan) some of the things that need to be considered in planning supervision are as follows:

a) Clarity of learning objectives in schools, where the main aspect that must be observed by pedagogic supervisors in structuring a supervision plan is the level of effectiveness in achieving the purpose of learning.

b) Knowledge of efficient teaching, where the main attention of a supervisor is an increase in the educational process and student learning outcomes. Therefore, the supervisor must be able to understand the principles contained in the educational process, be able to sort out and use appropriate educational procedures to be applied in learning activities by teachers (Mustabsyiroh, 2021).

According to (Marsellina, 2020) a pedagogic supervisor must be a teacher who has the experience and good character, who can and always fosters teachers to teach efficiently and pleasantly.

c) Pedagogic supervision plan is based on the knowledge of students. Supervisors and teachers must identify the characteristics and needs of their students, the comparison of the needs of each student, the general skills, and characteristics of students.

According to (Suginam, 2019) this supervision plan must be aimed at increasing teacher professionalism in the education process. The goal of supervision is not only to increase teacher

skills but also to increase learning activities and student learning outcomes. The increase in teacher skills is an intermediate goal, so it needs to be planned in supervision, not only what teachers need to learn and how teacher learning skills are, but it must also consider what students need and how their learning skills are. The main case in real supervision is not only how to help teachers improve their abilities, how to make students learn better, and what must be given to them to be successful in their studies, but what efforts mean to teachers so that students can learn more. good and successful. Therefore, a supervisor is not only required to understand and recognize the teacher but also must understand and recognize the characteristics of students such as learning skills, limitations, needs, universal characteristics, and those that distinguish one student from another.

This knowledge of students is what underlies supervisors to determine what encouragement is needed and can be given to their teachers (Lalupanda, 2019).

d) Knowledge of teachers, teachers are partners of supervisors to improve processes and student learning outcomes to be more efficient. Improving learning outcomes is carried out through teachers so that it requires cooperation. Supervisors must understand the teacher who is invited to work with, related to the skills and abilities of the teacher, and what are the needs to become a more reliable teacher.

Supervision activities to be planned must be based on teacher expertise, teacher attention, and teacher needs. Therefore, it is also necessary to know the thoughts and behaviour of teachers towards learning, as well as their duties as educators, and their behaviour towards citizens. However, before supervisors can begin to improve teacher skills, there must be an effort from the teacher to change the behaviour and thoughts of teachers towards learning and their duties as educators in the community.

According to (Hariantja, 2020) Supervision activities require skills in various fields, after that facilities and equipment, buildings, space, equipment and communication media, props, laboratories, and others are also needed to support activities. Supervision planning must be completed such as:

⇨ What equipment will be needed, and which must be used.
⇨ Where to hold activities.

⇨ Who will be included, especially as resource persons.

⇨ How much is the fee. Needed, and so on.

⇨ Ability to consider the aspect of time.

Supervisory Communication and its influence on effective teaching and learning

Supervision is a service effort and assistance in the form of guidance from superiors (headmasters) to school personnel (teachers) and other school officers. Supervisors act as stimulators, counsellors, and consultants for teachers in improving teaching and creating good teaching and learning situations (Handoko et al., 2017; Nurmawati, 2020). In addition, supervision is expected to bring the impact of good development for the progress of the teaching process through improving the existing curriculum in schools as one means in improving the quality of education (Mujiono, 2020; Renata et al., 2018). Supervision is an effort to develop the teaching process in a better direction by helping teachers individually or in groups (Saidah, 2020).

Supervision is an effort to develop teacher professionalism (Duma et al., 2021; Sormin, 2016). During supervision, the principal must also be able to build two-way communication so that it will have a positive effect on the development of the quality of education in a better direction (Memah et al., 2019; Pujianto et al., 2020). Effective communication of the supervisor with teachers enhances teaching and learning which in the long run improves students' performance in national examination (Renata et al., 2018; Too et al., 2012). In the educational circle, most authors see pedagogic communication function of supervision as a process to improve the learning opportunities for students. Supervision is directed towards both maintaining and improving the teaching-learning process of the school. In the words, supervision is an organized behaviour system for the purpose of improving the learning situation of children, considers pedagogic supervision as that aspect of educational management, which has to do with helping in the development of better teaching-learning situation (Mohammed et al., 2015). The pedagogic supervision communicates with the teachers to make a schedule of supervision and there is also sudden supervision, so it is more natural. Pedagogic supervision is a supportive aspect of teacher teaching performance (Lastriyani & Herawan, 2013).

Supervisory Monitoring and it influence on teaching and learning process.

Sufficient, comprehensive, and continuous monitoring is an important factor for efficient implementation of whichever program within the education system (Bibik, 2017). And every time an education program or project is administered, there is a need for a way to test its efficiency for further improvement and for better use of resources. This process is referred to as monitoring. In the context of education, monitoring entails assessment and control. These can be continuous, intermediate, or final assessment to indicate progress in achieving learning goals (Komar, et al, 2019). According to Ferdaus (2016), monitoring is a constitutive part of all projects/programs that keeps watch on progress and development and failures in current and future development.

In scientific terms, "monitoring" is described as a network of continuous, interim, and summary evaluation as well a systematic assessment of a project or a program (Mertens, 2009). According to Eddy, et al (2016), monitoring entails the methods and used in tracing information gathered within the school through quantitative as well as empirical methods, primarily numerical information that is then applied in evaluating the performance of the school against the set criteria to know the standard. Monitoring is a system-level process designed specifically to gather, collate and give report about information concerning the organization, structure and functioning of schools. Monitoring involves 'input' or administrative data, as well as data that trace the performance information such as school report cards.

According to Ferdaus (2016) Monitoring helps to make decisions on time, assures accountability, and provides a basis for evaluation. Monitoring is the process of collecting and analysing a project or project related activity information to measure the effectiveness of interventions that meet the stated objectives and to take appropriate steps to ensure that the project is followed (Mapfumo, 2015). Given the strategic role of monitoring, it has proved an important tool for social, economic, political, and financial progress in private and public sector as well and has permeated through every field, program and human activity and education is no exception (Mtetesha, 2019).

In secondary schools, supervisors monitor instructional practices of teachers such as their preparation for the lesson, lesson presentation and assessment methods used by the teacher as well giving monitoring feedback to teachers. Because the quality of teaching has a positive

correlation with the response from the pedagogic supervisors and members of the administration involved in monitoring, when the teaching staff lacks integrity and constructive confidence on their work due to lack of monitoring, this impairs the performance of the school. Monitoring gives teachers the opportunity to get feedback on their professional growth and development to find the right solution (Komar et al, 2019).

Monitoring generates daily feedback on student achievement and potential problems and how to solve them evaluate the effectiveness of the various practices used and suggest improvements, evaluate how these practices serve to realize their common goals and provide a course for improving teaching and learning (Karani, Bichanga, & Kamau, 2014). Thus, monitoring makes it easy for pedagogic supervisors to maintain clarity, responsibility, reporting and empowering all the concerns of the people in the organization (Gopichandran & Krishna, 2013). Good quality information obtained from monitoring is determined by the reliability, completeness, accuracy, preciseness, timeliness of data within the organization that helps decision-making (Myanmar, 2016). According to Glanz (2018), in the nineteenth century, monitoring was done for teachers by creating stringent rules that were frequently observed while in classroom to ensure that they adhere to the instructions that are set. Teachers who did not follow these instructions were rendered jobless. In most African countries supervisors are responsible for ensuring that appropriate resources and techniques are provided and monitored to ensure effective learning in schools. According to Ronoh and Tanui, (2016), the most important role of pedagogic supervisors is to support student achievement by monitoring teaching and learning process. Pedagogic supervisors should coordinate and direct all learning activities in schools and ensure that learners achieve their learning objectives within the deadline. This can only be done through monitoring of instructional processes.

Ndungu et al (2015), explain that different activities are monitored daily in teaching and learning. These include documents prepared by teachers, physical class attendants by teachers and students' assessments. The students' response is also necessary in establishing whether the learners have found the lesson interesting and, therefore, lead to the conclusion that learning took place. There are three types of monitoring systems this study worked with. These include compliance monitoring (ensuring that certain legal standards are met), diagnostic monitoring (finding out the effort and cost ratio of measuring student achievement) and performance monitoring (comparing school performance and academic standards set), (Ferdaus, 2016).

Purpose of supervisory monitoring on the teaching and learning process

Monitoring serves a dual purpose:

- ⇨ Accountability
- ⇨ Development.

How this two-fold objective is pursued may condition the level of trust among supervisors and influence the teaching and learning process. Seen as a learning tool that contributes to a shared goal, monitoring could increase trust among teachers and create an atmosphere of co-operation. (Enzle and Anderson, 1993). Designing the adequate monitoring system that provides incentives while building trust among teachers, is highly contextual. It depends on the existing trust among teachers (Langfred, 2004) and the stage of quality teaching (Holzman, 2012). Depending on these characteristics, a country might opt for an external, internal, or in-between monitoring system for supervision of the teaching and learning process. In systems where there is a higher level of capacity, and thus more room for autonomy, there can be correspondingly a higher level of trust, and lower need for centrally imposed accountability measures. In such systems, monitoring may be chosen to be conducted internally, by the actors themselves involved, such as teachers (Hälinen and Holappa, 2013). On the other hand, in systems where more structure is needed in the form of both support and accountability, monitoring can be carried out externally by a more central organ.

At a time when teachers are more and more central in the teaching process (Braun, Ball &Maguire, 2010), their data literacy, and the availability of quality information, conditions how monitoring and evaluation can serve the implementation of the new curriculum (CBA) (Earl and Katz, 2006). Data literacy refers to a process that involves several capacities, such as knowing what data is needed and why; knowing where to locate it; seeing its limitation; and knowing how to interpret it. However, data literacy should not be restricted to teachers, but also extend to principals to reflect on school performance and development plans, and central authorities to pilot the system effectively (Ozga, 2009).

Supervisory Evaluation and it effect on teaching and learning process.

Education evaluation refers to the evaluation of an education system to provide accountability information to the public and to inform policies to improve educational processes and outcomes (OECD, 2013). System evaluation can support the monitoring of the implementation of the

curriculum and contribute to the transparency of the educational system. It relies on indicator frameworks, tools (national assessments, surveys, diagnosis assessments etc.), and processes (research agendas, ad hoc reviews, and dialogues between sub-national education systems, governmental agencies, local authorities, and schools etc.) that need to reflect on the teaching and learning process for quality education and gather information relevant to curriculum implementation. For instance, teacher training data (results of teacher assessments during teaching process or on student's outcome), teacher and school surveys can provide evidence on changes in teacher knowledge, attitudes, and beliefs about school supervision (OECD, 2020). Supervisory evaluation implies data collection to create feedback loops that serve as a learning tool for stakeholders or policy makers to track teachers progress or to know what needs to be improved concerning the teaching and learning process (Eshuis and Van Woerkum, 2003).

Figure 5: The OECD framework of evaluation and assessment
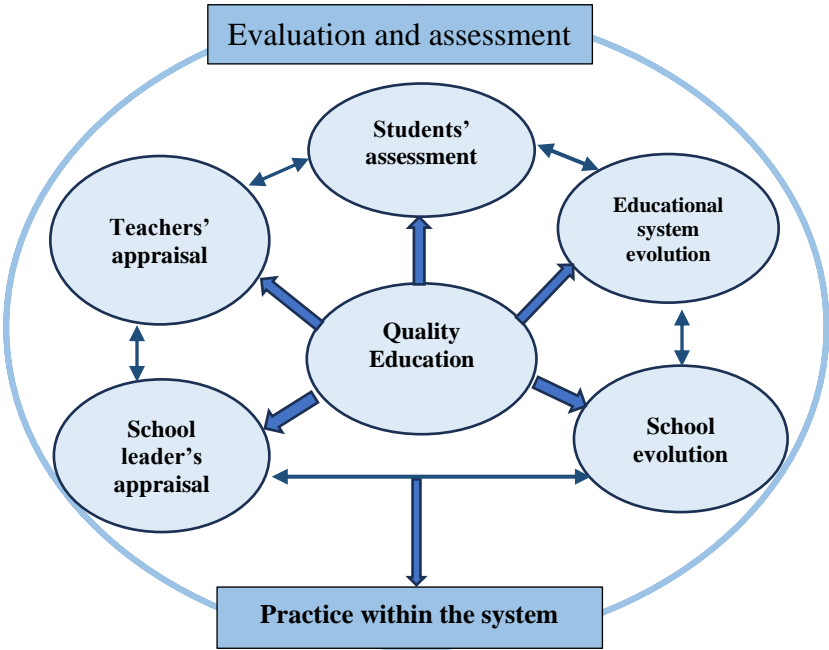
Source: Adapted from OECD (2013, p12)

School evaluation refers to the analysis of the following elements at the school level. The effectiveness of the structures and processes in place, the implementation of national educational policies and regulations, the quality of student learning outcomes, and the capacity for schools to improve. In many countries, school evaluation of these aspects takes a dual form. On one hand, self-evaluation consists in an internal review, and on the other hand, school external evaluation is led by specific national or state institutions, such as, for instance,

Inspectorates or Quality Review Agencies (OECD, 2013). School performance accountability needs to reflect the new objectives of the teaching and learning process, and both the frameworks for internal and external evaluation must be updated accordingly.

Table 1: Types of school accountability

Types of school accountability		
Vertical	**Regulatory school accountability:** Compliance with laws and regulations; focuses on inputs and processes within the school. Mechanism: reporting to higher level of school authority.	
	School performance accountability: Periodic school evaluations. Mechanisms include: 1) standardized student testing, 2) public reporting of school performance, and 3) rewards or sanctions.	
Horizontal	**Professional school accountability:** Professional standards for teachers and other educational staff. Mechanisms: credible, useful standards and the creation of professional learning communities.	
	Multiple school accountability: Involving students, parents, communities and other stakeholders in formulating strategies, decision making, and evaluation.	

Source: Hooge, Burns and Wilkoszewski (2012)

Most countries (80%) taking part in the OECD International Synthesis Report on teaching and learning redesign reported that schools provide a first layer of teaching and learning monitoring within schools' self-evaluations (OECD, 2020). Updated school reporting should also feed into meaningful external evaluation, geared towards development rather than accountability during that period of change, to support various initiatives to develop and unfold the effect teaching and learning process (Fullan, 2011).

Student Assessment

Student assessment helps focus attention on the learning progress and outcomes of each student. Students need clarity about learning goals and evaluation criteria to measure progress and inform future learning. Teachers need assessment information to target future teaching and improve classroom instruction (OECD, 2013). Effective teaching involves rethinking the scope,

content, and instrument of assessment so that it is aligned to changes to curricular goals, content, materials, and pedagogies. Assessments, particularly high-stakes assessments, impact what is taught, and ultimately, what students learn (OECD, 2020). The assessments that dictate school accountability evaluations, matriculation, and entrance into post-secondary institutions are, therefore, tipping points since they can drive the whole educational system.

Teacher and school leader appraisals

Teacher appraisal refers to the evaluation of individual teachers to make a judgement about their competencies and performance and/or to provide feedback to support the improvement of their practice (OECD, 2013). Teachers may be wary to engage in new pedagogies or assessment methods to enact the effective teaching if these practices are not formally recognised. This is why professional standards (professional school accountability) describing the skills, knowledge, and behaviours that characterise excellent practice, require updating according to the new curriculum requirements (CBA)

School leader appraisal refers to the assessment of school leader's competences for performance management, employment-related decisions and/or rewards purposes (OECD, 2013). The role of school leaders in mediating the effective teaching and learning is critical, as they can create a culture of change, and initiate and sustain improvement at the school level (Gregg, Thompson, & Niska, 2004). In educational systems where school leaders are expected to exercise instructional leadership, their appraisals also need to consider how they set up school processes for teachers to collaborate in the development of effective teaching and learning.

