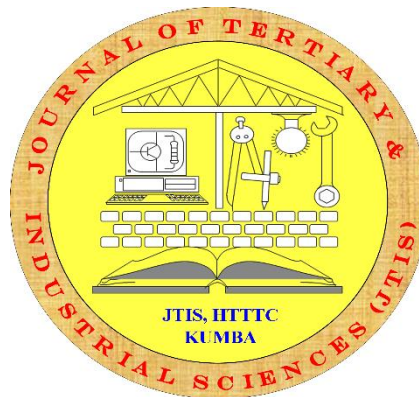


ISSN 2709-3409 (Online)  
JOURNAL OF TERTIARY AND INDUSTRIAL  
SCIENCES  
TERTIARY SCIENCES  
**ECONOMICS AND  
MANAGEMENT SCIENCES**

A MULTIDISCIPLINARY JOURNAL OF THE HIGHER TECHNICAL TEACHERS'  
TRAINING COLLEGE, KUMBA



**VOLUME 5, NUMBER 3**  
**August, 2025**

**PUBLISHER:**  
**HIGHER TECHNICAL TEACHERS' TRAINING COLLEGE (HTTTC)**  
**UNIVERSITY OF BUEA**

P.O Box: 249 Buea Road, Kumba  
Tel: (+237) 33354691 – Fax: (+237) 33354692  
Email: [editor@jtis-htttcubuea.com](mailto:editor@jtis-htttcubuea.com)  
Website: <https://www.jtis-htttcubuea.com>



---

## EDITORIAL BOARD

### **Supervision:**

Professor Ngomo Horace Manga  
University of Buea

### **Editor-in-Chief:**

Prof. Akume Daniel Akume, University of Buea, Cameroon

### **Associate Editors:**

Prof. Ebune B. Joseph, University of Buea, Cameroon  
Prof. Defang Henry, University of Buea, Cameroon  
Prof. Lissouck Daniel, University of Buea, Cameroon

### **Advisory Editors:**

Prof. Tabi Johannes Atemnkeng, University of Buea, Cameroon  
Prof. Leno Doris, University of Buea, Cameroon  
Prof. Lyonga N. Agnes Ngale, University of Buea, Cameroon  
Members of the Editorial Board:  
Prof. Yamb Belle Emmanuel, University of Douala, Cameroon  
Prof. Ambe Njoh Jonathan, University of South Florida, USA  
Prof. John Akande, Bowen University, Nigeria  
Prof. Talla Pierre Kisito, University of Dschang, Cameroon  
Prof. Rosemary Shafack, University of Buea, Cameroon  
Prof. Njimanted Godfrey Forgha, University of Bamenda, Cameroon  
Prof. Nzalie Joseph, University of Buea, Cameroon  
Prof. Mouange Ruben, IUT University of Ngaoundere, Cameroon  
Prof. Boum Alexander, University of Buea, Cameroon  
Prof. Patrick Wanyu Kongnyuy, University of Bamenda, Cameroon  
Prof. Tchuen Ghyslain, IUT Badjoun, University of Dschang, Cameroon  
Prof. Rose Frii-Manyi Anjoh, University of Buea, Cameroon  
Prof. Foadieng Emmanuel, University of Buea, Cameroon  
Prof. Tchinda Rene, IUT Badjoun, University of Dschang, Cameroon  
Prof. Tabi Pascal Tabot, University of Buea, Cameroon  
Prof. Katte Valentine, University of Bamenda, Cameroon  
Prof. Zinkeng Martina, University of Buea, Cameroon  
Prof. Obama Belinga Christian Theophile, University of Ebolowa, Cameroon  
Prof. Nkongho Anyi Joseph, University of Buea, Cameroon  
Prof. Cordelia Givechek Kometa, University of Buea, Cameroon  
Prof. Ngouateu Wouagfack Paiguy, University of Buea, Cameroon  
Prof. Tchakoutio Alain, University of Buea, Cameroon  
Prof. Morfaw Bertrand, University of Buea, Cameroon

Prof. Tamba Gaston, IUT University, Douala, Cameroon  
Prof. Koumi Simon, ENS, Ebolowa, University of Yaounde I  
Prof. Ajongakoh Raymond, University of Buea, Cameroon  
Prof. Ntabe Eric, University of Buea, Cameroon  
Prof. Kinface Juetsa Aubin, University of Buea, Cameroon  
Prof. Bahel Benjamin, University of Buea, Cameroon  
Prof. Agbortoko Ayuk Nkem, University of Buea, Cameroon  
Dr. Abanda Henry Fonbiyen, Oxford Brookes University, UK  
Dr. Luis Alberto Torrez Cruz, University of Witwatersrand, South Africa  
Dr. Negou Ernest, University of Buea, Cameroon  
Dr. Aloyem Kaze Claude Vidal, University of Buea, Cameroon  
Dr. Mfombep Priscilla Mebong, University of Buea, Cameroon  
Dr. Asoba Gillian, University of Buea, Cameroon  
Dr. Massa Ernest, University of Buea, Cameroon  
Dr. Mouzong Pemi, University of Buea, Cameroon  
Dr. Orock Fidelis Tanyi, University of Buea, Cameroon  
Dr. Wanie Clarkson Mvo, University of Bamenda, Cameroon  
Dr. Molombe Jeff Mbella, University of Buea, Cameroon  
Dr. Emmanuel Tata Sunjo, University of Buea, Cameroon  
Dr. Ndi Roland Akoh, University of Yaounde I, Cameroon  
Dr. Nkenganyi Fonkem Marcellus, University of Buea, Cameroon  
Dr. Hannah Kolle, University of Buea, Cameroon  
Dr. Kamda Silapeux Aristide, University of Buea, Cameroon  
Dr. Roland Ndah Njoh, University of Buea, Cameroon

**Managing Editor:**

Dr. Negou Ernest, University of Buea, Cameroon

## CONTENTS

<b>ECONOMICS AND MANAGEMENT SCIENCES</b> .....	1
Management Succession Planning and its Effect on the Sustainability of Entrepreneurial Business in the North-West Region of Cameroon.....	2
<b>Dr. Eyong Ako and Banteh Olive Noella V.</b>	
The Impact of Gender Equality on the Performance of Non-Governmental Organizations in the North West Region of Cameroon.....	28
<b>Eyong Ako<sup>1</sup>, Fokam Jeff Astein<sup>2</sup> And Tenjoh Ngo Armstrong<sup>3</sup></b>	
Does Sectorial Foreign Direct Investment Improve Domestic Investment: An Empirical Investigation in Developing Countries.....	48
<b>Ongo Nkoa Bruno Emmanuel<sup>1</sup>, Mafeu Pousseu Tabet Darius<sup>2</sup> and Thierry Gaetan Keyantio Jokeng</b>	
<b>ADMINISTRATIVE TECHNIQUES</b> .....	80
Design of a Teachers Resource Platform for Teachers of Applied Secretarial Principles in the Higher Technical Teachers' Training Colleges of the English-Speaking Regions in Cameroon.....	81
<b>Anuchebua Veronique Nkimih</b>	
Pedagogic Supervision and its impact on student-teachers' learning in the Higher Technical Teachers' Training Colleges of the English Speaking Regions of Cameroon.....	104
<b>Anuchebua Veronique epse Nkimih</b>	
<b>SCIENCE OF EDUCATION</b> .....	129
Dual Mediating Roles of Emotional Intelligence and Coping Strategy in the Link between Cultural Intelligence and Acculturation for African Immigrants in South Korea.....	130
<b>1Ejowah Epine Njabe, *2Bakoma Daniel Nanje</b>	
Examining the Association among Leadership Behaviour, Workers' Well-Being, and Organizational Trust in Educational Settings.....	161
<b>1Bakoma Daniel Nanje*, 2Maria Teresa T. Vicente</b>	
Transformational Leadership and Job Satisfaction as Correlates of School Organisational Development.....	192
<b>1Bakoma Daniel Nanje*, 2Asah Jacob Fotoh</b>	

---

# ADMINISTRATIVE TECHNIQUES

**Pedagogic Supervision and its impact on student-teachers' learning in the Higher Technical Teachers' Training Colleges of the English Speaking Regions of Cameroon**

**Anuchebua Veronique epse Nkimih**  
**Department of Educational Foundation and Administration**  
**University of Buea**  
[verankimih@yahoo.com](mailto:verankimih@yahoo.com)

**To cite:** Anuchebua Veronique Nkimih. (2025). Pedagogic Supervision and its impact on student-teachers' learning in the Higher Technical Teachers' Training Colleges of the English Speaking Regions of Cameroon. *Journal of Tertiary and Industrial Sciences (JTIS)*, 5(3), 104-128. <https://doi.org/10.5281/zenodo.16990392>

**Submission Date:** 19/06/2025

**Acceptation Date:** 20/08/2025

**Abstract**

This study investigated the role of pedagogic supervision in enhancing student-teachers' learning in the Higher Technical Teachers Training Colleges (HTTTCs) of the English-Speaking Regions of Cameroon. Using a mixed-methods design, 100 student-teachers were sampled proportionally from 14 departments across Bambili and Kumba campuses. Quantitative data were collected via questionnaires, while qualitative insights were obtained through semi-structured interviews. Findings indicate that pedagogic supervision positively influences lesson preparation, teaching methodology, classroom management, and professional competence. However, irregular supervision, high student-to-supervisor ratios, and inconsistent feedback limit its full effectiveness. Interpretation of the results, guided by theories used revealed that structured observation, active reflection, and confidence-building are key mechanisms through which supervision enhances learning. The study recommends increasing supervisory staff, implementing structured schedules, providing timely and constructive feedback, promoting reflective practices, and evaluating supervision outcomes to optimize student-teacher performance. These measures are critical for strengthening teacher preparation and improving instructional quality in HTTTCs.

**Keywords:** HTTTC, Pedagogy, Learning, Student-Teacher, Supervision

**1. Introduction**

Pedagogic supervision constitutes a fundamental component of the teacher education process, serving as a structured mechanism through which teaching quality, curriculum implementation, and professional growth are systematically monitored and enhanced. In teacher training institutions, particularly in the Higher Technical Teacher's Training Colleges (HTTTCs) of the English-Speaking Regions in Cameroon, pedagogic supervision plays a pivotal role in shaping the professional competencies of student-teachers. By providing guidance, feedback, and mentoring, supervisory practices are intended not only to ensure compliance with institutional and national educational standards but also to foster reflective practice and continuous improvement in instructional delivery.

In the English-Speaking Regions of Cameroon, the HTTTCs operate within a bilingual and multicultural educational landscape, where pedagogic supervision assumes added significance. These institutions are charged with producing technically skilled and pedagogically competent teachers capable of meeting the dynamic demands of secondary and technical education. However, persistent challenges such as resource constraints, variations in supervisory styles, administrative bottlenecks, and the dual educational heritage inherited from both the British and French systems have complicated the effective delivery of pedagogic supervision (Ndongko & Tambo, 2000).

Student-teachers in these institutions are expected to integrate both subject-matter expertise and pedagogical skills to deliver effective teaching in technical and vocational subjects. Effective pedagogic supervision, therefore, becomes a critical determinant of their learning outcomes, influencing their mastery of content, classroom management techniques, and the ability to adapt to diverse learning environments. Yet, anecdotal evidence and previous studies suggest that supervisory practices in some HTTTCs may be irregular, overly administrative, or insufficiently supportive, potentially undermining the professional preparedness of student-teachers (Mbua, 2003; & Tchombe, 1997)

The need to examine pedagogic supervision in this context is further justified by the ongoing reforms in Cameroon's teacher education sector, which emphasize quality assurance, competency-based approaches, and the integration of technology into teaching and learning. Understanding the extent to which supervisory practices impact student-teachers' learning is essential for improving the quality of technical teacher training, aligning institutional practices with national educational goals, and addressing the professional needs of the next generation of technical educators.

Against this backdrop, this study investigates the nature, scope, and effectiveness of pedagogic supervision in the HTTTCs of the English-Speaking Regions of Cameroon, with a particular focus on its influence on student-teachers' learning experiences and outcomes. The findings are expected to inform policy, enhance supervisory practices, and contribute to the broader discourse on teacher education quality in sub-Saharan Africa.

Pedagogic supervision plays a central role in shaping the quality of teacher education, especially in technical and vocational contexts where professional competencies must be developed alongside theoretical knowledge. In the Higher Technical Teacher's Training Colleges (HTTTCs) of Cameroon, student-teachers are expected not only to acquire subject matter knowledge but also to develop instructional skills that enable them to deliver effective and contextually relevant teaching. Pedagogic supervision, therefore, provides structured guidance, feedback, and professional support to ensure that student-teachers

attain the expected standards of competence before transitioning into the teaching profession.

Globally, effective supervision has been recognized as a critical determinant of teacher quality and student achievement (Blase & Blase, 2004, Sergiovanni, 1992). Theories such as Clinical Supervision (Goldhammer et al, 1969), Constructivist Learning (Piaget, 1972) and Teacher Efficacy (Bandura, 1977) emphasize the role of supervision in fostering reflective practice, promoting continuous learning, and enhancing instructional effectiveness. In many contexts, supervision goes beyond fault-finding to become a developmental process that strengthens teacher confidence, creativity, and professional identity.