Theoretical Framework

Scientific Management Theory

The Scientific Management Theory is the first management theory popularly referred to as Frederick W. Taylor's (1856-1917) Scientific Management which started the era of modern management in the late 19th and early 20th centuries when he was decrying the awkward, inefficient, or ill-directed movements of men as national loss (Lunenburg & Irby, 2013). Frederick W. Taylor's idea of improving efficiency and reorganization in industry offered a method for managers to control the aspects of industrial operation in factories and business. The emphasis was on the problem of obtaining increased productivity from individual workers

through technical structuring of the work and the provision of incentives to motivate higher levels of output (Mullins, 2007). During that time, Taylor consistently sought to overthrow management "by rule of thumb" and replace it with actual timed observations leading to "the one best" practice (Lunenburg & Irby, 2013). According to Taylor, the major purpose of the management was to sustain the maximum well-being of all personnel and accordingly realize the maximum welfare of the employer (Turan, 2015).

Hence, Taylor announced the missions and responsibilities as "Scientific Management Principles" which is the title of the book at the same time (Turan, 2015). These principles are as follows (Taylor, 1911) in 1911:

⇨ People are to be managed scientifically not by the old rule-of-thumb.
⇨ Workers must be carefully trained and selected in their area of specialization to improve productivity.
⇨ Emphasis on cooperation and a close supervision to ensure performance of work in accordance with the principles of science.
⇨ Emphasis on division of labour while ensuring that every worker is better fitted on his/her work.

Taylor suggested four important tenets based on his findings and research. These are as follows:

Figure 6: Principles of Scientific Management
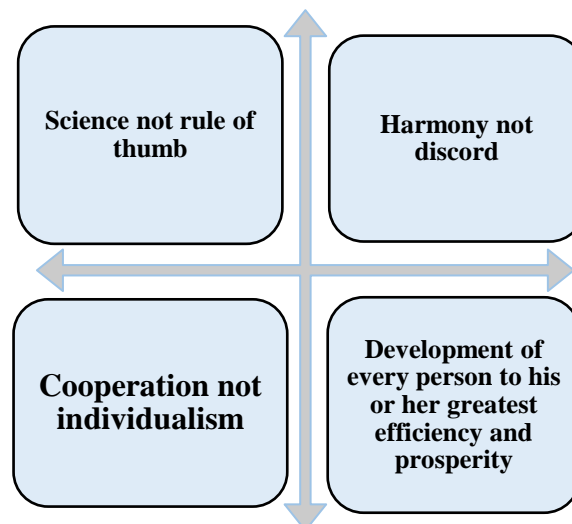
Source: Taylor, (1911, p17)

Science Not Rule of Thumb: When science is applied instead of the rule of thumb, to any job, it standardizes work. Moreover, the workers get a specialized way of performing the task and wastage of a lot of time, cost and resources can be avoided.

Harmony Not Discord: Taylor emphasized on maintaining peace and harmony in the workplace, and there should be no conflict among the managers and the workers. Conflicts only result in negatively, i.e., a decline in the productivity of the organization.

There can be a significant improvement and growth in productivity if there exists a friendly relationship between the managers and the labours where both value the efforts of each other.

Cooperation Not Individualism: An organization is made up of different individuals (i.e., personnel), and each one of them is equally important. Business is all about teamwork and cooperation, in the absence of which the organization may fail to attain the desired results. Therefore, the employees in an organization must work together, keeping aside their objectives and ego to achieve the common goals set by the management. There should not be any competition among the workers; instead, they should cooperate at work. The administration should also encourage the workers to give suggestions and create an open communication system in the organization.

Development of Every Person to His or Her Greatest Efficiency and Prosperity: Taylor believed that employees should be given proper training of the task they perform because no human being is perfect, and there is always a scope of improvement. Moreover, training and development improve the competency, skills and learning of the workforce. It is beneficial for both the organization and the workers.

Scientific Management and Pedagogic Supervision

Taylor developed a variety of methods and procedures to implement this concept of management including the use of time-motion study as a means of analysing and standardising work (Galabawa, 2001). His scientific approach called for detailed observation and measurement of work to find the optimum mode of performance. With the response to expansion of curriculum and student services in schools in the United States of America (USA), it led to a need for improved supervision and accountability (Fine, 1997). Therefore, supervisors

started to apply concepts of Scientific Management to educational supervision in the early 20th century (Fine, 1997).

The processes of pedagogic supervision during the late 20th century relied on the observation and evaluation process in what Gordon (1997) called "control supervision" that was primarily supervision of teaching and learning. However, collaborative approaches to pedagogic supervision in the form of clinical supervision emerged in schools during this time (Anderson, Goldhammer & Krajewski, 1993). According to Anderson, Goldhammer, & Krajewski, pedagogic supervisors and teachers worked together during the observation process to identify areas of improvement.

Therefore, school-based supervisors implemented the tenets of scientific management for improvement and accountability to provide a positive change in supervisory processes (Glanz, 1977).
This changed pedagogic supervision from guesswork to scientific accuracy and from a political job to a skilled and professional undertaking (Glanz, 1977). This model of supervision would frame schools as industrial plants, supervisors as industrial managers, teachers as workers, and students as raw products to be processed (Fine, 1997). The scientific management approach emphasises improving work methods through observation and analysis (Kwok, 2014).

When school-supervisors check teachers' lesson notes, lesson plans and schemes of work to determine their relatedness, tasks completeness and content of instruction, effectiveness in classroom instructions through high level of frequency and duration of supervision will lead to building up the expected values (Adewale, 2014). According to Adewale (2014) pedagogic supervision through monitoring and evaluation improves teachers' instructional methods and their classroom management skills. Adewale also shows that it increases their ability to adapt to instruction to meet students' needs and establishing a professional culture which is important in teaching and learning. The idea of workload sharing between the teachers and pedagogic supervisors with supervisors performing the science and instruction and the teachers performing the teaching, each group doing the work for which it was best suited is also very important (Brevis, Cronje, Smit, &Vrba, 2007).

Moreover, classroom supervision and observation were introduced as approaches for teachers' evaluation together with performance appraisal schemes based on specific targets (Sergiovanni

& Starratt, 1993; Hoyle & Wallace, 2005). The idea behind the introduction of close supervision practice was to ensure that teachers were teaching how they were supposed to and carefully followed the approved teaching protocol and guidelines (Sergiovanni & Starratt, 2007). For example, they needed to prepare the schemes of work extracted from the syllabus and the lesson plans that followed the scheme of work. Teachers had to follow the pre-determined objectives and goals of education stated in the national curriculum. Pedagogics was to ensure teachers followed these arrangements for effective teaching and learning. According to Sergiovanni & Starratt, control, accountability and efficiency with clear-cut manager-subordinate relationships are the watchwords of Scientific Management.

Human Relations Theory

Human Relations Theory had its origins in the Democratic Administration Movement (DAM) most notably by the work of Elton Mayo in 1930s in his classic research study at the Western Electronic Hawthorne plant. Elton Mayo was a social philosopher and professor of business administration at Harvard University (Sergiovanni & Starratt, 2007). Mayo believed that the productivity of workers could increase by meeting their social needs at work and by promoting their interaction between them. According to Mayo, workers need to be treated decently and should be involved in decision-making processes (Sergiovanni & Starratt, 2007).

Human relations theory assumes that people will be committed to work if the work conditions are favourable. Also, they can be self-directed and creative at work if properly motivated. People as human beings have their own thinking, and they view the world in different ways (Druker, 1991). Accordingly, the need for recognition, security and a sense of belonging is more important in determining workers' morale and productivity (Druker, 1991; Sergiovanni & Starratt, 2007). A worker is a person whose attitudes and effectiveness are conditioned by social demands from both inside and outside the work plant (Druker, 1991; Sergiovanni & Starratt, 2007). A person who deals with people should understand that there is always a social aspect to life. Workers know a great deal about the work they are doing. If a leader wants to address productivity and quality, then she/he should ask them what they think could be the best way to do the job (Druker, 1991). Workers‟ knowledge of their job is the starting point for improved productivity, quality, and performance. Thus, in making and moving things, partnership with the responsible worker is the best way to increase productivity (Druker, 1991).

The key elements of the Human Relations Theory

⇨ An emphasis on humans instead of focusing on machines and monetary structures.

⇨ Effective human relations. It is integral to motivating workers.

⇨ Focusing on the environment of the organization that goes beyond the social context.

⇨ The motivation of the workers is extensively reliant on the establishment of teamwork, cooperation, and proper control of the individuals within the organization.

⇨ Efficiency is realized by the minimal inputs generating maximum results.

In education and schooling processes, teachers are regarded as whole persons rather than as packages of energy, skills, and aptitudes to be utilized by administrators and pedagogic supervisors (Sergiovanni & Starrat, 2007). Pedagogic supervisors need to create a feeling of satisfaction among teachers by showing interest in them as people (Sergiovanni & Starratt, 2007).

It is assumed that a satisfied teacher would work harder and would be easier to work with (Sergiovanni & Starrratt, 2007). Teachers know better about their strengths and weaknesses whilst the pedagogic supervisors are simply there as a facilitator for supporting the teacher for better performance. For that reason, teachers need to participate in the evaluation process and so pedagogic supervisors' methods and its objectives should make teachers feel that they are important and useful to a particular school. There is a need as well to create the personal feelings and comfortable relationship between teachers and pedagogic supervisors (Sergiovanni & Starratt, 2007).

In addition, Sergiovanni& Strarrat (2007), Human Relations Theory suits best in supporting quality development of education in schools. Human Relations Theory has been cited to guide the pedagogic supervisors to communicate effectively with their teachers and since they are regarded as whole persons in their right rather than as packages of energy, skills, and aptitudes to be utilized by administrators (Pretomode 1997). This means that pedagogic supervisors need to develop a feeling of satisfaction among teachers by creating interest in them as important persons and encourage intrinsic motivation so that teachers can have a feeling of personal enjoyment, interest, and pleasure at work (Emily, 2011, Sergiovann & Starrat, 2007).

Hoy & Miskel (2008) add that a school is an open social system that has five important sub systems thus, structure; the individual; the culture, the political and the pedagogical. In order to gain confidence of the members in a school, the administrators should harmonize the human relationship (Mullins, 2005) because the system must be defined in terms of the aim and not in terms of methods. When the whole system is optimized, everybody wins and less than optimization of the whole system means eventual loss to everyone. Deming (1993) states administrators need to encourage good relationship to cultivate intellectual and professional stimulations among staff. If well supported, staffs will effectively fulfil the demands of students to follow the curriculum. Schools as social systems, human relations have an important role of facilitating results (Chima, et al., 2012). They, (Chima, et al., 2012) add that the view and expectations about people determines the good and real understanding in a rationalized manner because relationship in schools must not be based on morality alone. The quality of education is to be maintained as other cultural and sociological factors contribute to effective promotion of the school's climate.

Furthermore, the human relations perspective sees communication as a tool that can be used by management to "buy" cooperation from subordinates. Robert Dubin, R. (1958).

The world of work. Englewood Cliffs, NJ: Prentice-Hall coined the term "privilege pay" to refer to a tool manager can utilize with subordinates when the manager provides subordinates departmental information and allows the subordinate to engage in open communication about various departmental issues with the manager. Dubin sees this as a form of payment a manager makes to "buy" cooperation from subordinates because the manager is having to give up some of her or his access to private information and control over subordinates because this process enables subordinates to engage in some self-direction.

In sum, the human relations perspective on organizational management notes that the world would be easier for managers if they could just make decisions and have subordinates follow those decisions. However, because employees are more productive when they are satisfied, it becomes the job of the manager to open engage with subordinates.

Empirical Review

Supervisory Planning for Effective Teaching and Learning

Saihu (2020) conducted a study on the role of educational supervision in improving the quality of teachers in educational institutions through theoretical concepts, objectives, principles, planning and techniques in the implementation and follow-up of educational supervision through reviewing books, using bibliographic methods, and using qualitative research methodologies. With the applied research, the results of this study were summarized to the effect that real academic supervision can improve the efficiency of the teacher in an educational institution. With careful planning, as well as the correct techniques in its implementation, its results will be reflected in improvements in the efficiency and quality of teachers and education in schools.

Goldring et al (2020) conducted a study aimed at developing the role of supervisors through their training and development to provide academic support to teachers and increase the effectiveness of academic content and teaching methods for teachers, which in turn increases the academic achievement of students by improving the quality of teaching, and by eliminating all the challenges they face. Challenges have been eliminated through training and development, and support and development effective principles more effectively. The educational purpose was achieved by giving supervisors less authority over principals and few other tasks that would divert them from working with school leaders and making them focus more on teaching during school visits, providing customized training for key supervisors and focusing on meeting times, and for professional learning and continuous skills development.

Supervisory Monitoring for Effective Teaching and Learning

Çevik and Zepeda (2020) conducted a study on the role of educational supervision in monitoring and promoting social principles in secondary schools of the United States. The results of this study were that educational supervision enhances reflexive practices, supports relationship building, creates opportunities to improve teacher ability, and focuses effort and time to create momentum for teachers to become more social – just as they also interact with their students. And that educational supervision must have social, cultural, and political principles, and that without these principles, supervision, professional learning, and evaluation

will remain secret administrative functions that do not focus on the needs of teachers while they are on the move throughout their careers.

Mayudho and Imron (2021) research to the methods used for school monitoring in Kamashi district public secondary schools. The various supervision techniques utilized by the supervisors at these schools, the methods for secondary school classroom monitoring, the degree to which pedagogic supervisors fulfil their duties, and the difficulties in putting pedagogic supervision into practice. The manner of the survey was descriptive. Five schools were chosen at random to serve as model schools. Using the intentional sample method, 5 principals and 30 pedagogic supervisors were included as respondents. The major tool for gathering data was the questionnaire. The study's findings showed that teachers lack awareness of and guidance regarding the activities and significance of pedagogic supervision, that supervisory practices do not effectively match teachers' developmental levels, and that supervisors are unable to correctly implement the required procedures for classroom supervision. On the other hand, a lack of pertinent training programs for supervisors, a dearth of supervisors with experience in pedagogic supervision activities, a lack of supervision guides in schools, and a lack of funding for supervisory activities are some of the factors that have an impact on pedagogic supervision. Finally, it is advised that supervisors be given relevant in-service training to improve their supervision activities, necessary tools such as supervision guides, and sufficient funding for this training to eliminate pedagogic supervision issues in secondary schools.

Supervisory Evaluation for Effective Teaching and Learning

Kristiawan et al (2019) discussed supervision as a grant from the principal to carry out the evaluation and overseeing the technical aspects of teaching and administration in the form of providing instructions and examples on the implementation of teaching by teachers to improve and
improve the performance of the teacher in carrying out the main task and to know the shortcomings or education errors that must be fixed. In order to apply their knowledge and skills to better assist parents, students, and schools, instructors and supervisors must go through a process called supervision. The principal and the teacher must comply to the directives of the educational supervisor in addition to making the school a better and more productive society.

In view of Thakral (2015) supervision is about evaluating and supporting teachers by bringing improvement in the teaching-learning process and their professional development. In addition, a supervisor is formally and officially a designated person to assess and assist teachers in teaching-learning process and professional development. Additionally, effective supervision comprises tasks done by the head of schools and other pedagogic supervisors to direct and enlighten teachers about what should be done or have been done rather than faults findings. Michael. (2017). provide that, supervision intends to help teachers improve instruction by directly assisting them whereas supervision aims to check the completion of the goals of curriculum by the teacher and in case of failure, to caution them critically.