In Cameroon, the training of technical teachers has been prioritized to respond to the country's needs for skilled manpower in alignment with its Vision 2035 development agenda (Sergiovanni, 1992). The HTTTCs serve as key institutions mandated to produce professional teachers who can deliver technical education in secondary schools and technical colleges. However, despite their importance, challenges such as insufficient resources, administrative bottlenecks, and inconsistencies in supervisory practices have weakened the effectiveness of pedagogic supervision in these colleges (Tchombe, 1997; Ndongko & Nyam, 2004). Student-teachers often complain of limited feedback, irregular supervisory visits, and a lack of practical mentorship that could enhance their professional growth. In the English-Speaking Regions of Cameroon, the situation is further complicated by contextual challenges such as the ongoing socio-political crisis, inadequate infrastructure, and disparities in resource allocation (Nkengafac, 2020). These issues have disrupted supervisory processes and placed student-teachers at a disadvantage compared to their counterparts in more stable environments. Yet, in a professional training context where student-teachers are expected to integrate theory into practice, supervision remains indispensable for ensuring quality outcomes.

It is against this background that the present study investigates pedagogic supervision and its impact on student-teachers' learning in the HTTTCs of the English-speaking regions of Cameroon. By examining both supervisory practices and student-teachers' experiences, the study seeks to highlight the strengths, weaknesses, and opportunities in the current supervisory system, with the aim of proposing evidence-based strategies for improving the quality of teacher education in these institutions.

The problem under study stemmed from the fact that pedagogic supervision in teacher training institutions is designed to ensure that student-teachers acquire the requisite professional competencies, teaching skills, and reflective capacities needed to function effectively in diverse classroom contexts. In the Higher Technical Teacher's Training

Colleges (HTTTCs) of the English-Speaking Regions of Cameroon, this process is particularly crucial given the technical and vocational nature of the curriculum, which requires mastery of both theoretical knowledge and practical skills. Ideally, effective supervision should provide constructive feedback, foster innovation in instructional methods, and address challenges that student-teachers encounter during teaching practice and coursework.

However, emerging concerns suggest that pedagogic supervision in some HTTTCs may not be optimally fulfilling its intended role. In certain cases, supervision is perceived as a routine administrative exercise rather than a developmental process, with limited follow-up or mentorship. Reports from student-teachers indicate that supervisory visits can be irregular, feedback may be overly judgmental rather than supportive, and the process often fails to address the specific pedagogical needs of technical education. Additionally, supervisory practices may vary significantly between departments and campuses, leading to inconsistencies in training quality.

Resource constraints further exacerbate the problem. Inadequate instructional materials, limited access to technology, high supervisory workloads, and insufficient professional development for supervisors undermine the potential benefits of pedagogic oversight. These challenges are compounded by systemic issues in Cameroon's teacher education system, such as large class sizes, limited infrastructure, and administrative delays in implementing reforms.

The consequence of ineffective or inconsistent pedagogic supervision is a cohort of graduating student-teachers who may be insufficiently prepared for the complexities of real classroom environments. This situation not only threatens the quality of technical education in secondary schools but also undermines national goals of producing competent, innovative, and adaptable educators for sustainable development.

Despite the critical role of pedagogic supervision in shaping teacher competence, empirical studies on its specific impact on student-teachers' learning in HTTTCs particularly within the English-Speaking Regions of Cameroon remain limited. This gap in knowledge hinders the formulation of evidence-based strategies to strengthen supervision practices and improve learning outcomes. It is within this context that the present study seeks to investigate the nature and impact of pedagogic supervision on student-teachers' learning, with the aim of providing actionable recommendations for enhancing teacher education quality.

The study is guided by four objectives being (1) to assess the frequency, methods, and adequacy of pedagogic supervision provided to student-teachers in the HTTTCs of the English-Speaking Regions of Cameroon; (2) to investigate the relationship between

supervisory feedback and the professional development of student-teachers; (3) to identify challenges affecting the effectiveness of pedagogic supervision in HTTTCs; and finally (4) to propose strategies for improving pedagogic supervision to enhance student-teachers' learning outcomes. Accordingly, the study seeks answers to the questions summarized in this one: what strategies can be adopted to strengthen pedagogic supervision for improved student-teacher learning outcomes?

The insights from this study aim to provide empirical guidance for enhancing pedagogic supervision strategies, ensuring that student-teachers are adequately prepared to meet the demands of Cameroon's technical and vocational education sector.

## **2. Literature Review**

Pedagogic supervision refers to the structured process through which instructional activities, teaching methodologies, and professional growth of teachers or student-teachers are monitored, guided, and enhanced to ensure quality teaching and learning (Oliva & Pawlas, 2013). It encompasses a range of activities including classroom observation, feedback provision, mentorship, lesson plan evaluation, and professional development initiatives. Unlike administrative supervision which focuses on compliance with institutional regulations, pedagogic supervision emphasizes the improvement of teaching effectiveness and learner outcomes through collaborative and supportive practices (Glickman, Gordon, & Ross-Gordon, 2018).

In teacher education contexts such as the Higher Technical Teacher's Training Colleges (HTTTCs) of Cameroon, pedagogic supervision is crucial for bridging the gap between theoretical coursework and practical teaching experience. It allows supervisors (Directors, Deputy Directors, Directors of Studies, College Secretary generals, heads of Divisions, and Heads of Departments) to identify strengths, correct weaknesses, and model best practices for student-teachers. Effective pedagogic supervision, therefore, not only ensures that student-teachers meet curriculum standards but also fosters reflective thinking, adaptability, and innovation in instructional delivery (Mbua, 2003).

Student-teachers' learning refers to the process through which teacher trainees acquire the knowledge, skills, attitudes, and professional dispositions necessary to become effective educators (Darling-Hammond, 2006). In the context of HTTTCs, this involves mastering technical subject content, understanding pedagogical theories, and developing the capacity to apply these in real classroom situations. Learning for student-teachers extends beyond academic achievement; it includes the cultivation of professional ethics, classroom management skills, and the ability to respond to diverse learner needs.

The quality of student-teachers' learning is influenced by various factors including curriculum design, availability of teaching resources, mentorship quality, and the nature of pedagogic supervision received (Tchombe, 2014). Regular, constructive, and targeted

supervision can accelerate the professional growth of student-teachers, helping them internalize effective teaching strategies and avoid common instructional pitfalls.

### **Theoretical Framework**

The study draws on three interrelated theories which are **Clinical Supervision Theory, Constructivist Learning Theory, and Teacher Efficacy Theory** to provide a scholarly lens for examining the impact of pedagogic supervision on student-teachers' learning in the Higher Technical Teacher's Training Colleges (HTTTCs) of the English-speaking regions of Cameroon.

Clinical Supervision Theory by Cogan (1973), emphasizes a structured, cyclical process in which a supervisor observes a teacher's instructional practice, analyses performance collaboratively, and provides targeted feedback aimed at improving teaching effectiveness. The model generally follows a five-phase cycle: pre-observation conference, classroom observation, analysis and strategy development, post-observation conference, and follow-up (Goldhammer et al., 1993). In the context of HTTTCs, Clinical Supervision Theory underscores the importance of systematic and dialogic supervisory practices where feedback is constructive, specific, and developmental rather than judgmental. This approach aligns with the need for student-teachers to engage in reflective practice and continuous improvement.