Suchyadi et al. (2019) conducted a study which focused on educational supervision on teachers and school administrators to improve the performance of teachers and raise the efficiency of education and the educational process, as well as oversight and the development of preventive measures to prevent teachers from committing violations and being more careful in performing their work as teachers. This will help in implementing community service and revealing supervision activities that are implemented in school. The results of this study are expected to help in solving educational problems that teachers face during learning and can provide motivation for teachers to always increase their knowledge to become teachers.

Kristiawan et al (2019) discussed pedagogic supervision as a grant from the supervisor to carry out the evaluation and overseeing the technical aspects of teaching and administration in the form of providing instructions and examples on the implementation of teaching by teachers to improve and improve the performance of the teacher in carrying out the main task and to know the shortcomings or education errors that must be fixed. To apply their knowledge and skills to better assist parents, students, and schools, instructors and supervisors must go through a process called supervision. The supervisor and the teacher must comply to the directives of the educational supervisor in addition to making the school a better and more productive society.

Berhanu (2019) & Terra completes a study evaluating the procedures and difficulties associated with educational supervision in public secondary schools in the Wallita District and choose the degree to which educational supervisors support trained professionals at the professional level. How educational supervisors are skilled in their jobs and are aware of the main difficulties encountered while carrying out educational monitoring. Use a descriptive survey design. A questionnaire was used to collect quantitative data. In-depth interviews were used to collect

qualitative data. According to the study's findings, there are educational supervisors. It did not offer instructors consistent and sufficient assistance for curriculum development and professional growth. Neither in educational matters nor in the significance of educational monitoring did they provide training for teachers. They spend their time working on administrative activities rather than providing greater support for academic tasks. On the other hand, educational supervisors encountered several difficulties that hindered the efficient application of supervision, the difficulty in choosing and appointing qualified individuals to serve as instructional supervisors, the absence of supervision handbooks.

Supervisory Communication for Effective Teaching and Learning

Kata Kunci, (2021) carried a study on the role of academic supervision and communication on teacher performance. Teachers as education personnel have an important role in determining success in achieving educational goals. Schools pay special attention to teacher competence so that teachers are required to continue to develop professionalism and performance. This study aims to obtain information about the role of academic supervision and interpersonal communication. research place at public elementary schools in the administrative city of South Jakarta. This study used a survey method with path analysis techniques and a causal quantitative approach. The sample in this study was 81 teachers who were taken using simple random sampling technique or simple random sampling and the teachers who were the object of the research were determined using the sample technique formula from Slovin. The data analysis technique was performed using descriptive and inferential statistics by first doing the prerequisite analysis, namely population normality and regression analysis. The findings from the study that academic supervision activities and smooth interpersonal communication play a major role in improving teacher performance. Professional teachers will be able to manage learning activities well and will be able to provide motivation to students so that the goals of learning will be achieved and produce students who excel in their respective fields.

Figure 7: Conceptual framework
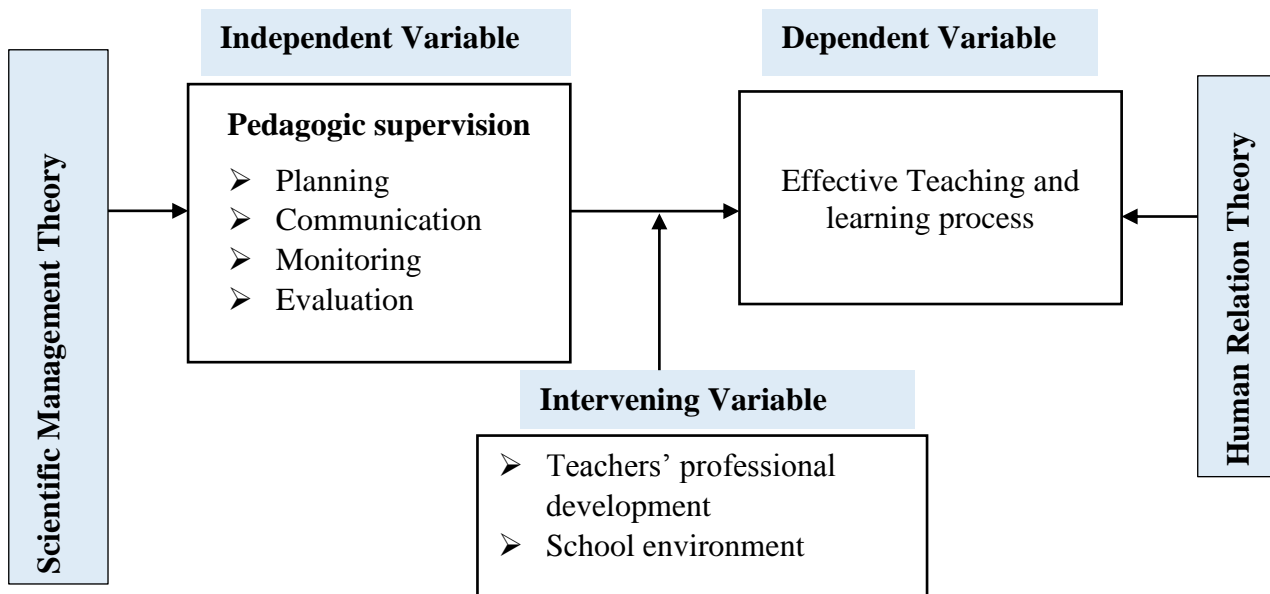
Source: Researcher (2023)

The conceptual diagram was developed from the review of literature and theories.

CHAPTER THREE

METHODOLOGY

This section discusses the research methodology used for collecting and analysing data. It reveals the processes used to collect data from the field. The section opens with a description of the research design, the study area, the population of the study, the target population, and the accessible population from which our sample size was derived. We then received the sample and the sampling techniques that were employed. The data-gathering tools and methods for validating them were discussed. The processes for administering the instruments were also discussed, data analysis techniques elucidated, ethical considerations, and reiteration of the hypothesis.

Research Design

A descriptive survey design was employed for this study, and a regression prediction design was used to gather data. Using descriptive design and regression analysis, you can predict results and elucidate the effect of independent variables on the dependent variable. Researchers use the regression test to predict the effect of two or more variables or sets of scores (Creswell, 2012). According to Cresswell (2012), a research design is a strategy that details information on a certain issue and should be gathered and processed. It is a broad framework that describes the steps that will be taken to collect the data needed to respond to the research question or hypothesis. Cresswell (2012) claims that a research design outlines the steps the researcher will take, from writing or creating the hypothesis to the final data analysis. Data is gathered using a quantitative approach to ascertain whether and how strongly the two variables affect each other (pedagogic supervision and teaching and learning process). At the end of this research, quantitative data was collected and analysed, and the findings were generalised to the entire study population. With prediction design, researchers aim to predict outcomes by employing specific factors as predictors rather than merely associating variables. Therefore, prediction studies are valuable because they aid in predicting or anticipating future behaviour.

Area of Study

The purpose of this section is to describe the study area in terms of locality, topography, and history. A research area is a physical site where a study or a current research project is being conducted. This research was carried out in the Mfoundi division in Cameroon's Centre Region.

The division covers an area of 297 km2 and as of 2005 had a total population of 1,881,876 (Central Bureau for population census in Cameroon, 2005). The division forms the Yaoundé capital and greater area. The division was created following Decree No. 74/193 of the March 11, 1974, separating it from the division of Méfou (today itself divided into Méfou-et-Afamba and Méfou-et-Akono).

The division has only one urban community: However, each of the seven current municipality has an urban municipal council, elected headed by an urban municipality mayor. The urban community covering the entire division makes it a community with a special status.

The division has seven Sub-division:

1. Yaoundé I (Nlongkak)
2. Yaoundé II (Tsinga)
3. Yaoundé III (Efoulan)
4. Yaoundé IV (Kondengui)
5. Yaounde V (Essos)
6. Yaoundé VI (Biyem-Assi)
7. Yaoundé VII (Nkolbisson)

The study was carried out in the Mfoundi because there is inadequate information on pedagogic supervision on teaching and learning process.

Figure 8: Map of Mfoundi division
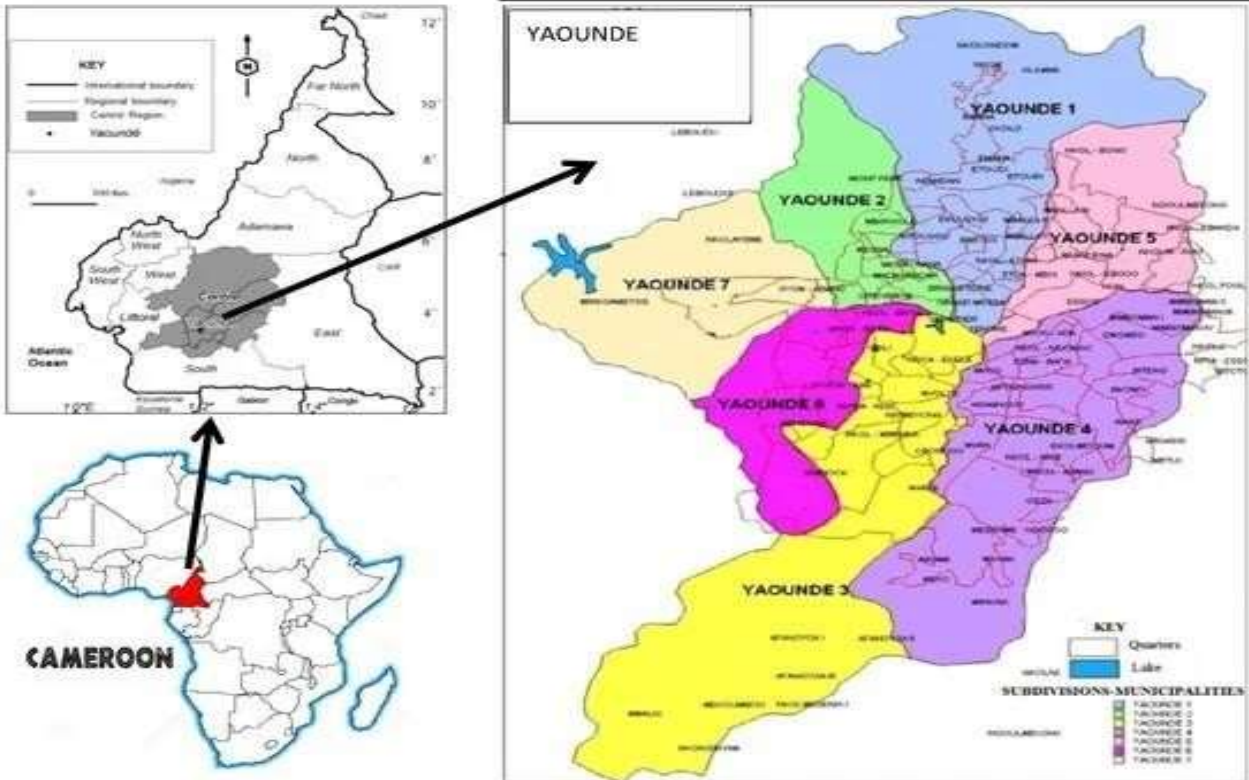
Population of Study

According to Amin (2005), a population is the totality of all the components relevant to certain research. When concluding a sampling study, the researcher is interested in the entirety or aggregate of things or people with one or more traits in common (Amin, 2005). Asiamah et al. (2017) believe that population members must share at least one common attribute. This characteristic qualifies participants as population members. Five thousand six hundred and ninety (5690) teachers from public and private institutions in Mfoundi comprise the study population (Division of Personnel, the divisional delegation of secondary education, 2023).

Target Population

The researcher intends to generalize the findings to this population. The target population, often known as the parent population, may not always be reachable to the researcher (Amin, 2005). For Asiamah et al. (2017), the set of people or participants with traits of interest and relevance is referred to as the target population, and it is the portion of the general population that remains

after it has been refined. The researcher must therefore identify and exclude members of the general population who might not be able to share experiences and ideas in sufficient clarity and depth from the target population. Thus, the target population of this study comprises ten (10) schools drawn from the seven subdivisions of Mfoundi. Teachers were chosen because they are the sole guarantors of quality education in the country, which is why emphasis should be placed on teaching and learning process.

Table 2: Distribution of Target Population

No	Name of School	Sub-division	Target Population
1	Government Bilingual High School Emana	Yaoundé 1	175
2	Government Bilingual High School Nyom	Yaoundé 1	83
3	Government Bilingual High School Nkol-Eton	Yaoundé 2	182
4	Government Bilingual Practising High School Yaoundé	Yaoundé 3	244
5	Government Bilingual High School Ekounou	Yaoundé 4	194
6	Government Bilingual High School Mimboman	Yaoundé 4	169
7	Government Bilingual High School Yaounde	Yaoundé 5	198
8	Government Bilingual High School Etoug-Egbe	Yaoundé 6	284
9	Government Bilingual High School Mendong	Yaoundé 6	276
10	Government Bilingual High School Ekorezock	Yaoundé 7	163
	Total		**1968**

Source: Division of Personnel, the divisional delegation of secondary education 2023

Accessible Population

This is the population from which the sample is drawn (Amin, 2005). Asiamah et al. (2017) corroborates this by postulating that after eliminating every member of the target population who might or might not engage in the study or who cannot be reached during that time, the accessible population is then reached. The last group of participants is the one from whom data is gathered by polling either the entire group or a sample taken from it. If a sample is to be taken from it, it serves as the sampling frame. People eligible to engage in the study but unable to participate or would not be available at the time of data collection are referred to as the accessible population. The accessible population of this study is drawn from seven (07) government bilingual high schools where teachers of the English sub-system of education were targeted. The researcher, therefore, had access to 1315 teachers drawn from the seven (07) schools, as seen below.

Table 3: Distribution of Accessible Population per school

No	Name of school	Sub-division	Accessible population
1	Government Bilingual High School Nyom	Yaounde 1	83
2	Government Bilingual High School Nkol-Eton	Yaounde 2	182
3	Government Bilingual Practicing High School Yaounde	Yaounde 3	244
4	Government Bilingual High School Mimboman	Yaounde 4	169
5	Government Bilingual High School Yaounde	Yaounde 5	198
6	Government Bilingual High School Mendong	Yaounde 6	276
7	Government Bilingual High School Ekorezock	Yaounde 7	163
	Total		**1315**

Source: Division of personnel, divisional delegation of secondary education 2023

Table above shows the accessible population, which is 1315 in the targeted seven schools.

Sample of the study

The sample of this research work was drawn from the accessible population of 1315 teachers of the English sub system of education from the seven schools the researcher had access. A good sample is one that statistically represents the target population and is sizeable enough to provide an answer to the research issue. Amin (2005) views a sample as a portion of the population whose results can be generalized to the entire population.

The author adds that a sample can also be considered representative of a population. Majid (2018) corroborates this by asserting that because the community of interest typically consists of too many people for any research endeavour to involve as participants, sampling is a crucial tool for research investigations.

The sample size was determined using research advisor sample size table (2006), which constituted 306 teachers, drawn from seven schools representing the seven sub-divisions in Mfoundi. They were drawn in such a way that all teachers of GBHS should be represented.