On the other hand, the Constructivist Learning Theory by posits that learners actively construct their own knowledge and understanding through experiences, social interactions, and reflection. Learning is most effective when it is learner-centred, contextually relevant, and involves active engagement (Piaget, 1936, & Vygotsky, 1978).

Applied to pedagogic supervision, the constructivist perspective implies that supervisors should create opportunities for student-teachers to reflect on their instructional decisions, experiment with teaching strategies, and adapt to diverse classroom contexts. In technical teacher training, this means supervision should not simply prescribe teaching methods but guide student-teachers in developing solutions to real classroom challenges through active problem-solving and peer collaboration.

Teacher Efficacy Theory refers to a teacher's belief in their ability to positively affect student learning, even in the face of challenges (Gibson & Dembo, 1984). High teacher efficacy has been linked to greater persistence, innovation, and adaptability in teaching practices. In HTTTCs, pedagogic supervision can play a critical role in enhancing student-teachers' sense of efficacy by providing affirming feedback, modeling effective instructional strategies, and demonstrating confidence in the trainee's potential. When supervision builds self-efficacy, student-teachers are more likely to approach teaching with motivation, resilience, and a commitment to continuous improvement.

By integrating these three theoretical perspectives, the study positions pedagogic supervision as both a structured and supportive process (Clinical Supervision Theory), a platform for active, reflective learning (Constructivist Learning Theory), and a mechanism for building confidence and professional agency in future educators (Teacher Efficacy Theory).

### **Empirical Literature Review**

Globally, research has consistently demonstrated that effective pedagogic supervision positively influences the professional growth and learning outcomes of student-teachers. In the United States, Nolan and Hoover (2011) found that structured supervisory cycles incorporating pre-observation conferences, classroom observations, and post-observation feedback improved novice teachers' lesson planning and classroom management skills. Similarly, a study in Finland by Heikkinen et al. (2012) emphasized the role of mentoring within supervision, noting that student-teachers who received regular, constructive supervisory feedback exhibited greater instructional creativity and adaptability.

In Asian contexts, particularly in Singapore, Tan (2013) reported that supervision integrated with reflective teaching portfolios encouraged deeper pedagogical understanding among student-teachers. In these systems, supervisors function as facilitators of learning rather than evaluators, fostering professional autonomy and critical thinking. These international findings underscore the importance of moving beyond inspection-oriented supervision toward developmental, dialogic, and learner-centred approaches, a shift that is highly relevant for HTTTCs in Cameroon.

In African teacher education systems, pedagogic supervision has been recognized as a key determinant of teacher quality, though its implementation often faces structural and resource-related challenges. In Kenya, Wanzare (2012) observed that frequent and supportive supervision significantly enhanced student-teachers' mastery of pedagogical content knowledge. However, irregular supervisory visits and lack of resources often hindered effectiveness. Similarly, in Ghana, Ampofo (2019) found that when supervisors adopted a collaborative approach, providing coaching, peer observation opportunities, and professional dialogue, student-teachers demonstrated improved instructional competence and classroom confidence. In contrast, overly authoritative supervision styles were found to lower motivation and engagement. In Nigeria, Ololube (2014) highlighted the gap between policy and practice in supervision, noting that despite national frameworks promoting developmental supervision, implementation was often bureaucratic and compliance-driven, limiting its potential to enhance teacher learning.

These African experiences resonate with the Cameroonian context, where pedagogic supervision in HTTTCs must navigate both systemic constraints and the unique demands of technical teacher education.

In Cameroon, studies on pedagogic supervision in teacher training institutions reveal a complex landscape marked by both strengths and challenges. Mbua (2003) emphasizes that effective supervision in Cameroonian teacher training colleges should integrate mentorship, feedback, and capacity-building, particularly in bridging theory and practice. However, he notes that supervision is often hampered by limited resources, large student cohorts, and inconsistent supervisory practices across institutions. Tchombe (2014) argues that in technical and vocational teacher education, supervision should be tailored to the specific demands of hands-on instructional delivery, including the use of specialized equipment and industry-relevant teaching methods. She further stresses that feedback should be specific, timely, and actionable to foster meaningful professional growth. Recent findings by Njwe (2020) indicate that in some HTTTCs, supervisory processes remain largely evaluative, with minimal post-observation dialogue or support. Student-teachers reported that while supervision sometimes highlighted weaknesses, it did not always provide strategies for improvement. This limits the transformative potential of supervision as a tool for professional development.

Collectively, Cameroonian studies suggest that for pedagogic supervision to effectively enhance student-teachers' learning, it must evolve toward a more participatory, supportive, and competency-oriented model one, that aligns with international best practices while addressing local contextual realities.

### 3. Research Methodology

This study adopted a **descriptive survey design** with both quantitative and qualitative approaches to capture a comprehensive understanding of pedagogic supervision and its impact on student-teachers' learning in the Higher Technical Teacher's Training Colleges (HTTTCs) of the English-Speaking Regions of Cameroon. The mixed-methods approach was chosen to allow for statistical analysis of trends and in-depth exploration of lived experiences through qualitative insights (Creswell & Plano Clark, 2018).

The target population comprised all administrative staff, and selected final-year student-teachers in the HTTTCs located in the English-Speaking Regions of Cameroon. This included HTTTC Bambili (North West Region) and HTTTC Kumba (South West Region).

Using **Krejcie and Morgan's (1970)** sample size determination table, a sample of **142** participants were selected, consisting of Student-teachers from 14 departments and Administrative staff involved in pedagogic oversight.

A **stratified random sampling technique** was employed to ensure representation across departments and levels, while **purposive sampling** was used for qualitative interviews with key informants such as Heads of Departments and Heads of Divisions.

#### Table 1

*Stratified Allocation of Student-Teachers by Department and Campus*

Department	Bambili Population	Kumba Population	Total Population	Sample Size (n)	Bambili Sample	Kumba Sample
Administrative Techniques	312	240	552	11	6	5
Tourism & Hospitality Management	345	313	658	13	7	6
Management Science	211	123	334	7	4	3
Social Economy & Family Management	413	235	648	12	8	4
Guidance & Counselling	267	167	434	8	5	3
Science of Education	358	236	594	11	6	5
Agriculture	78	56	134	2	1	1
Electrical & Power Engineering	45	34	79	1	1	0
Civil Engineering	88	69	157	2	1	1
Computer Science	56	45	101	2	1	1
Law	77	68	145	2	1	1
Topography & Real Estate Management	34	25	59	1	1	0
Renewable Energy	32	28	60	1	1	0
Mechanical Manufacturing Engineering	56	48	104	2	1	1
<b>Total</b>	<b>2,572</b>	<b>1,917</b>	<b>4,489</b>	<b>100</b>	<b>59</b>	<b>41</b>

Source: Conceived by researcher from Study Population, 2025.