Table 4: Distribution of Sample per school

No	Name of school	Sub-division	Accessible population	Sample
1	Government bilingual high school Nkol-Eton	Yaoundé 2	182	44
2	Government bilingual high school Nyom	Yaoundé 1	83	44
3	Government bilingual practising high school Yaoundé	Yaoundé 3	244	45
4	Government bilingual high school Mimboman	Yaoundé 4	169	44
5	Government bilingual high school Yaoundé	Yaoundé 5	198	44
6	Government bilingual high school Mendong	Yaoundé 6	276	45
7	Government bilingual high school Ekorezock	Yaoundé 7	163	40
	Total		**1315**	**306**

Source: Researcher 2023

Table above shows the sample of the study drawn from research advisor sample size table (2006)

Sampling technique

Every research involves, to some degree or another, a sampling process. Sampling is one of the most important steps in research; it will lead to valid results when carefully done. Sampling is a process of selecting representative portions of a population that permits the researcher to make utterances or generalizations concerning the said population. It can also be the process of selecting elements from a population so that the sampled elements selected represent the population. Sampling is involved when any choice is made about studying some people, objects, situations, or events rather than others. A good sample should be representative of the population from which it was extracted. Regardless of the sampling approach, the researcher should be able to describe and relate the characteristics to the population (Amin, 2005).

Sampling techniques refer to the various strategies a researcher uses to draw out a sample from the parent population of the study (Amin,2005). There are two main sampling techniques: probability and non-probability techniques. The sampling technique suitable for this study is probability sampling, in which all the elements of the population have some probability of being

selected. Probability sampling will provide a base for the researcher to generalize about the population.

The type of probability sampling technique employed in this research is Simple Random Sampling (SRS). Amin (2005) opined that a simple random sample is a sample obtained from the population in such a way that samples of the same size have equal chances of being selected. The researcher proceeded through this method by selecting the accessible population comprising seven government bilingual high schools in Mfoundi. This was done through the random number method, in which Amin (2005) says if there are numbers that identify the elements of the population, then the random number method will be appropriate. The researcher proceeded as follows; The numbers 01, 02, 03,….10, were attributed to all the Government Bilingual High Schools in the Mfoundi division on folded pieces of paper in a basket. The researcher pleaded with two neighbours who randomly selected 3 and 4 schools each from the basket. These seven schools were selected to represent the seven schools used in the accessible population. Through this technique, no school or teacher was left out, ensuring the representativeness of all government bilingual high schools in the Mfoundi division.

Instrument for Data Collection

An instrument is any tool that has been methodically built to collect data and should be gathered accurately. The questionnaire is the tool utilized to gather data for this investigation. According to Amin's definition from 2005, a questionnaire is a professionally crafted tool used to gather data in line with the research questions and hypothesis requirements. He continues by saying that a questionnaire can be considered a self-report tool used to collect data on factors of interest in research. A questionnaire is a useful tool for gathering survey data, providing structured, frequently numerical data, being able to be administered without the researcher's presence, and frequently being comparatively simple to analyse, as Cohen et al. (2007) reiterated. It is a tool for gathering data with specific questions that the respondent must answer and then return to the researcher. There are two different kinds of questionnaires: closed and open-ended. The type of study is the only factor influencing the questionnaire selection. This study will use closed-ended questions, including Likert-style rating scales and dichotomous questions. These closed questions are simple to code and take little time to complete.

According to Creswell (2009), a questionnaire takes a quantitative approach to measure perceptions and provides data upon which generalizations can be made on the views of a given population on a particular phenomenon. This study's self-administered questionnaire was preferred, given that the targeted respondents could read and express themselves effectively. The researcher used a self-administered questionnaire to capture the teachers' views on the teaching and learning process in some public secondary schools in Mfoundi Division. It is a rigorous instrument prepared by the researcher about the research problem under investigation, which is to be used to collect information from respondents. It consists of a carefully selected set of questions or statements requiring respondents' answers. The collection of the research-developed questionnaire titled: Pedagogic supervisor's (PS) has two parts; A and B. Part A contains information on the personal data of the respondents, while part B contains twenty-five (25) statements built in five clusters A, B, C, D and E. Cluster A of the questionnaire focused on supervisors planning strategies for the achievement of effective teaching and learning process in the selected schools. Cluster B of the questionnaire hinged on supervisors monitoring strategies for the achievement of effective teaching and learning processes. Cluster C of the questionnaire concentrated on the supervisor's evaluation strategies for achieving effective teaching and learning. Cluster D of the questionnaire addressed the pedagogic supervisor's communication strategies for achieving effective teaching and learning. Finally, cluster E was made up of statements about effective teaching and learning. This enables us to obtain information on the dependent variable, which is the actual problem.

Table 5: Variables and Statements

Variables	Statements
The pedagogic planning for the supervisor	1, 2,3, 4, 5
The pedagogic monitoring of the supervisor	6, 7, 8, 9, 10
The pedagogic evaluation of the supervisor	11, 12, 13, 14, 15
The pedagogic communication of the supervisor	16, 17, 18, 19, 20
Effective teaching and learning process	21, 22, 23, 24, 25

All the five-cluster had five statements each, all relating to the research questions that guided the study. The response format for clusters A to E is based on a four-point scale of strongly agree (SA), Agree (A), Disagree (D) and strongly disagree (SD). In other words, the higher the

aggregate scores on the rating scale, the more positive the response of the subjects and the lower the score, respondents indicated their level of agreement by ticking (√) on the rating scale.

Table 6: Questionnaire options and corresponding weights on the Likert scale

Option	Weight
Strongly Agree (SA)	4 Points
Agree (A)	3 Points
Disagree(D)	2 Points
Strongly Disagree (SD)	1 Point

Table 6 shows how the questionnaire was weighted with the various options, from 4 points for SA to 1 point for SD.

Validation of the Instrument of data Collection

According to Amin ME (2005), validation refers to the accuracy of the instrument in measuring what the researcher intends to measure. Validity refers to the measurement instrument and the level to which it saves the purpose of it design. The validity of the instrument can be affirmed with the reason that the questions were simple, understandable, and easy for the respondents to answer. Face validity was adopted. This was done by giving the initial draft of the questions to expert raters and were kindly requested to examine the adequacy of the statement relevance and suitability of language, structuring and sequencing of ideas and appropriateness of the instrument.

The comments and observations of these experts were used for modifications of the instrument. They modified some of the research questions and improved on the clarity of the questionnaire statements and the clarity of the response scale format of strongly Agree (SA), Agree (A), Disagree (D) and strongly Disagree (SD). Their comments were incorporated in the revised version of the questionnaire statements. Our method of distributing questionnaires to the respondent was face-to-face distribution. We later collected the questionnaire in on week. This was to give room for the respondents to take their time in filling the questionnaires without any inconvenience.

Face Validity

The questionnaire was carefully studied by specialists in instrument development and the supervisor in charge of the dissertation for examination and screening in case of any error. Some were adjusted, and maintained and others were disqualified.

Content Validity

The supervisor examined the statements on the questionnaire in relation to the objective of the research work. After proper examination and acceptance of the statements, the content of the instruments was made valid. It was distributed to teachers at the selected schools and collected a week later. The researcher permitted the respondents to pose questions where necessary during the exercise. In the end, most of the copies were collected, and the return rate was recorded.

Pilot Study

The researcher then conducted a pilot test in the Government Bilingual High School Etoug-Egbe, which did not constitute part of the sample. We did a pilot study because we wanted to develop and test the adequacy of the research instrument. The teachers responded and the internal consistency of the clusters were determined using Cronbach alpha which gave us a reliability of .874. The coefficient for the clusters was high enough for the study to realize the instrument because it reveals a complete understanding of the content of the questionnaire. This procedure ensures the content validity if the instrument. It might also give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated.

Reliability of the study

The questionnaire was pre-tested with comparable respondents drawn from outside the area of the study. The results of the pilot testing were used in computing relevant reliability. The instruments were trial tested using ten teachers in Government Bilingual High School Etoug-Egbe. The teachers responded, and he internal consistency of the six clusters was determined using Cronbach alpha which gave us a reliability of .874. The coefficient of the clusters was

high enough for the study to utilize the instrument. After using the questionnaire for the study, we had a Cronbach alpha of .879, implying the instrument was reliable.

Method of data collection

The researcher took authorization of research from the Dean of the Faculty of Science of Education from the University of Yaoundé 1. She first went to the Centre Regional Delegation for Secondary Education of Mfoundi Division, where she carried out documentary research on statistics of teachers in the division. She went to the schools and obtained permission from the principals. The permission was granted.

As far as the questionnaire administered were concern, they were distributed to all the teachers at the schools' concern and was collected after with a research confirmation signed by the principals of the respective schools. During the exercise, the researcher permitted the teachers to ask questions were necessary. At the end, most of the copies were collected. This gave a return rate of 98.37%.

The Return Rate of the Instrument

The return rate indicates the number of questionnaires that were received at the end of the research after the questionnaires were administered to respondents. The return rate for this study was calculated using a simple percentage based on the formula below.

$$R = \frac{\sum RQ}{\sum AQ} \, X \, 100$$

Where:

R= Return rate

$\sum$RQ= Sum of questionnaires returned.

$\sum$AQ = Sum of questionnaires administered.

% = Percentage expressed as a hundred

The rate of return of questionnaires for this study was calculated as follow:

Total number of questionnaires administered = 306.

Total number of questionnaires returned= 301.

Therefore, return rate $R = \dfrac{301}{306} X\ 100 = 98.37\%$

Methods of data analysis

This study made use of a method of data analysis by which each hypothesis is taken and material to answer or provide a test is provided. Consequently, a regression method was used. Data were presented using tables and descriptive statistics like percentages, frequencies, and means were used. Correlation as well as the statistically more advanced method of multiple regression analyses was used in data analyses.

A regression method was the main method used in this study. Regression methods form the backbone of much of the analyses in research. In general, these methods are used to estimate associations between variables, especially when one or more of these are variables are continuous. To answer the research question on how the independent variables affect the dependent variables, a standard multiple regression analysis was conducted on the data in SPSS. The multiple regression analyses attempt to find out whether independent variables can predict the dependent variable and which of those independent variables is the strongest predictor of the dependent variable, in this case, teaching and learning process, therefore, multiple regression analyses is the most suitable analysis tool for the current research (Pallant, 2005).

Ethical Considerations

Wilson and Hunter (2010) insisted that before conducting research, there should be awareness on both parties of institutions and research participants. Thakhathi, Shepherd, and Nosizo (2018) maintains that ethical considerations in research are essential because they discourage fabrication or falsifying data, and thus encourage the quest of knowledge and truth, which is the main objective of undertaking a study. This research was conducted in respect to the fundamentals of research ethics. The respondents were assured of anonymity to avoid prejudice and victimisation. All the information gathered from the respondents was held in confidentiality, in that, names of the respondents were not indicated in the questionnaires, and the research findings were not used otherwise apart from for academic purposes. This study sought in-depth information on selected administrative practices and may reveal inadequacies in leadership of schools in the study area. The principal may become weary of the implications of the research; thus, the researcher communicated to the respondents beforehand. The contents

of the questionnaires such as what is being studied, the purpose of the study, those involved in the study and the nature of participation of each subject and methods of data collection were conveyed to respondents in advance.

Expected Results

After having tested our variables, we expect to see whether supervisory planning, monitoring, evaluation, and communication influence the teaching and learning process.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

This study aimed to find out how pedagogic supervision influences teaching and learning process in some public secondary schools in Mfoundi division. This chapter seeks to answer the questions raised in the study and test the research hypotheses.

Data Screening

The data was screened for univariate outliers. Of the returned questionnaire, there were neither outliers nor missing values. Hence the analysis of the study will be based on a total of 301 questionnaires.

Demographic Characteristics

Table 7: Questionnaire options and corresponding weights on the Likert scale

Sex	Frequency	Percent
Male	110	36.5
Female	191	63.5
Total	**301**	**100.0**

The table represents the sex distribution of respondents. In the context of this study, we use a population of 301 respondents. According to the table, 110 of the respondents are male while 191 of the respondents are female, making a percentage of 36.5 and 63.5, respectively. This variation is because there are more females than males in the sample schools. This indicates that most of the teachers in secondary schools in Mfoundi-Division are females.

Figure 9: Gender Distribution of Respondents
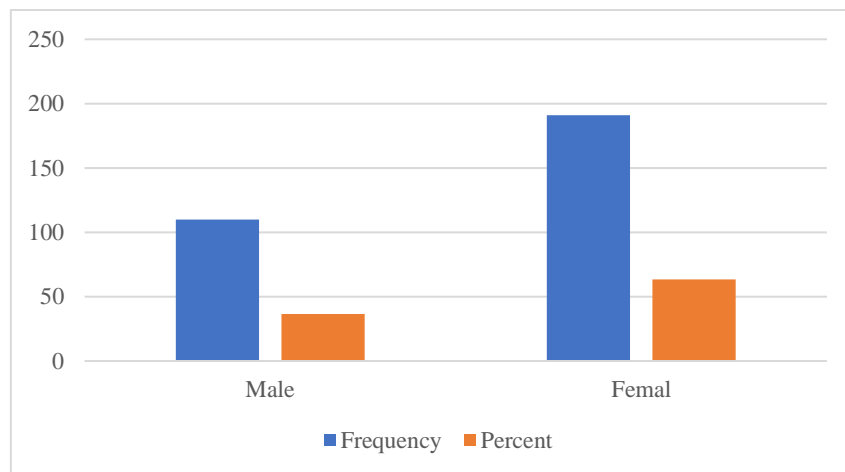
Table 8: Questionnaire options and corresponding weights on the Likert scale

	Frequency	**Percent**
21-30 yrs.	67	22.3
31-40 yrs.	134	44.5
41-50 yrs.	73	24.3
51-60 yrs.	27	9.0
Total	**301**	**100.0**

The result shows that 22.3 % of the teachers are of 21 to 30 years, 44.5% have ages between 31 to 40 years, 24.3% of 41 to 50 years of age, 9.0 % between 51 to 60 years.

Figure 10: Distribution of Respondents based on Age Group
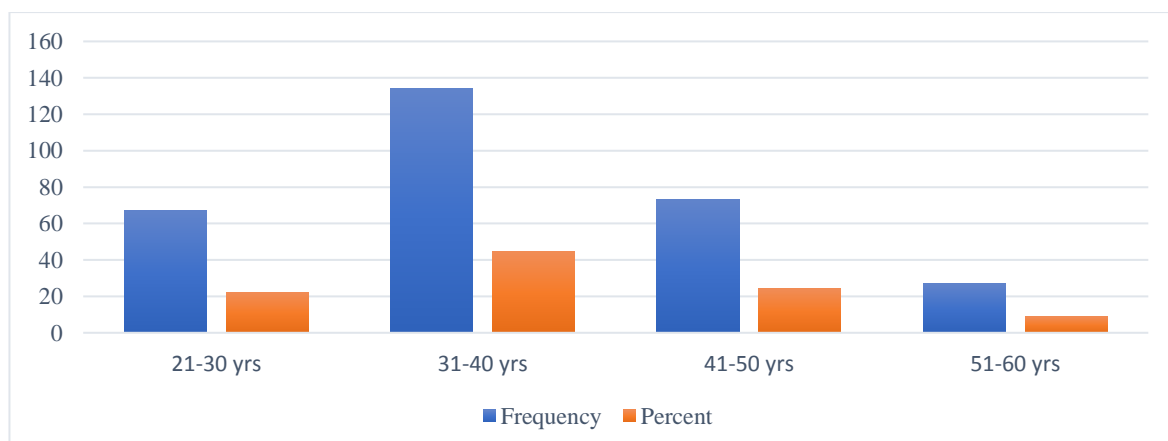
Table 9: Questionnaire options and corresponding weights on the Likert scale

Qualification	Frequency	Percent
DIPES I	221	73.4
DIPES II	80	26.6
Total	**301**	**100.0**

With respect to qualification, more than half of the respondents (73.4%) are holders of DIPES I, and 26.6% are holders of DIPES II.