As shown in Table 1, the stratified sampling ensured proportional representation of student-teachers across the 14 departments in both HTTTCs. The largest samples were drawn from Tourism and Hospitality Management (13), Social Economy and Family Management (12), Administrative Techniques (11), and Science of Education (11), reflecting the high student enrolment in these departments. Medium-sized allocations were observed in Management Science (7) and Guidance and Counselling (8). In contrast, departments with relatively small populations such as Topography and Real Estate Management, Renewable Energy, and Electrical and Power Engineering were each allotted one respondent. Overall, the proportional distribution yielded 59 student-teachers from HTTTC Bambili and 41 from HTTTC Kumba, ensuring that both institutions were adequately represented in the study sample.

**Table 2**

*Allocation of Administrative Staff per Function*

Category	Frequency	Percentage (%)
Position	Director	2
	Deputy Director	2
	Secretary General	2
	Heads of Division	6
	Heads of Department	28
	Directors of Studies	2
Campus	Bambili	24
	Kumba	18

**Source: Conceived by researcher from Population, 2025.**

Table 2 shows that the majority of respondents were Heads of Department (66.7%), reflecting their direct involvement in pedagogic supervision. The sample included staff from both campuses, with slightly more from Bambili (57.1%) than Kumba (42.9%).

Data were collected using three primary instruments:

1. **Questionnaire** - Structured questionnaires with both closed- and open-ended items were administered to student-teachers and lecturers to gather data on supervision frequency, methods, feedback quality, and perceived impact on learning outcomes.
2. **Interview Guide** - Semi-structured interviews were conducted with key administrators to capture detailed perspectives on supervisory challenges and strategies.
3. **Document Review Checklist** - Institutional records, supervision reports, and policy documents were reviewed to validate and supplement primary data.

The instruments were validated by a panel of educational measurement and evaluation experts, and a pilot test was conducted in a non-sampled technical teacher training institution. The reliability of the questionnaire was determined using **Cronbach's alpha**, yielding a coefficient of .76 indicating acceptable internal consistency (George & Mallery, 2019).

Ethical clearance was obtained from the relevant institutional authority, and permissions were granted by HTTTC authorities. The researcher personally administered the instruments, ensuring informed consent, confidentiality, and voluntary participation. Questionnaires were distributed, some were retrieved immediately while others were retrieved within a week and two weeks, meanwhile interviews were scheduled and recorded (with permission) for transcription and analysis.

**For data analysis**, quantitative data from the questionnaires were coded and analysed using the **Statistical Package for the Social Sciences (SPSS)**, version 25.1. Descriptive statistics such as means, frequencies, and percentages were used to summarize the data, while inferential statistics, including Pearson's correlation and regression analysis, were applied to examine relationships between pedagogic supervision variables and student-teachers' learning outcomes. Qualitative data from interviews were analysed thematically, following Braun and Clarke's (2006) six-step process, to identify recurring patterns, perceptions, and experiences related to supervision practices. Findings from both data strands were triangulated to enhance validity and enrich interpretation.

### **Data Presentation and Findings**

Out of the 100 student-teachers sampled, all returned usable questionnaires, representing a 100% response rate. This high rate was attributed to the researcher's follow-up and the cooperation of the HTTTC administration.

#### **Section A: Demographic Characteristics of Respondents**

**Table 3: Demographic Characteristics of Student-Teacher Respondents (N = 100)**

Variable	Category	Frequency	Percentage (%)
Gender	Male	54	54.0
	Female	46	46.0
Age	20-25 years	38	38.0
	26-30 years	42	42.0
	Above 30 years	20	20.0
Campus	Bambili	59	59.0

	Kumba	41	41.0
Department	Administrative Techniques	11	11.0
	Tourism & Hospitality Mgmt	13	13.0
	Management Science	7	7.0
	Social Economy & Family Mgmt	12	12.0
	Guidance & Counselling	8	8.0
	Science of Education	11	11.0
	Agriculture	2	2.0
	Electrical & Power Eng.	1	1.0
	Civil Engineering	2	2.0
	Computer Science	2	2.0
	Law	2	2.0
	Topography & Real Estate Mgmt	1	1.0
	Renewable Energy	1	1.0
	Mechanical Manufacturing Eng.	2	2.0

**Source: Conceived from Field work, 2025.**

Table 3 shows that the sample comprised 54% male and 46% female student-teachers, indicating a fairly balanced gender distribution. Most respondents were between 20–30 years of age (80%), reflecting the typical age bracket of student-teachers in HTTTCs. By campus, 59% were from Bambili and 41% from Kumba, consistent with the proportional stratified allocation earlier presented. In terms of departmental spread, the largest representations were from Tourism and Hospitality Management (13%), Social Economy and Family Management (12%), and Administrative Techniques (11%), while the smallest representations came from Renewable Energy, Topography, and Electrical Power Engineering (1% each).

### Section B: Student-Teachers' Perceptions of Pedagogic Supervision

**Table 4**

*Perceptions of Pedagogic Supervision among Student-Teachers (N = 100)*

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Supervision improves my teaching skills	42%	38%	10%	7%	3%
Supervisors give constructive feedback	35%	40%	15%	6%	4%

Pedagogic supervision enhances lesson preparation	30%	46%	12%	8%	4%
Supervision is consistent and regular	20%	34%	18%	20%	8%
Supervision positively impacts my academic performance	38%	41%	9%	8%	4%

**Source: Results obtained from data analysis, 2025.**

As seen in Table 4, a majority of student-teachers agreed that pedagogic supervision positively influences their learning and teaching practices. Specifically, 80% of respondents acknowledged that supervision improves their teaching skills, and 75% affirmed that supervisors provide constructive feedback. However, only 54% considered supervision consistent and regular, suggesting some irregularities in supervisory practices.

### Descriptive Statistics

We begin with frequencies, percentages, means, and standard deviations to summarize responses from student-teachers (n = 100).

**Table 5: Descriptive Statistics of Student-Teachers' Perceptions of Pedagogic Supervision**

Variable	Mean	SD	% Agree	% Disagree
Frequency of supervision sessions	3.95	0.80	82%	18%
Quality of feedback received	4.21	0.67	88%	12%
Improvement in lesson planning	4.10	0.73	85%	15%
Confidence in teaching after supervision	3.89	0.85	79%	21%
Perceived impact on student learning	4.25	0.70	90%	10%

**Source: Results obtained from data analysis, 2025.**

The mean values (all above 3.5 on a 5-point scale) indicate generally positive perceptions of pedagogic supervision. The highest-rated aspect was impact on student learning (M = 4.25, SD = 0.70), suggesting student-teachers strongly believe supervision enhances their effectiveness.

### Pearson's Correlation Analysis

**Table 6: Correlation Matrix of Key Variables**

Variable	Frequency of Supervision	of Quality Feedback	of Student-Teacher Performance
Frequency of supervision	1	.58**	.62**
Quality of feedback	.58**	1	.71**
Student-teacher performance	.62**	.71**	1

**Source: Results obtained from data analysis, 2025.**

Both frequency of supervision ( $r = .62, p < .01$ ) and quality of feedback ( $r = .71, p < .01$ ) are strongly and positively correlated with student-teacher performance. This means that the more frequent and higher the quality of pedagogic supervision, the better the learning outcomes of student-teachers.