Figure 11: Distribution of Respondents based on Qualification.
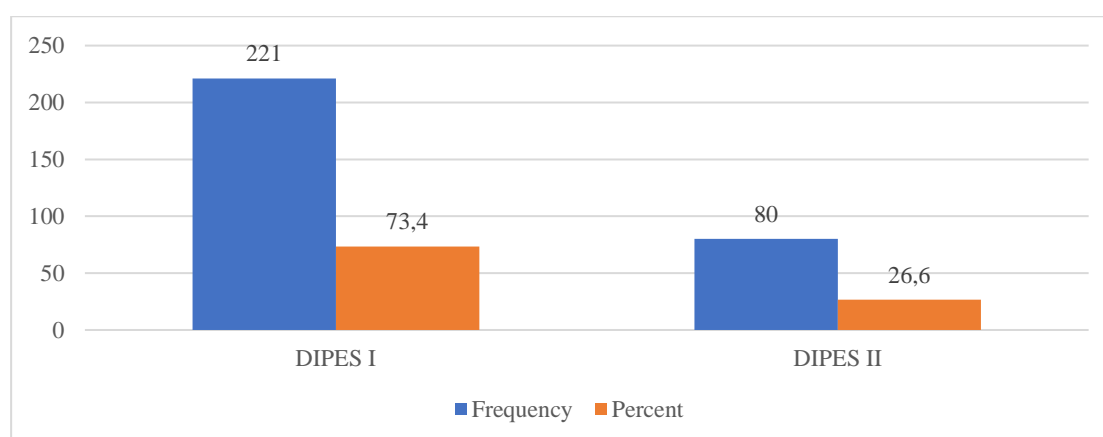
Table 10: Questionnaire options and corresponding weights on the Likert scale

	Frequency	Percent
Government Bilingual High School Emana	44	14.6
Government Bilingual High School Nkol-Eton	44	14.6
Government Bilingual Practising High School Yaoundé	44	14.6
Government Bilingual High School Ekounou	44	14.6
Government Bilingual High School Yaoundé	44	14.6
Government Bilingual High School Mendong	45	15.0
Government Bilingual High School Ekorezock	36	12.0
Total	**301**	**100.0**

The above table represents the seven selected bilingual high schools in Mfoundi Division, questionnaire was distributed in these schools. Government Bilingual High School Emana with a frequency of 44, giving a percentage of 14.6, Government Bilingual High School Nkol-Eton with a frequency of 44, giving a percentage of 14.6, Government Bilingual Practicing High School Yaoundé and Government Bilingual High School Ekounou both with a frequency of 44 giving a percentage of 14.6, Government Bilingual High School Yaoundé with a frequency of 44 giving a percentage of 14.6, Government Bilingual High School Mendong with a frequency of 45 giving a percentage of 15.0, and Government Bilingual High School Ekorezock with a frequency of 36 giving a percentage of 12.0.

This same result is represented in the figure below.

Figure 12: Distribution of respondents based on schools.
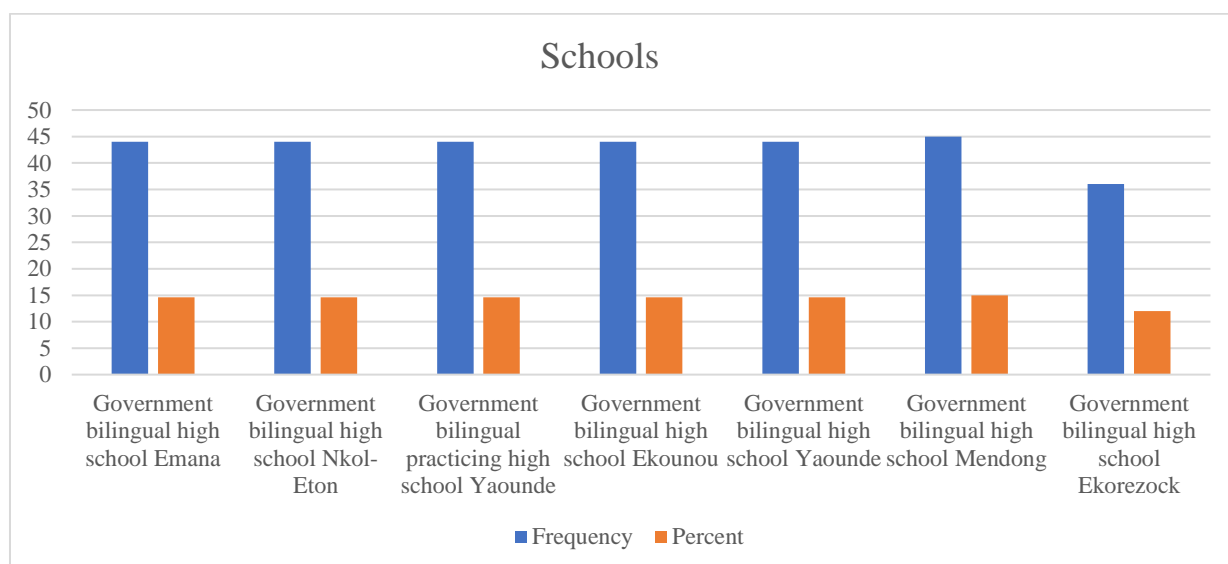
Table 11: Questionnaire options and corresponding weights on the Likert scale

	Frequency	Percent
Yaoundé I	44	14.6
Yaoundé 2	44	14.6
Yaoundé 3	44	14.6
Yaoundé 4	44	14.6
Yaoundé 5	44	14.6
Yaoundé 6	45	15.0
Yaoundé 7	36	12.0
Total	**301**	**100.0**

According to the table above, questionnaire was distributed in seven sub-divisions that make up Mfoundi Division. These sub divisions were Yaoundé 1, with a frequency of 44, giving a percentage of 14.6, Yaoundé 2 with a frequency of 44, giving a percentage of 14.6; Yaoundé 3 and Yaoundé 4 both with a frequency of 44 giving a percentage of 14.6, Yaoundé 5 with a frequency of 44 giving a percentage of 14.6, Yaoundé 6 with a frequency of 45 giving a percentage of 15.0, and Yaoundé 7 with a frequency of 36 giving a percentage of 12.0. This same result is represented in the figure below.

Figure 13: Frequency table based on School Location School Location
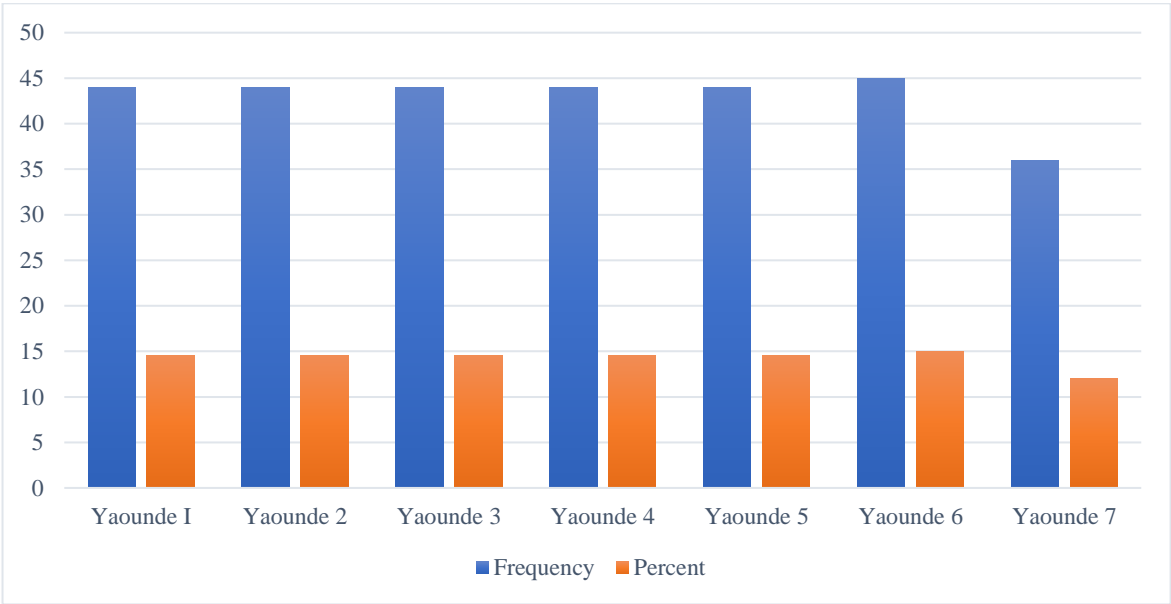
Respondent's views on the Planning functions of the supervisor

Five items were designed in the questionnaire to respond to this section. All five items designed to measure respondent's views on the pedagogic planning functions of the supervisor have a mean less than 2.5 which is the cuff of mean.

Table 12: Questionnaire options and corresponding weights on the Likert scale

No	Item	SA f	SA %	A f	A %	DA f	DA %	SD f	SD %	M	SD
1	Pedagogic supervisors have a copy of the teacher's scheme of work	20	6.6	75	24.9	39	13	167	55.5	**1.83**	**1.022**
2	The supervisors organize pre-meetings with the school heads before the supervision day	9	3	40	13.3	116	38.5	136	45.2	**1.74**	**.7100**
3	Pedagogic supervisors play a major role in school curriculum implementation through seminars	19	6.3	83	27.6	55	18.3	144	47.8	**1.92**	**1.002**
4	Pedagogic supervisors clearly state the objectives of the visit	20	6.6	67	22.3	86	28.6	128	42.5	**1.93**	**.955**
5	Pedagogic supervisors state the type of supervision visit	16	5.3	38	12.6	96	31.9	151	50.2	**1.73**	**.878**
	Grande mean	**1.83**									
	SD	**0.500**									

It shows that only 31.5% of the teachers generally agree that Pedagogic supervisors have a copy of the teacher's scheme of work, which was supported by a mean of 1.83. 16.3% equally generally agreed to the notion that the supervisors organize pre-meetings with the school heads before the supervision day. 33.9% agreed with the notion that Pedagogic supervisors play a major role in school curriculum implementation through seminars. Only 28.9% think that Pedagogic supervisors clearly state the objectives of the visit. Finally, 17.9% agreed that Pedagogic supervisors state the type of supervision visit.

Respondent's view on the monitoring functions of supervisors

Five items were designed in the questionnaire to respond to the question on pedagogic monitoring functions of supervisors.

Table 13: Respondent's view on the monitoring functions of supervisors

No	Item	SA F	SA %	A f	A %	DA f	DA %	SD F	SD %	M	SD
1	Pedagogic supervisors concentrate on observing lessons	20	6.6	85	28.2	46	15.3	150	49.8	**1.92**	**1.021**
2	Pedagogic supervisors spend enough time in the lesson	24	8.0	83	27.6	88	29.2	106	35.2	**2.08**	**.971**
3	Pedagogic supervisors do identify strengths and weaknesses	10	3.3	69	22.9	69	22.9	153	50.8	**1.79**	**.909**
4	Pedagogic supervisors' general conclusion after observation	23	7.6	86	28.6	74	24.6	118	39.2	**2.05**	**.992**
5	Pedagogic supervisors are well-structured	9	3.0	30	10	97	32.2	165	54.8	**1.61**	**.786**
	Grande mean	**1.89**									
	SD	**0.510**									

From the above table, all the five items designed to answer this question have a mean below the 2.5 cut-offs. It shows that 34.4% of the teachers believe Pedagogic supervisors concentrate on observing lessons. 33.6 % agreed that Pedagogic supervisors spend enough time in the lesson. 25.2% also agreed that Pedagogic supervisors do identify strengths and weaknesses. 36.2% generally agreed that Pedagogic supervisors' general conclusion after observation. Finally, 13 % think Pedagogic supervisors are well-structured.

Respondent's view on the evaluation functions of supervisors

Five items were designed in the questionnaire to respond to this section. From the table below, all five items designed to answer this question have a mean below the 2.5 cut-offs.

Table 14: Respondent's view on the evaluation functions of supervisors

No	Item	SA		A		DA		SD		M	SD
		f	%	f	%	f	%	F	%		
1	Pedagogic supervisors organize individual teacher evaluation conference	9	3.0	36	12	76	25.2	180	59.8	1.58	.815
2	Pedagogic supervisors modify procedures after pedagogic evaluation	17	5.6	57	18.9	99	32.9	128	42.5	1.88	.910
3	Pedagogic supervisors facilitate self-evaluation	4	1.3	10	3.3	116	38.5	171	56.8	1.49	.630
4	Pedagogic Supervisors validate and give additional feedback to struggling teachers	8	2.7	70	23.3	120	39.9	103	34.2	1.94	.825
5	Pedagogic supervisors provide the basics for career planning	21	7	84	27.9	55	18.3	141	46.8	1.95	1.014
	Grande mean	**1.77**									
	SD	**0.454**									

Only 12% of the teachers agreed that Pedagogic supervisors organize individual teacher evaluation conferences. 24.5% agreed that Pedagogic supervisors modify procedures after pedagogic evaluation. Only 4.6% of the teachers supported the opinion that Pedagogic supervisors facilitate self-evaluation. 26% generally agreed that Pedagogic Supervisors validate and give additional feedback to struggling teachers. 34.9% generally agreed that Pedagogic supervisors provide the basics for career planning.

Respondent's view on the communication functions of supervisors

Five items were designed in the questionnaire to respond to this section. All five items designed to answer this question have a mean below the 2.5 cut-offs. 25.9% generally agreed that Pedagogic supervisors communicate school policies. Only 15.9% affirmed that Pedagogic supervisors communicate the time, and criteria of the supervision visit to the school. 17.3% agreed that Pedagogic supervisors use friendly language with the teachers. 19.6% generally agreed that the teachers listen to the pedagogic supervisor during communication because they are experts.

Table 15: Respondent's view on the communication functions of supervisors

No	Item	SA		A		DA		SD		M	SD
		f	%	f	%	f	%	f	%		
1	Pedagogic supervisors communicate school policies	9	3.0	69	22.9	39	13.0	184	61.1	**1.678**	**.927**
2	Pedagogic supervisors communicate the time, and criteria of the supervision visit to the school	10	3.3	38	12.6	116	38.5	137	45.5	**1.74**	**.805**
3	Pedagogic supervisors use friendly language with the teachers	10	3.3	42	14	63	20.9	186	61.8	**1.59**	**.850**
4	The teachers listen to the pedagogic supervisor during communication because they are experts	17	5.6	42	14	1616	38.5	126	41.9	**1.83**	**.871**
5	Pedagogic supervisors have a superiority complex and do not come as friends	3	1	13	4.3	121	40.2	164	54.5	**1.52**	**.630**
	Grande mean	**1.67**									
	SD	**0.440**									

Only 5.3% of the teachers supported the notion that Pedagogic supervisors have a superiority complex and do not come as friends.

Respondent's view on teaching and learning process

Five items were designed in the questionnaire to respond to this section. All the five items designed to answer this question have a mean below the 2.5 cut-offs. 27.9% of the teachers generally agreed that they prepare lessons and schemes of work before teaching. 26% of the teachers agreed that they state the objectives and student responsibilities at the beginning of the lesson. 29% generally agreed that they organize and present lessons well. Only 10% of the teachers agreed that they encourage students to think independently, critically, and analytically. 15.9% of the teachers agreed that they accomplish their objectives at the end of the lesson.

Table 16: Respondent's view on teaching and learning process

No	Item	SA f	%	A f	%	DA f	%	SD f	%	M	SD
1	I prepare lessons and schemes of work before teaching	10	3.3	74	24.6	50	16.6	167	55.5	1.76	.937
2	I state the objectives and student responsibilities at the beginning of the lesson.	8	2.7	70	23.3	102	33.9	121	40.2	1.88	.854
3	I organize and present my lessons well.	10	3.3	53	17.6	78	25.9	160	53.2	1.71	.871
4	I encourage students to think independently, critically, and analytically.	8	2.7	22	7.3	117	38.9	154	51.2	1.61	.738
5	I accomplish my objectives at the end of the lesson	29	9.6	19	6.3	86	28.6	167	55.5	1.70	.957
	Grande mean	**1.73**									
	SD	**0.463**									

Correlation analysis

To test the previously established hypotheses with the help of simple linear regression analyses, Saunders et al. (2016) state that the collected data must meet the precondition that is concerned with the linearity of the relationship between the separate IVs and the DV. Therefore, in the first instance, the researchers have produced scatterplots of the relationships between the different IV, namely the planning functions of the supervisor, monitoring functions of supervisors, evaluation functions of the supervisor, communication functions of supervisor as DV. Looking at the various scatterplots, it can be detected that the relationship between the different IVs and the DV in all cases is linear.

Table 17: Correlations among variables

	SP	SM	SE	SC	ETL
Supervisory Planning (SP)		.626[**]	.523[**]	.516[**]	.537[**]
Supervisory Monitoring (SM)			.586[**]	.590[**]	.537[**]
Supervisory Evaluation (SE)				.591[**]	.522[**]
Supervisory Communication (SC)					.656[**]
Effective teaching and learning processes (ETL)					
Mean	1.83	1.89	1.77	1.67	1.73
SD	.497	.510	.454	.440	.463
N	301	301	301	301	301

To be more precise and fully test the assumption of the linearity and strengths of relationships between the separate IVs and the DV, the researchers have conducted a correlation analysis whose main results are displayed in Table 16. Outcomes show that Pedagogic planning functions of the supervisor, Pedagogic monitoring functions of supervisors, Pedagogic evaluation functions of supervisor, Pedagogic communication functions of supervisor are significantly correlated with the teaching and learning process.

Concerning the strength of relationship, the IVs of the nature of the planning functions of the supervisor, and monitoring functions of supervisors, (Pearson's r (300) = .626, p < .000), planning functions of the supervisor and Pedagogic evaluation functions of supervisor, (Pearson's r (300) = .523, p < .000), planning functions of the supervisor, and communication functions of supervisor, (Pearson's r (300) = .516, p < .000), monitoring functions of supervisors, and Pedagogic evaluation functions of supervisor, (Pearson's r (300) = .586, p < .000), monitoring functions of supervisors, and communication functions of supervisor (Pearson's r (300) = .590, p < .000), evaluation functions of supervisor and communication functions of supervisor, (Pearson's r (300) =.591, p < .000. Hence, from the correlation analysis, it can be concluded that all four measured IVs are significantly correlated. Moreover, due to the confirmed linearity of relationships between the separate IVs and the DV, the precondition to run regression analyses to test the previously developed hypotheses is met (Saunders et al., 2016).

Regression Analysis

Since pedagogic supervision is the intersection of the contributing constructs, in order to identify which independent variable was the largest predictor of teaching and learning process, when all the other variables have been considered, a standard simple regression was performed. Teaching and learning process was the dependent variable, and planning functions of the supervisor, monitoring functions of supervisors, evaluation functions of supervisor, communication functions of supervisor were the independent variables.

The various assumptions underlying simple regression were examined. The correlations between the independent variables and the dependent variable were above 0.2 and thus were acceptable for the regression analysis (Tabachnick & Fidell, 2007). Moreover, there were not very high correlations (r > 0.9) (Field, 2009) between the independent variables. For further

evaluation to check multicollinearity, which indicates a perfect linear relationship between two or more of the independent variables, the tolerance and variance inflation factor (VIF) values were examined. All the tolerance values were above 0.1 and the VIF values were less than 10, thus the data set did not indicate multicollinearity (Field, 2009; Tabachnick & Fidell, 2007).

The Mahalanobis distance was used to check for outliers. Mahalanobis distance "is the distance of a case from the centroid of the remaining cases where the centroid is the point created at the intersection of the means of all the variables" (Tabachnick & Fidell, 2007). It reveals cases that lie at a distance from the other cases, and such cases are considered outliers. Mahalanobis distance is evaluated using chi-square distribution. "Mahalanobis distance is distributed as a chi-square (X^2) variable, with degrees of freedom equal to the number of independent variables" (Tabachnick & Fidell, 2007). To detect which cases are multivariate outliers, the critical X^2 value of the number of degrees of freedom of the independent variables is compared with the Mahalanobis distance of the cases (Tabachnick & Fidell, 2007). Any case whose Mahalanobis distance value is greater than the critical X^2 is considered an outlier. Tabachnick and Fidell (2007) have produced a table of critical X^2 values with which researchers can compare their Mahalanobis distance values. The data cases of the study were compared with this critical X^2 value. No case with critical values higher than what was prescribed by Tabachnick and Fidell (2007) was detected.

Normality of the data set was checked with the Normal Probability Plot and the Scatterplot of the Standardised Residuals. The Normality Probability Plot produced a straight diagonal plot, indicating that the points did not deviate from normality. Again, the scatterplot produced a rectangular-shaped distribution of the residuals, with most points concentrated around zero (0). This indicated that the data was normally distributed. SPSS produces unusual cases in a table called Case-wise Diagnostics for standard multiple regression. Pallant (2005) alerted that the Casewise Diagnostics table has information on cases that have values above 3.0 or below -3.0 as their standardised residuals and that in normally distributed data, such cases should not be more than 1% of the total cases. In order to check if such cases have an effect on the results, one should have a look at the Cook's distance value. If the Cook's distance is more than 1, then there is cause for concern (Field, 2009; Pallant, 2005; Tabachnick & Fidell, 2007). Though the Casewise Diagnostics produced a case with a standardised residual above 3 (in this case, it was 6.443), the Cook's distance produced a maximum value of 0.61. Thus, though the standardised

residual is above 3, the maximum Cook's distance value was less than 1; therefore, this case can be included in the regression.

The standard regression with each of the four independent predictors (planning functions of the supervisor, monitoring functions of supervisors, evaluation functions of supervisor, communication

functions of supervisor) to predict teaching and learning process was used to verify each research hypothesis. The adjusted R^2 was reported because Tabachnick and Fidell (2007) recommended that the R square tends to overestimate its true value in the population when the sample size is small and that the adjusted R square corrects the value of R square and thus produces a better predictor of the true population value.

Test of Hypotheses

H_{O1}: Planning functions of the supervisor have no statistically significant effect on the teaching and learning process at p= .05.

Regression was carried out to ascertain the extent to which planning functions of the supervisor scores predict the teaching and learning process.

Table 18: Model Summary of the effects of pedagogic planning functions of the supervisor on teaching and learning process

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.537[a]	.288	.286	.39159

a. **Predictors: (Constant), planning functions of the supervisor**

The scatterplot showed that there was a strong positive linear relationship between the planning functions of the supervisor on teaching and learning scores, which was confirmed with a Pearson's correlation coefficient of r = .537. The regression model predicted 28.8% of the variance. The model was a good fit for the data (*F* (1, 299 = 121.177, *p* < .000).

Figure 14: Scatterplot of the effects of planning functions of the supervisor on teaching and learning process

Scatterplot
Dependent Variable: Effective teaching and learning processes
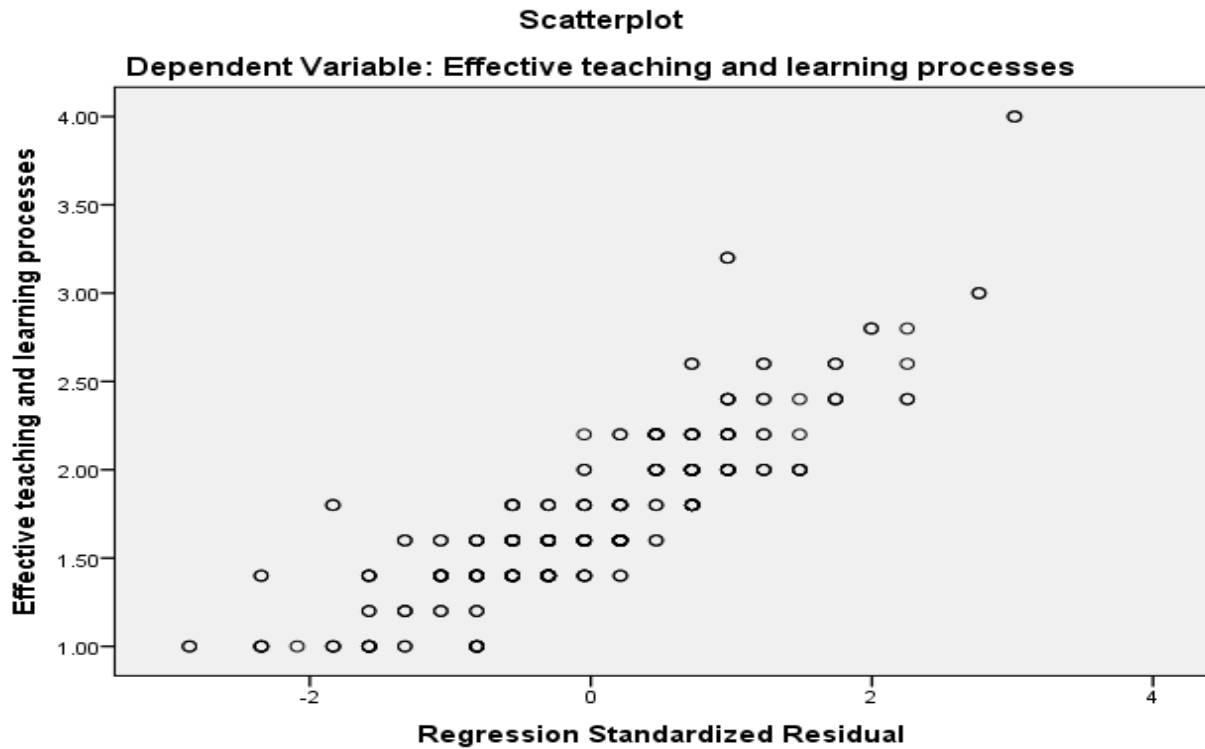
The next table is the F test. The linear regression F test has the null hypothesis that the planning functions of the supervisor do not have a statistically significant influence on teaching and learning at p=.05. In other words, R^2= 0, with $F_{(1, 299)} = 121.177$, p= .000, the test is highly significant. Thus, we can assume that there is a statistically significant relationship between the planning functions of the supervisor and the teaching and learning process.

Table 19: ANOVA^a of the effects of planning functions of the supervisor on teaching and learning process.

			ANOVA^a			
	Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	18.582	1	18.582	121.177	.000^b
	Residual	45.849	299	.153		
	Total	**64.431**	**300**			

a. Dependent Variable: Effective teaching and learning processes

b. Predictors: (Constant), Pedagogic planning functions of the supervisor

The regression results showed a significant relationship between the planning functions of the supervisor and teaching and learning process scores (t = 11.008, p < 0.000). The slope coefficient for the planning functions of the supervisor was .537, so the teaching and learning process increases by a factor of .537.

Table 20: Coefficients[a] of the effects of planning functions of the supervisor on teaching and learning Process

		Coefficients[a]				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.817	.086		9.481	.000
	Pedagogic planning functions of the supervisor	.500	.045	.537	11.008	.000

a. Dependent Variable: Effective teaching and learning processes

H$_{O2}$: Monitoring functions of the supervisor have no statistically significant effect on the teaching and learning process at p= .05.

Here, regression was also carried out to ascertain the extent to which pedagogic monitoring functions of the supervisor scores predict teaching and learning process scores.

Table 21: Model Summary of pedagogic monitoring functions of the supervisor on teaching and learning Process.

		Model Summary		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.537[a]	.288	.286	.39173

a. Predictors: (Constant), monitoring functions of supervisors

The scatterplot showed that there was a strong positive linear relationship between the monitoring functions of the supervisor on teaching and learning process scores, which was confirmed with a Pearson's correlation coefficient of $r = .537$. The regression model predicted 5.6 % of pedagogic supervision variance. The model was a good fit for the data (F (1, 299) = 120.876, $p < .0000$.

Figure 15: Scatterplot of the effect of monitoring functions of the supervisor on teaching and learning processes

Scatterplot
Dependent Variable: Effective teaching and learning processes

Table 22: ANOVAª of the effect of monitoring functions of the supervisor on teaching and learning Process

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.549	1	18.549	120.876	.000^b
	Residual	45.882	299	.153		
	Total	**64.431**	**300**			

ANOVAª

a. Dependent Variable: Effective teaching and learning processes

b. Predictors: (Constant), monitoring functions of supervisors

ANOVA results show that the linear regression F test has the null hypothesis that monitoring functions of the supervisor do not have a statistically significant influence on the teaching and learning process p=.05. In other words, R^2= 0, with F $(1,299)$ = 120.876, p= .000, the test is highly significant. Thus, we can assume that the monitoring functions of the supervisor significantly influence the teaching and learning process in our model.

Table 23: Coefficients[a] of the effect of monitoring functions of the supervisor on teaching and learning process.

		Coefficients[a]				
		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	.812	.087		9.353	.000
	Pedagogic monitoring functions of supervisors	.488	.044	.537	10.994	.000

a.   Dependent Variable: Effective teaching and learning processes

The regression results showed a significant relationship between the monitoring functions of the supervisor on teaching and learning process scores (t = 10.994, p= 0.000). The slope coefficient for the monitoring functions of the supervisor was .537, teaching and learning process increased by a factor of .537.

H$_{O3}$: Evaluation functions of the supervisor have no statistically significant outcome on the teaching and learning process at p= .05.

Simple linear regression was equally conducted to ascertain the extent to which pedagogic evaluation functions of the supervisor score predictor teaching and learning process.