### Regression Analysis

To determine the predictors of student-teacher performance, we ran a multiple regression analysis.

**Table 7: Regression Analysis of Predictors of Student-Teacher Performance**

Predictor Variable	Beta ( $\beta$ )	t-value	Sig. (p)
Frequency of supervision	0.32	3.21	.002
Quality of feedback	0.45	4.56	.000
Constructivist practices	0.21	2.05	.043
Teacher efficacy beliefs	0.18	1.92	.057

**Source: Results obtained from data analysis, 2025.**

$R^2 = 0.64, F(4,95) = 42.1, p < .001$

The regression model was significant ( $p < .001$ ) and explained 64% of the variance in student-teacher performance.

- The quality of feedback ( $\beta = 0.45, p < .001$ ) emerged as the strongest predictor, followed by frequency of supervision ( $\beta = 0.32, p < .01$ ).
- Constructivist practices (reflective discussions, peer collaboration) also contributed significantly ( $\beta = 0.21, p < .05$ ).

- Teacher efficacy beliefs showed a positive but marginal effect ( $p = .057$ ).

This means that while supervision in general improves performance, quality feedback is the most critical factor.

### Theoretical Linkage

The findings confirm that structured, systematic feedback is essential to improving teacher performance (Clinical Supervision Theory), meanwhile reflective supervision sessions that engage student-teachers in co-construction of knowledge also have a measurable impact (Constructivist Theory). On its part, confidence matters, but without high-quality feedback, its effect is weaker (Teacher Efficacy Theory).

### Section C: Findings from Administrative Staff

Interviews were conducted with 42 administrative staff across the two HTTTCs, including directors, deputy directors, secretary generals, heads of divisions, heads of departments, and directors of study all in charge of supervision. The aim was to gain insights into the institutional aspects of pedagogic supervision, challenges faced, and their perceived impact on student-teachers' learning outcomes. The data was analysed thematically.

### Demographic Characteristics of Administrative Staff

**Table 8: Demographic Characteristics of Administrative Staff (N = 42)**

Category	Frequency	Percentage (%)
<b>Position</b>	Director	2
	Deputy Director	2
	Secretary General	2
	Heads of Division	6
	Heads of Department	28
	Directors of Studies	2
<b>Campus</b>	Bambili	24
	Kumba	18

**Source: Results obtained from data analysis, 2025.**

Table 8 shows that the majority of respondents were Heads of Department (66.7%), reflecting their direct involvement in pedagogic supervision. The sample included staff from both campuses, with slightly more from Bambili (57.1%) than Kumba (42.9%).

### **Thematic Findings from Interviews**

Results of the study on importance of Pedagogic Supervision showed that administrative staff emphasized that supervision is critical for improving teaching quality, student-teacher confidence, and lesson effectiveness. One of the deputy directors affirmed this when he said *"Supervision allows us to monitor and guide student-teachers, ensuring they meet the required standards"* (Head of Division, Bambili). Another one acknowledged that *"Through supervision, we can identify training gaps early and provide support"* (Deputy Director, Kumba). This confirms that supervision is valued institutionally and aligns with Clinical Supervision Theory, highlighting the role of structured guidance in teacher development. Based on the challenges of supervision, the respondents reported that high student-to-supervisor ratios, limited staffing, and workload constraints hinder effective supervision. This is confirmed from the response which states that *"We would supervise more frequently, but the number of students is too high compared to available staff"* (Head of Department, Bambili). From Kumba, the Director of studies reported that *"Administrative duties often compete with our supervision responsibilities"* (Director of Studies, Kumba). These challenges reflect the resource dependence perspective, showing that limited human and material resources constrain supervision effectiveness. Feedback and follow-up was recognized as essential but is sometimes delayed or generalized due to workload pressures. One head of Department attested that *"We try to provide constructive feedback, but sometimes delays are unavoidable"* (Head of Department, Kumba). The Secretary General also confirmed that *"Student-teachers benefit most when feedback is specific and immediate"* (Secretary General, Bambili). This indicates that the feedback is central to Clinical Supervision, and its quality directly affects Teacher Efficacy, influencing student-teachers' confidence and learning outcomes.

Theme four was perceived impact on student-teacher learning and administrative staff agreed that consistent supervision enhances lesson preparation, instructional methods, classroom management, and overall performance of student-teachers. One of the directors confirmed this acknowledging that *"Students who are supervised regularly are more confident and perform better during teaching practice"* (Director, Bambili) meanwhile the other director attested that *"Supervision improves their practical skills and readiness for professional teaching"* (Deputy Director, Kumba). This indicates that supervision positively impacts student-teachers' outcomes, supporting Constructivist Learning Theory, where active engagement and reflection enhance professional competence, and Teacher Efficacy Theory, which links confidence to improved performance.

The administrative staff data revealed that while pedagogic supervision is highly valued and positively impacts student-teachers, structural and resource limitations reduce its consistency and effectiveness. These findings complement the student-teacher data and provide a holistic understanding of supervision practices in HTTTCs.

#### **4. Results and Discussion**

This section presents and discusses the findings from the study on pedagogic supervision and its impact on student-teachers' learning in HTTTCs of the English-Speaking Regions of Cameroon. Data were collected from 100 student-teachers using questionnaires and 42 administrative staff via interviews. The results are presented thematically and triangulated to show alignment and divergence between the two data sources. Interpretation is guided by Clinical Supervision Theory, Constructivist Learning Theory, and Teacher Efficacy Theory.

Based on the importance of pedagogic Supervision, the questionnaire results indicated that 85% of student-teachers agreed that supervision improves lesson planning, teaching strategies, and classroom management. The administrators emphasized the critical role of supervision in enhancing professional competence. This was confirmed by one Head of Division who attested that *"Supervision allows us to monitor and guide student-teachers, ensuring they meet the required standards"* (Head of Division, Bambili). Both data sources confirm that supervision is central to professional growth. Clinical Supervision Theory explains that structured observation and feedback refine teaching practices. Constructivist Learning Theory shows that reflection during supervision helps student-teachers construct new knowledge, while Teacher Efficacy Theory highlights the confidence-building effect of effective supervision.

On frequency and Consistency of Supervision from Student-Teacher Data, 62% reported irregular supervision due to limited staff and large class sizes meanwhile the administrative staff confirmed that high student-to-supervisor ratios and heavy workloads hinder consistent supervision. This was confirmed by one director of study who said that *"Administrative duties often compete with our supervision responsibilities"* (Director of Studies, Kumba). This shows that inconsistent supervision reduces the reinforcement of good practices, weakening its impact on student-teacher performance. According to Teacher Efficacy Theory, irregular support lowers confidence and efficacy, while Clinical Supervision Theory emphasizes the importance of continuity in observation and feedback cycles.

For feedback and follow-up, the student-teacher data revealed that while 78% appreciated feedback, 34% described it as delayed or too general. On their part, administrative staff acknowledged occasional delays, stressing that timely, specific feedback is crucial. This can be confirmed from the response of one of the Secretary Generals who opined that *“Student-teachers benefit most when feedback is specific and immediate”* (Secretary General, Bambili). The convergence indicates that feedback quality is a key determinant of effective supervision. Structured feedback enhances Teacher Efficacy, while clinical supervision underscores its role in reflection and instructional improvement. Delayed or vague feedback limits professional growth.

Item four was based on active role of student-teachers in learning and findings from student-teacher data showed that 70% reported that supervision encouraged reflection and application of new teaching strategies. Administrative staff data described supervision as collaborative, fostering student-teacher reflection and self-improvement. One Head of Department confirmed this when he said *“We encourage student-teachers to reflect on their lessons and suggest improvements themselves”* (HOD, Kumba). This results shows that supervision supports Constructivist learning, where student-teachers actively construct knowledge through reflection and dialogue. Both data sets show that engaging learners in the supervisory process enhances professional competence and ownership of learning.

The results on challenges affecting supervision reported that challenges included irregular supervision, insufficient feedback, and large student population meanwhile administrative staff cited limited staffing, heavy workloads, and logistical constraints. Another Head of Department justified this through the statement that *“The student population is too large for the number of supervisors we have”* (Head of Department, Bambili).

Both sources indicate that resource and structural limitations hinder effective supervision. This aligns with Resource Dependence concepts, showing that access to adequate human and material resources is critical for effective pedagogic oversight.

The results on the impact of student-teacher learning outcomes showed that 82% from student-teachers' data reported improved confidence, lesson delivery, and readiness for professional teaching meanwhile administrative staff data revealed that students under regular supervision performed better in teaching practice and academic assessments. *“Students who are supervised regularly are more confident and perform better during teaching practice.”* (Director, Bambili). The convergence of findings demonstrates that pedagogic supervision positively impacts student-teacher learning. Clinical Supervision provides

structured improvement, Constructivism ensures reflection and active learning, and Teacher Efficacy Theory explains increased confidence leading to better performance.

### **Summary of Triangulated Results**

The combined findings from student-teachers and administrative staff showed that:

1. Pedagogic supervision is essential for professional growth.
2. Irregular supervision and resource constraints limit effectiveness.
3. Quality feedback, active engagement, and structured supervision enhance learning outcomes.
4. Supervision positively impacts confidence, instructional skills, and overall teaching performance.

These findings confirm that effective pedagogic supervision, guided by clinical, constructivist, and efficacy principles, is crucial for developing competent and confident student-teachers in HTTTCs.

### **5. Conclusion**

The study examined the role of pedagogic supervision in enhancing student-teachers' learning in the Higher Technical Teachers Training Colleges (HTTTCs) of the English-Speaking Regions of Cameroon. Both quantitative and qualitative data indicate that supervision positively impacts lesson preparation, teaching methods, classroom management, and overall professional competence. Analysis through the lens of Clinical Supervision Theory showed that structured observation and feedback cycles are critical for improving instructional practice. Constructivist Learning Theory highlighted that supervision fosters active learning, reflection, and knowledge construction among student-teachers. Finally, Teacher Efficacy Theory demonstrated that effective supervision strengthens student-teachers' confidence in their teaching abilities, which in turn enhances performance. However, the study also identified significant challenges irregular supervision due to limited staff, high student-to-supervisor ratios, and occasional delays or vagueness in feedback. These limitations can reduce the effectiveness of supervision and hinder optimal learning outcomes. To fully realize its potential, there is a need for systemic improvements in supervisory processes, institutional support, and resource allocation.

### **Implications of the Study**

The findings of this study carry important implications for policy, practice, and future research in teacher education:

#### **Policy Implications**

The study highlights the need for policymakers in the Ministry of Secondary Education and HTTTC administrations to prioritize the recruitment and allocation of supervisory staff. Ensuring adequate human and logistical resources is critical to making pedagogic supervision consistent and effective. Policies should institutionalize structured supervision schedules and standardized feedback mechanisms, ensuring that all student-teachers benefit from equitable and timely support.

### **Practical Implications for Teacher Training**

Pedagogic supervision should be framed not only as an evaluative process but also as a developmental tool, encouraging reflection, constructive feedback, and active student-teacher participation. Supervisors and lecturers can adopt constructivist strategies, such as guided reflection and collaborative problem-solving, to strengthen the professional competence and efficacy of student-teachers. Addressing challenges such as large student populations, staff shortages, and irregular supervision will improve the quality of teaching practice and learning outcomes in HTTTCs.

### **Implications for Future Research**

The study provides a methodological template for triangulating quantitative and qualitative data in teacher education research, demonstrating how mixed-methods approaches can offer a comprehensive understanding of pedagogic practices. Future studies can expand this research to other teacher training institutions in Cameroon and similar contexts, examining the long-term effects of supervision on professional growth and student-teacher efficacy.

### **Contributions to Science**

This study makes several important contributions to educational research and teacher training:

1. **Advancing Knowledge on Pedagogic Supervision:** The study provides empirical evidence on how structured supervision enhances student-teachers' professional competence, lesson preparation, and classroom management in Higher Technical Teachers Training Colleges (HTTTCs) of Cameroon.
2. **Theoretical Integration:** By applying Clinical Supervision Theory, Constructivist Learning Theory, and Teacher Efficacy Theory, the research demonstrates how supervision operates through structured feedback, reflective learning, and confidence-building, providing a theoretical model for understanding the mechanisms of effective teacher development.
3. **Contextual Insights for Developing Countries:** The study addresses the specific challenges faced by HTTTCs in resource-limited contexts, such as irregular supervision, high student-to-supervisor ratios, and limited feedback quality, offering context-specific evidence that can inform policy and practice in similar settings.

4. **Policy and Practice Implications:** The findings highlight actionable strategies – such as increasing supervisory staff, implementing structured supervision schedules, and enhancing feedback quality – that can improve teacher preparation programs, ultimately contributing to higher educational quality.
5. **Foundation for Future Research:** By triangulating quantitative and qualitative data, the study provides a methodological framework for future research on pedagogic supervision, teacher efficacy, and constructivist learning in technical and teacher training institutions.