Table 24: Model Summary of the effects of evaluation functions of the supervisor on teaching and learning process

		Model Summary		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522[a]	.272	.270	.39608

a. Predictors: (Constant), evaluation functions of supervisors

Figure 16: Scatterplot of the effects of evaluation functions of the supervisor on teaching and learning process
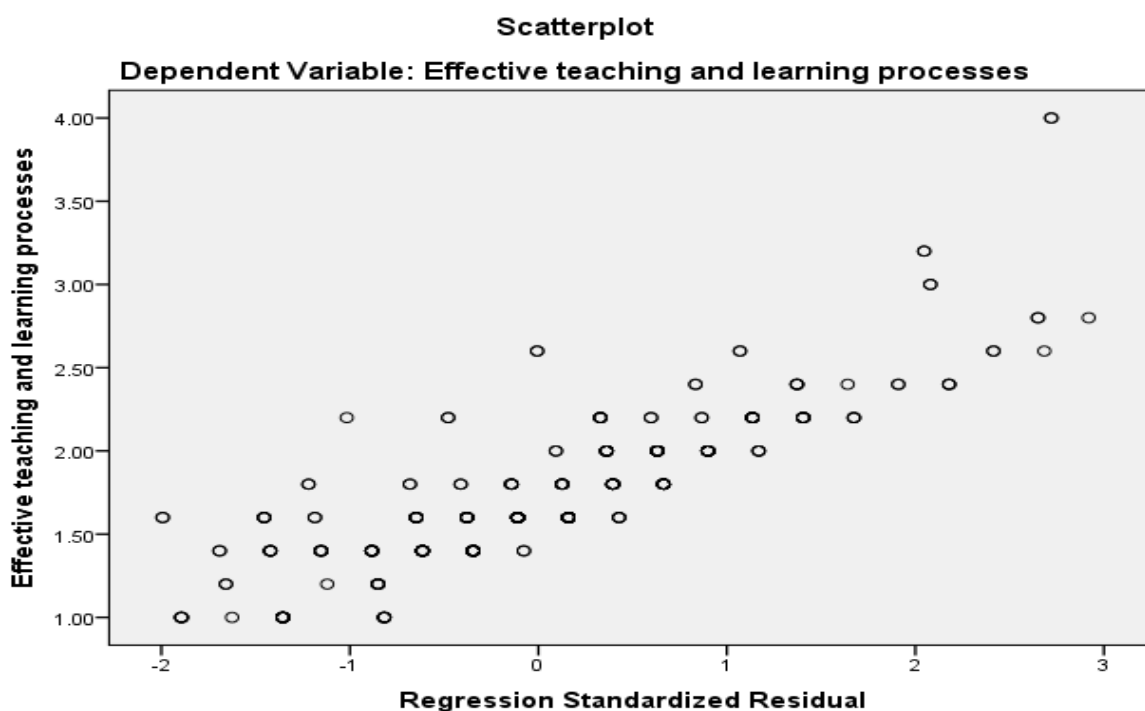
The scatterplot showed a strong positive linear relationship between teachers' assiduity on supervision scores, which was confirmed with a Pearson's correlation coefficient of $r = .522$. The regression model predicted a 27.2 % variance in pedagogic supervision. The model was a good fit for the data ($F (1, 299) = 111.712$, $p < .000$).
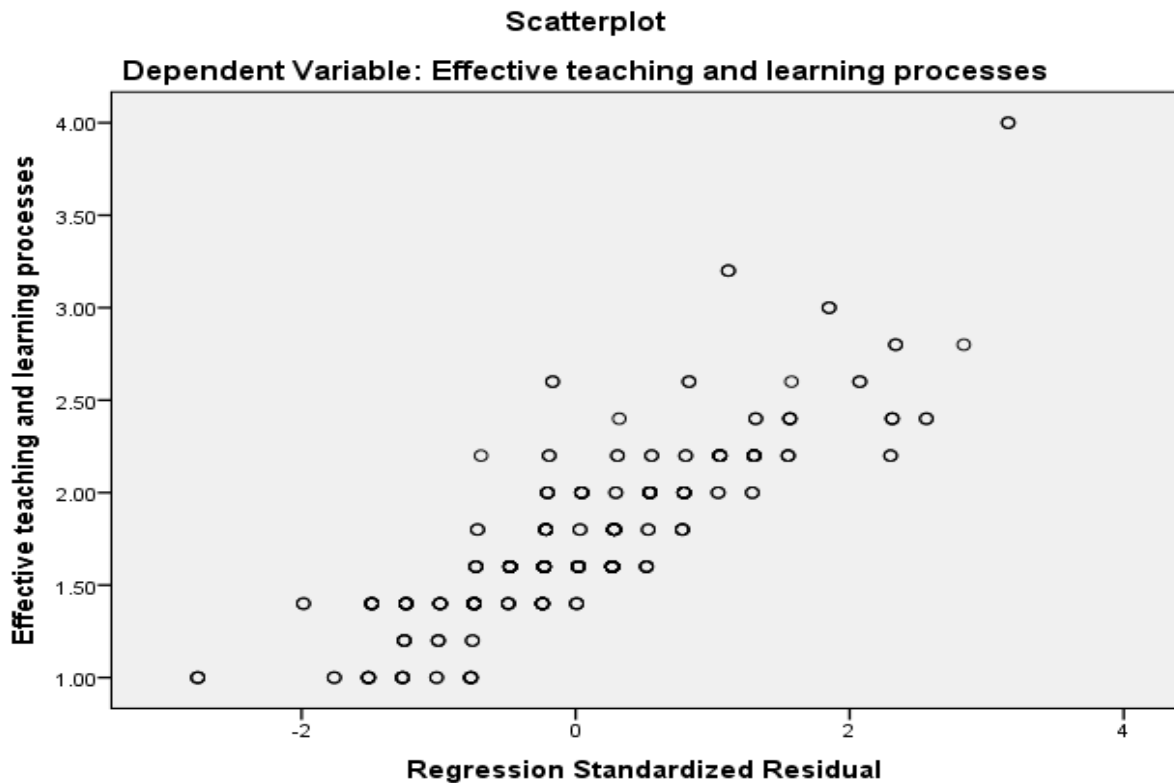
Table 25: ANOVA^a of the effects of evaluation functions of the supervisor on teaching and learning process

	Model	Sum of Squares	df	Mean Square	F	Sig.
		ANOVA^a				
1	Regression	17.525	1	17.525	111.712	.000^b
	Residual	46.906	299	.157		
	Total	**64.431**	**300**			

a. Dependent Variable: Effective teaching and learning processes

b. Predictors: (Constant), evaluation functions of supervisors

ANOVA results show that the linear regression F test has the null hypothesis that evaluation functions of the supervisor do not have statistically significant effects on the teaching and

learning process. In other words, $R^2 = 0$, with F (1, 299) = 111.712, p= .000, the test is highly significant. Thus, we can assume that the pedagogic evaluation functions of the supervisor have a significant influence on the teaching and learning process at p=.05 in our model.

Table 26: Coefficients of the effects of evaluation functions of the supervisor on teaching and learning process

		Coefficients[a]				
		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	T	Sig.
1	(Constant)	.791	.092		8.598	.000
	Pedagogic evaluation functions of supervisors	.533	.050	.522	10.569	.000

a. **Dependent Variable: Effective teaching and learning processes**

The regression equation showed a significant relationship between the evaluation functions of the supervisor as a predictor of teaching and learning process scores (t = 10.569, p < 0.000). The slope coefficient for Compensation Practice was .522, so teachers' effectiveness increases by a factor of .522.

H$_{O4}$: Communication functions of the supervisor have no statistically significant influence on the teaching and learning process at p= .05.

Simple linear regression was equally conducted to ascertain the extent to which communication functions of the supervisor scores predict teaching and learning process scores.

Table 27: Model Summary of the effect of pedagogic communication functions of the supervisor on teaching and learning process

			Model Summary	
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.656[a]	.430	.428	.35045

a. **Predictors: (Constant), communication functions of supervisors**

The scatterplot showed that there was a strong positive linear relationship between the communication functions of the supervisor and teaching and learning process scores, which was confirmed with a Pearson's correlation coefficient of r = .656. The regression model

predicted only 43 % of the variance in pedagogic supervision scores. The model was a good fit for the data (F (1, 299) = 225.607, p < .000).

Figure 17: Scatterplot of the effect of pedagogic communication functions of the supervisor on teaching and learning process.
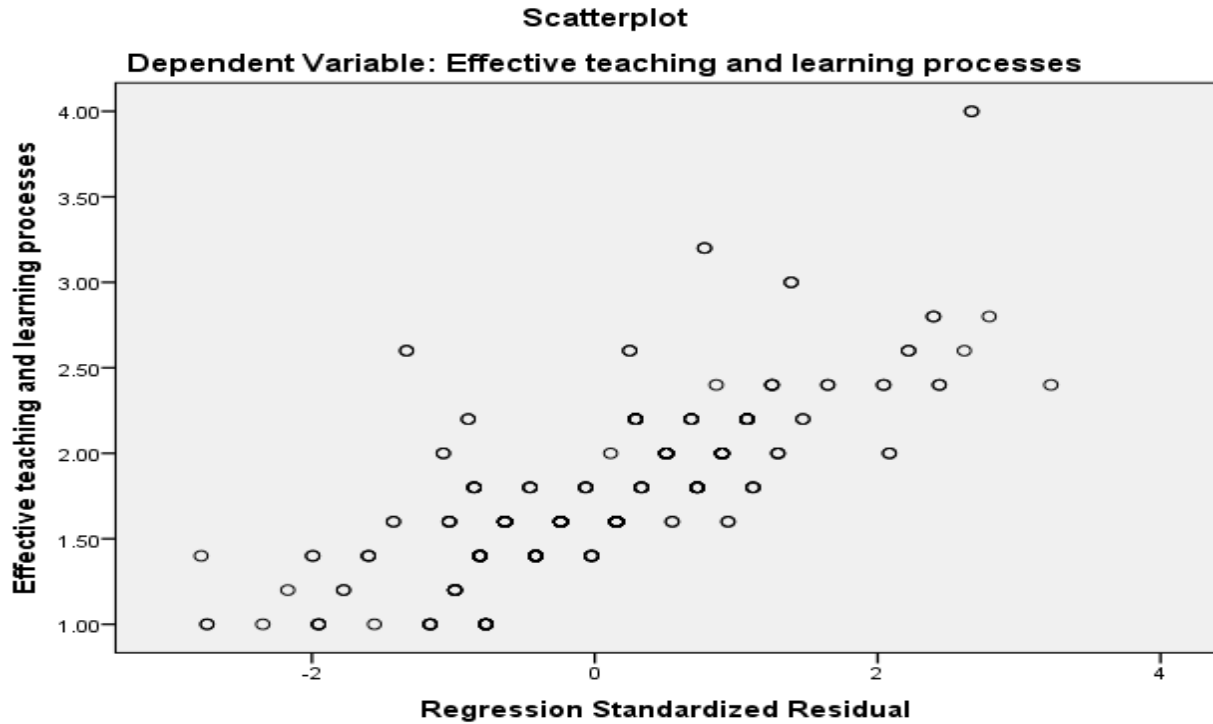
Table 28: ANOVAª of the effect of pedagogic communication functions of the supervisor on teaching and learning process

			ANOVAª			
	Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	27.709	1	27.709	225.607	.000[b]
	Residual	36.723	299	.123		
	Total	**64.431**	**300**			

 a. Dependent Variable: Effective teaching and learning processes
 b. Predictors: (Constant), communication functions of supervisors

ANOVA results show that the linear regression F test has the null hypothesis that communication functions of the supervisor do not have a statistically significant effects on the teaching and learning process at p=.05. In other words, R^2= 0, with F (1, 299 = 225.607 p= .000,

the test is highly significant. Thus, we can assume that the communication functions of the supervisor have a significant influence on teaching and learning at p=.05 in our model.

Table 29: Coefficients of the effect of pedagogic communication functions of the supervisor on teaching and learning process

| | Model | Coefficients[a] | | | | |
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.579	.079		7.283	.000
	Pedagogic communication functions of supervisors	.691	.046	.656	15.020	.000

a. Dependent Variable: Effective teaching and learning processes

The regression equation showed a significant relationship between the communication functions of the supervisor as a predictor of the teaching and learning process (t = 15.020, p < 0.000). The slope coefficient for pedagogic communication was .548, so the teaching and learning process increases by a factor of .548.

Summary

The analysis of the collected data revealed that all four hypotheses used in this study are statistically significant, hence:

$H_{a1:}$ planning functions of the supervisor have a statistically significant effect on the teaching and learning process at p= .05.

H_{a2}: monitoring functions of the supervisor have a statistically significant effect on the teaching and learning process at p= .05.

H_{a3}: evaluation functions of the supervisor have a statistically significant outcome on the teaching and learning process at p= .05.

H_{a4}: communication functions of the supervisor have a statistically significant influence on the teaching and learning process at p= .05.

CHAPTER FIVE:

DISCUSSION, SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

This study's main objective is to examine the impact of pedagogic supervision on the teaching and learning process in some selected secondary schools in Mfoundi Division.

Discussions of Findings

The discussion will logically follow the sequence of the research hypothesis and will be based on the relevant research data as presented in chapter four as well as the views of some authors and theories.

The Planning functions of the supervisor on the Teaching and Learning Process

The first hypothesis in this study states that the planning functions of the supervisors has an effect on the teaching and learning process. We used the correlation coefficient as a statistical tool to test this hypothesis.

The level of significance is P<.000 and thus is less than 0.05, which is the alpha and the standard error margin. The correlation coefficient of .537 indicates that the link is positive and moderate. Since the probability value is <0.05, we concluded that the pedagogic planning functions of the supervisor has an effect on the teaching and learning process in a significant manner. Hence, we reject the null hypothesis and retain the alternative hypothesis, which states that the pedagogic planning functions of supervisor' affects the teaching and learning process of teachers in a significant manner. This means that the more pedagogic supervisor improves on their planning functions, the more teachers will be effective. This is in line with the views of Mittenthal (2002) which remarked that planning is important because it provides staff with a sense of purpose. According to Goodstein, Nolan & Goodstein, (2011), before pedagogic supervision, pre-supervision arrangements should be carried out meticulously before the supervision day. This phase of the supervision procedure deals mainly with planning on the part of all stakeholders involved. Such a planning stage will help the supervisor, according to better schools' series: Modules Two (1998), focus on the following: objectives of the visit, the type of supervision visit, resources that are required, institutions to be inspected, the program

and time of the supervision. During this stage, supervisors should be able to assemble data about the school/ educational centre to be inspected, select team members, appoint a team leader, and mobilise material resources and planning logistics. All this planning by the supervision team aims to make teachers effective.

In the theory of Scientific Management by Fredrick Winston Taylor (1880s), Taylor believed that decisions based upon tradition and rules should be replaced by precise procedures developed after careful study of an individual at work (Hoyle & Wallace, 2005). Workers should plan and organize their work (Halk et al., 1998; Hoyle & Wallace, 2005; Wertheim, 2007). Taylor felt that the secret to Scientific Management was the compliance of workers and that they did not need autonomy or freedom of thought, but instead, their role was simply to follow the directions of their superiors (Sergiovanni & Starratt, 1993; Welsh & McGinn, 1999; Hoyle & Wallace, 2005). According to Hoyle and Wallace (2005), from that strand, Taylor suggested that Managers are to plan and control the work process. Fonkeng (2007) remarked that what obtains in Cameroon today is what is called participatory planning. This involves decentralization of planning. The involvement of all people who will be affected by the planning decision is important such as teachers and students. Hence, for pedagogic supervision to succeed in their planning functions, they must involve the teachers by considering their opinions. Equally, Fonkeng and Tamajong (2009) remarked that effective planning makes the judgment on finances, teacher supply with various qualifications, curriculum planning timetable aids, health and hygiene, pastoral care, and teaching.

Furthermore, the pedagogic supervisor is expected to have a good mastery of the roles of teachers in a school. In a formal structure, rules and regulations, course of study, position guides and policies may be developed, but they become significant only when people make use of them (Mutie and Ndambuki, 1999). Hence, the teachers' curriculum will become significant if the pedagogic supervisor has them, reads them, and practices what they have learnt.

The Monitoring functions of the supervisor on the Teaching and Learning Process

The second hypothesis in this study states that there is a relationship between the pedagogic monitoring functions of supervisors and the teaching and learning process. We used the correlation coefficient as a statistical tool to test this hypothesis. The level of significance is .000 and thus is, less than 0.05, which is the alpha and standard error margin. The correlation

coefficient of .537 indicates that the link is positive and moderate. Since the probability value <0.05, we conclude that there is a significant relationship between pedagogic monitoring. Hence, we reject the null or statistical hypothesis and retain the alternative hypothesis, which states that there is a significant relationship between the pedagogic planning functions of the supervisor and the teaching and learning process.

This means that the more pedagogic supervisors improve on the monitoring functions, the more the teaching and learning will be effective.

In Cameroon, supervision has long been and still is a major device employed by the Ministry of Education to monitor education quality in the country. The handbook for supervision of educational institutions (2000) notes that pedagogic supervision and standard officers (Supervisors) monitor and advise on education standards based on all round aspects. Pedagogic supervision is a process of ensuring effective resource input and control, refining the processes and raising the standards of output in order to meet the set goals. Ayeni (2012) opined that pedagogic supervision in education is the efficient management, monitoring, evaluation and review of the resource's inputs and transformation process (teaching and learning) to produce a quality output (students) that meets set standards and expectations of the society. Thus, the quality of education is the degree of excellence of the output (students), which can be achieved through a pedagogic supervisor's effective supervision strategies.

According to Adedoja (2016), the modalities for evolving, monitoring and re-appraising indices, benchmarks and good practices within an education system. Ukeje (2003) explain that pedagogic supervision in a school setting is made possible through proper planning by the management, which involves all staff in the functions of planning, execution, monitoring and evaluation using set standards and objectives. There is a need to uphold pedagogic supervision in secondary schools to ensure a successful school administration. Monitoring information can fill some of the gaps between working and specific knowledge (Rosen shine and Stevens, 1986). If data are collected routinely from a variety of sources, then many regular information needs can be met more quickly. Monitoring systems can contribute to the working knowledge of both supervisors and teachers. Monitoring can improve schooling and reduce inequities (Cohen, 1981, oden, 1982, Purkey and smith, 1983). The information from monitoring can be used to identify problem areas in the school system and the teachers so that corrective actions can be taken, it can assist supervisors in determining the best allocation of resources, it can be used to diagnose strengths and weaknesses in students mastery of curricular objectives and therefore

guide curriculum and instruction, it can stimulate discussion about the goals of schooling and give rise to new ideas that can affect policy and practice.

In addition, Ballard et al. (2010) highlighted that monitoring is a process that helps program implementers make informed decisions regarding program operations, services delivery and program effectiveness, using objectives and evidence.

It is a process that involves an ongoing and routine collection of information to assess if the program has made efficient use of resources and is on track. It also assesses to what extent the program has reached its objectives in terms of outputs (program activities), outcomes and impact (whether the expected benefits to the target population were reached).

The Evaluation function of the supervisor and Teaching and Learning process

The third hypothesis in this study states that the evaluation functions of the supervisor influence the teaching and learning process. This means that the more pedagogic supervisor improves on their evaluation functions, the more teaching and learning process will be effective. We used the correlation coefficient as a statistical tool to test this hypothesis. The level of significance is .000 and thus is less than 0.05, which is the alpha and the standard error margin. The correlation coefficient of .522 indicates that the link is positive and moderate. Since the probability value <0.05, we conclude that the pedagogic evaluation functions of the supervisor significantly affect the teacher's effectiveness. Hence, we reject the null statistical hypothesis and retain the alternative hypothesis, which states that the evaluation functions of the supervisor significantly affect the teaching and learning process.

According to Range Sheers & Holt (2011), evaluation should be used to identify teachers' quality and professional development. Teachers' effectiveness is important for student achievement (dipole& hoy, 2008). Numerous studies have found that teachers recounting higher evaluation scores also tend to have higher student achievement (Atenolol, Laree & Waters, 2006; Range, Scherzo & Holt, 2011; Tayler, 2012). Teachers, who are organized, require student responsibility, have a positive attitude, and have content knowledge are found to be more effective (Kane, Taylor, Tyler &Wooten, 2011; Kamahi, 2010; Taylor & 2012). Effective evaluations allow for self-reflection and should use an open line of communication between the evaluator and evaluate (Atenolol, Laree & Waters, 2006; Range, Scherzo & Holt, 2011; Tayler, 2012). Evaluation data should be used as a method to improve teachers' instructions. An

effective evaluation system can identify a teacher's qualities. Identifying strengths and weaknesses and providing an opportunity to improve these qualities will enhance teacher performance. Numerous studies have found that higher teachers' performance leads to higher student achievement (Grant, Strong, Sword, Rocks off, Speront, Zolo, Taut, Santelices, Araya, s Manzi, 2009, Whatson, Miller, David Scarter, 2010, Zimmerman, Decker –Pelton,2003). Regular classroom observations and evaluations can have a positive impact on student learning. Numerous studies have identified student achievement to be higher during and immediately following the years in which teachers are being evaluated (Grant, Strong, Sword, 2010, Kane, Taylor, Tyler, s Wooten, 2011, Rock off s Speront, 2010, Taylor, Tyler, 2012) constructive feedback about teachers performance has also been identified to have a positive effect on student achievement (Zimmerman's Neckert–Pelton, 2003) and such feedback may result in opportunities for improvement provided by professional development.

Teachers' evaluation by pedagogic supervisors is used to measure teacher performance with too many potential professional developments. Data-driven plans for evaluation can also have an effect on professional lives (Namaghi, 2010). The documented data is a great resource for identifying teaching strengths and weaknesses and improving any areas that need improvement (clips, 2011). Moore (2006), range, Schertz s Holt (2011) all states that using evaluation data is one of the best ways for teachers to improve classroom instruction. Teacher quality can also benefit from incorporating subjective evaluation and objective evaluations of student data (rock off s Spreroni, 2010). Evaluations can be validated by accepting teacher input when identifying what qualities make up an effective teacher. A key role in achieving excellence in schools today is attracting, developing, and retaining effective teachers (OECD, 2005, barber s mushed, 2007), one of the main purposes for teacher evaluation (Namaghi, 2010).

The Communication functions of the supervisor in the Teaching and Learning process

The fourth hypothesis in this study states that the supervisor's communication functions affect the teaching and learning process. We use the correlation coefficient as a statistical tool to test this hypothesis. The level of significance is .000; thus, it is less than 0.05, which is the alpha and the standard error margin. The correlation coefficient of .656 indicates that the link is positive and moderate. Since the probability value <0.05, we conclude that the pedagogic communication functions of the supervisor significantly affect the teaching and learning process. Hence, we reject the null hypothesis and retain the alternative hypothesis, which states

that the pedagogic communication functions of the supervisor significantly affect the teaching and learning process. This means that the more pedagogic supervisors improve their communication functions, the more the teachers will be effective.

According to Frawe (2001), communication is the first task of the supervisor. Similarly, authority-like communication involves two people, a sender and a receiver. A supervisor communicates not with himself alone but with the entire staff. Most communication is face-to-face, and by telephone rather than written means, E-mail has added another dimension to the supervisor's communication patterns. According to Missaz, (1982) in his research revealed that communication is a two-way process. It is necessary to be a good listener too. Thus, communication is purposive.

Its primary administrative functions are informing, instructing or directing someone, evacuating someone or something and influencing another thought or behaviour. Peter Drucker (as cited in Munvi 2005) explained that the most important thing in communication is to hear what is being said.

Communication and pre-supervision visits are important aspects of the school. Supervision should not feel they are experts in their various discipline and that teachers should only listen to them. Pedagogic supervisors should communicate with teachers as friends and facilitators. Communication not only conveys information, but it encourages effort, modifies, and stimulates thinking. Without it, stereotypes develop messages become distorted of understanding and sharing information where listening plays an important role (Missaz,1982).

Effective communication underpins the knotted, skills and dispositions supervisors require to have a direct and indirect influence on teachers' effectiveness, as identified in the best evidence synthesis on leadership (Santrock 2000). The extent to which supervisors communicate issues in education from the government to the teachers and vice versa is the pivot upon which success or failure is hinged in the schools. What was communicated, how it was communicated and what to say, will also ensure and maintain a supervisor's integrity and professionalism, that of the school and teachers and of the wider educational community. Even though pedagogic supervisors have influenced teachers' roles through effective communication, teachers can also influence their roles (Liden & Maslyn, 1998). Thus, communication is purposive. Its primary administrative functions are informing, instructing, or directing someone, evacuating someone

or something and influencing another thought or behaviour. Peter Drucker (2005) explained that the most important thing in communication is also to hear what is being said. Therefore, teachers should also be good listeners to supervisors and vice versa and put what they hear into practice.

Conclusion

The main objective of this study was to examine the impact of pedagogic supervision on the teaching and learning process in some selected secondary schools in Mfoundi Division. The correlation and the statistically more advanced method of simple linear regression analysis were used to analyse data. Data analysis proved that a significant relationship exists between the pedagogic functions of supervision and the teaching and learning process. The pedagogic supervisor can be blamed to a certain extent when teaching and learning are not effective. The study found that all four constructs used to measure pedagogic supervision were strong determinants of effective teaching and learning. In terms of effect size, communication functions of pedagogic

supervisor scores have the highest predictor of the teaching and learning process. Hence effective communication by a supervisor will enhance the effective teaching and learning process. The planning, monitory and evaluation functions all had a mild effect on the teaching and learning process compared to the impact of communication.

Recommendations

The Ministry of Secondary Education (MINESEC) in Cameroon should ensure that the different modes of supervision, such as full supervision, follow-up supervision, pre-opening of pedagogic supervision, supervision for promotion of teachers, subject-based supervision etc should be carried out rather than depending only on reopening of schools' supervision where supervisors go around only to gather statistics and ascertain the smooth reopening of schools.

Secondary pedagogic supervisors should always be selected not only considering accepted norms such as academic and professional qualification, available vacancies but other aspects like the candidates' output as a teacher, the track record of the candidate in relation to previous and present performance, evidence of potential on supervisor training courses, and the candidate's knowledge in the subject matter, pedagogy and psychology amongst others should

always be considered. All these are necessary considering the delicate job of a supervisor in the teaching-learning process.

Supervisors' allowances should be very encouraging, and sufficient funds made available for out-of-station allowances will motivate them to visit schools no matter how enclosed. More so, the job of educational supervisors ought to be lucrative so that it can attract able and experienced supervisors to vie for it. The government should provide sufficient funds for the procurement of necessary equipment and stationeries for the organization of workshops and seminars. It will help the supervisors grapple with their defined tasks.

There is an urgent need to ensure that performance indicators should guide supervisions, appropriate training throughout a supervisorial career is introduced, supervisors' handbooks be made available to schools and supervisors, the different types of supervision be pursued, School Self Evaluation Forms (SSEF) be introduced, supervision procedures adhered to and supervision reports whether positive or negative made available to principals, staff and parents for all these will improve upon supervisorial services in secondary schools in Mfoundi Division.

Limitations of the Study

Researcher encountered problem of distances from one school to the next while collecting data due to geographical position and poor awareness of some of respondents about the topic under study. Furthermore, time for collecting data was interrupted by other duties, such as school administration, classroom teaching and other daily routine. To counter check these hindrances, the researcher spent more time to create smooth communication with respondents when visiting them and clarifying the intention of study to the respondents. Despite inadequate funds, the researcher ensured that data were collected without bias and affecting findings. Furthermore, since research was conducted in researchers' place of residence, the expenditure was minimized to ensure smooth accomplishment of findings.

Suggestions for Further Research

- ➢ The study should be replicated in other divisions and region using other designs.
- ➢ A comparative study of lay private secondary and government schools' supervision.
- ➢ For the results of the study to be more generalized, a large sample should be used in replicating the study.
- ➢ Similar studies should be replicated between the supervisors of secondary schools and basic education.

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QUESTIONNAIRE

Dear Teachers.

I am a master 2 student at the University of Yaoundé 1, Department of Curriculum and Evaluation of the faculty of Education. I am conducting research on " The impact of pedagogic supervision on the teaching and learning process in some secondary schools in Mfoundi Division".

The purpose of the questionnaire is to get information from teachers on the above research topic. To carry out this research, your corporation in filling out the research questionnaire is needed. You are therefore required to be honest in your response as the research is purely for academic purposes, and all information supplied shall be treated confidentially. Thanks for your anticipated co-operation.

Yours Sincerely
GWANPUA DOHYA
(Researcher)

SECTION A: Personal Data (Information)

Read the following statements thoroughly and indicate the answer that best corresponds to your opinion by ticking in the appropriate column provided or by filing the blanks.

Sex: Male _____ Female _____

Name of school: _____

Qualification: DIPES I   DIPES II   BACHELOR MASTERS OTHERS

Age: 21 - 30   31 - 40   41 - 50   51 - 60   60 and above

Name of School: _____

Sub-Divions of School Location: _____

SECTION B:

Below are some statements designed to get a response on pedagogic supervision as an indicator of teachers' effectiveness in some secondary schools in Mfoundi Division. To what extent do you agree with them as appropriate. Indicate your response to the questions along the following.

Strongly agree ……………………………………………. (SA)
Agree ………………………………………………………… (A)
Disagree …………………………………………………… (D)
Strongly Disagree ……………………………………….... (SD)

Tick as appropriate.

CLUSTER A: **Pedagogic Supervisory Planning Strategies for achieving effective teaching and learning processes in some secondary schools in Mfoundi Division.**

To what extent do you agree with the following statements of supervisor planning functions on effective teaching and learning processes?

SN	Statement	SA	A	D	SD
1	Pedagogic supervisors have a copy of the teacher's scheme of work				
2	The supervisors organize pre-meetings with the school heads before the supervision day				
3	Pedagogic supervisors play a major role in school curriculum implementation through seminars				
4	Pedagogic supervisors clearly state the objectives of the visit				
5	Pedagogic supervisors state the type of supervision visit				

CLUSTER B: **Pedagogic Supervisory Monitoring Strategies for the achievement of teacher's effectiveness in some secondary schools in Mfoundi Division**

To what extent do you agree with the following statements of pedagogic supervisors monitoring functions on effective teaching and learning processes?

SN	Statement	SA	A	D	SD
1	Pedagogic supervisors concentrate on observing lessons, looking at the teaching-learning process and sampling students' work				
2	Pedagogic supervisors spend enough time in the lesson to make valid and reliable judgments on the standards of the learning process.				
3	Pedagogic supervisors do identify strengths and weaknesses of teaching leaning process				
4	Pedagogic supervisors' general conclusion after observation is accompanied by feedback and specific examples				
5	Pedagogic supervisors are well-structured, clear and they give a convincing account of the findings				

CLUSTER C: Pedagogic Supervisory Evaluation Strategies for the achievement of teacher's effectiveness in some secondary schools in Mfoundi Division

To what extent do you agree with the following statements of the pedagogic supervisor's Evaluation functions on effective teaching and learning processes?

SN	Statement	SA	A	D	SD
1	Pedagogic supervisors organize individual teacher evaluation conference				
2	Pedagogic supervisors modify procedures after pedagogic evaluation				
3	Pedagogic supervisors facilitate self-evaluation				
4	Pedagogic Supervisors, after supervision processes, validate and give additional feedback to struggling teachers				
5	Pedagogic supervisors provide the basics for career planning and individual growth and development				

CLUSTER D: **Pedagogic Supervisory Communication Strategies for achieving teacher's effectiveness in some secondary schools in Mfoundi Division**

To what extent do you agree with the following statements of the pedagogic supervisor's Communication functions on effective teaching and learning processes?

SN	Statement	SA	A	D	SD
1	Pedagogic supervisors communicate school policies and instructions well to the teachers				
2	Pedagogic supervisors communicate the time, key indicators and criteria of the supervision visit well to the school				
3	Pedagogic supervisors use friendly language with the teachers				
4	The teachers only listen to the pedagogic supervisor during communication because they are experts				
5	Pedagogic supervisors have a superiority complex and do not come as friends				

CLUSTER E: Effective Teaching and Learning processes.

To what extent do you agree with the following statements on effective teaching and learning processes?

SN	Statement	SA	A	D	SD
1.	I prepare lessons and schemes of work before teaching				
2.	I state the objectives and student responsibilities at the beginning of the lesson.				
3.	I organize and present my lessons well.				
4.	I encourage students to think independently, critically and analytically.				
5.	I accomplish my objectives at the end of the lesson				

Appendix B

Required Sample Size[†]

Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586