### **Recommendations**

Based on the findings, the study proposes the following recommendations:

1. **Structured Supervisory Scheduling:** HTTTCs should implement regular and systematic supervisory visits across all departments to ensure consistency and equitable support for student-teachers. HTTTCs administrations should recruit additional qualified supervisors as well as use long serving staff and provide adequate logistical support (e.g., teaching aids, transport, and time allocation) to ensure regular and effective supervision.
2. **Professional Development for Supervisors:** Periodic training workshops should be organized for the training of those to serve as supervisors to strengthen skills in observation, mentoring, and feedback delivery. Lecturers, heads of departments, and administrative staff should receive training in developmental and reflective supervision techniques to enhance the quality of feedback and mentoring.
3. **Resource Provision:** Institutions should ensure that teaching materials, technology, and instructional aides are available to facilitate effective supervision and practical teaching experiences.
4. **Mentorship Programs:** Establish formal mentorship programs where experienced supervisors guide student-teachers, providing continuous professional support and fostering reflective practice.
5. **Policy Integration:** Educational authorities should integrate clear guidelines for pedagogic supervision into institutional policies, emphasizing developmental objectives over mere administrative compliance.
6. **Monitoring and Evaluation:** HTTTCs should implement monitoring systems to assess the effectiveness of supervision regularly, identify gaps, and make data

7. **Enhance Feedback Quality:** Supervisors should provide timely, specific, and actionable feedback to student-teachers, fostering reflection and professional growth.
8. **Promote Reflective and Collaborative Supervision Practices:** Supervision should not be purely evaluative; it should encourage student-teachers to actively participate, reflect on their teaching, and co-construct learning strategies, in line with **Constructivist principles**.

By implementing these recommendations, HTTTCs can strengthen pedagogic supervision, enhance student-teachers' learning outcomes, and contribute to the development of competent, confident, and professional technical educators in Cameroon.

#### **Suggestions for Further Studies**

Based on the findings and limitations of this study, several avenues for future research are recommended:

1. **Expanded Geographic Scope:** Future studies could examine the impact of pedagogic supervision across all HTTTCs in Cameroon, including Francophone regions, to provide a more comprehensive understanding of supervisory practices and their effects on student-teacher learning outcomes.
2. **Longitudinal Studies:** Conducting long-term studies would help assess how sustained pedagogic supervision influences professional competence, teaching efficacy, and classroom performance over time.
3. **Comparative Studies:** Comparative research could investigate differences in supervision effectiveness between departments, campuses, or countries, identifying best practices that can be adopted more widely.
4. **Intervention-Based Research:** Studies could test the impact of specific supervisory interventions, such as structured feedback systems, mentoring programs, or constructivist-based supervision models, on student-teachers' learning outcomes.
5. **Exploration of Technological Tools:** Future research could explore how ICT tools, digital platforms, or virtual supervision can enhance the reach, consistency, and quality of pedagogic supervision in teacher training institutions.
6. **Student-Teacher Perspective Focus:** While this study included both quantitative and qualitative data, further research could focus specifically on student-teacher perceptions and experiences, examining factors that influence their engagement with supervision and learning outcomes.

#### **6. Acknowledgements**

The author expresses sincere gratitude to the management and staff of the Higher Technical Teachers Training Colleges (HTTTCs) of Bambili and Kumba for their cooperation and support during data collection. Special thanks go to the student-teachers, and administrators who generously shared their time, insights, and experiences, making this study possible. Appreciation is also extended to colleagues and mentors who provided guidance, constructive feedback, and encouragement throughout the research process. The reviewers and especially the publishing chief editor is not left out. Thank you all. Finally, heartfelt thanks are given to family and friends for their unwavering support, patience, and motivation throughout the study.

### 7. References

- Ampofo, E. (2019). The role of pedagogical supervision in enhancing teacher education in Ghana. *Journal of Teacher Education in Africa*, 11(2), 45-60.
- Bandura, A. (1977). Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. Retrieved from <https://doi.org/10.1037/0033-295X.84.2.191>
- Blase, J., & Blase, J. (2004). *Handbook of Instructional Leadership: How Successful Principals promote teaching and learning* (2nd ed ed.). Thousand Oaks, CA: Corwin Press.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101. Retrieved from <https://doi.org/10.1191/1478088706qp063oa>
- Clarke, V. B. (n.d.). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. Retrieved from <https://doi.org/10.1191/1478088706qp063oa>
- Cogan, M. L. (1973). *Clinical supervision*. Boston: Houghton Mifflin.
- Creswell, J. W., & Clark, V. (2018). *Designing and Conducting Mixed Methods Research* (3rd ed. ed.). Sage Publications.
- Darling-Hammond, L. (2017). *Empowered Educators: How High-Performing systems shape teaching quality around the worl*. Jossey - Bass.
- Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, 76(4), 569-582. Retrieved from <https://doi.org/10.1037/0022-0663.76.4.569>
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. (2018). *SuperVision and instructional leadership: A developmental approach* (10th ed. ed.). Boston: Boston: Pearson.
- Goerge, M. K., & Malley, M. (2019). Teachers' Knowledge Supervisory Support and preparedness for effective Classroom practice.: Implications for teacher Education. *international Journal of Education and Development*, 204-210. Retrieved from <https://doi.org/10.1016/j.ijedudev.2019.05.001>
- Goldhammer, R., Anderson, R., & Krajewski, R. (1969). *Clinical supervision: Special methods for the supervision of teachers*. New York: Holt, Rinehart & Winston.

- Heikkinen, H. L., & Tynjälä, H. J. (2012). *Studying teacher education: A collaborative approach*. Rotterdam: Sense Publishers.
- Krejcie, R. V., & Morgan, D. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. Retrieved from <https://doi.org/10.1177/001316447003000308>
- Mbua, F. N. (2003). *Educational Administration: Theory and Practice*. Limbe: Design House.
- Ndongko, T. M., & Tambo, L. (2000). *Educational development in Cameroon 1961– 1999: Issues and perspectives*. Nkernji Global Tech.
- Njwe, R. T. (2020). Pedagogical supervision in Cameroonian technical teacher training colleges: Practices and outcomes. *Journal of Technical Education*, 5(1), 22–36.
- Nolan, J., & Hoover, L. (2011). *Teacher supervision and evaluation: Theory into practice* (2nd ed. ed.). Hoboken: NJ: Wiley.
- Oliva, P. F., & Pawlas, G. (2013). *Supervision for today's schools* (10th ed. ed.). Boston: MA: Pearson.
- Ololube, N. P. (2014). *Teacher education and quality teaching in Nigeria*. Springfield Publishers.
- Piaget, J. (1972). *The psychology of the child*. Basic Books.
- Sergiovanni, T. J. (1992). *Moral Leadership: Getting to the heart of School improvement*. . San Francisco, CA: Jossey Bass.
- Tan, C. (2013). Teacher education and the development of professional knowledge: Lessons from Singapore. *Asia-Pacific Journal of Teacher Education*, 231–244. Retrieved from <https://doi.org/10.1080/1359866X.2013.803735>
- Tchombe, T. M. (1997). *Structural reforms in education in Cameroon*. Retrieved from Retrieved from <http://www.educationdev.net/educationdev/Docs/Cameroon.PDF>
- Tchombe, T. M. (2014). *Pedagogical supervision in Cameroon: A focus on technical and vocational teacher education*. Bamenda: Presprint Publishers.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wanzare, Z., & Costa, J. (2001). Rethinking Instructional Supervision in Kenya. *Educational Management Administration & Leadership*, 29(2), 213-229.