## **UNIVERSITE DE YAOUNDE I**

FACULTE DES SCIENCES DE L'EDUCATION

CENTRE DE RECHERCHE ET FORMATION DOCTORALE EN SCIENCES HUMAINES, SOCIALES ET EDUCATIVES

UNITE DE RECHERCHE ET DE FORMATION DOCTORALE EN SCIENCES DE L'EDUCATION ET INGENIERIE EDUCATIVE

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DOCTORATE UNIT FOR RESEARCH AND TRAINING IN EDUCATION AND EDUCATIONAL ENGENIEERING

DEPARTMENT OF CURRICULA AND EVALUATION

# TEACHERS' INSTRUCTIONAL PRACTICES AND ACADEMIC PERFORMANCE OF LEARNERS' WITH VISUAL IMPAIRMENT IN GOVERNMENT BILINGUAL HIGH SCHOOL BAMENDA, NORTH-WEST REGION OF CAMEROON

A dissertation submitted and defended on the 10<sup>th</sup> November 2021 in fulfilment of the requirements for the award of a master's degree in Curriculum and Evaluation.

**Speciality: Fundamental Rechearch** 

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## CERTIFICATION

We the undersigned hereby certify that this study, titled "TEACHERS' INSTRUCTIONAL PRACTICES AND ACADEMIC PERFORMANCE OF LEARNERS WITH VISUAL IMPAIRMENT IN GBHS Bamenda in the North West Region of CAMEROON was carried out by Delphine EMBI ACHUO, Matricule 18X3979, student of the Department of Curriculum and Evaluation, Faculty of Education, University of Yaounde 1. Any work taken from somewhere has been properly referenced and acknowledged.

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Date \_\_\_\_\_2021

## DEDICATION

То

My Father Mr. ACHUO THOMAS EWI

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# LIST OF ABBREVIATIONS AND ACROYNMS

<b>G.B.H.S</b> :	Government Bilingual High School
UNESCO:	United Nations Educational, Scientific and Cultural Organization
G.P.E:	Growth and Employment Paper
MINESEC:	Ministry of Secondary Education
<b>C.B.A</b> :	Competency Base Approach
<b>E.E.C</b> :	Expanded Core Curriculum
<b>P.W.D</b> :	Persons with Disabilities
<b>U.N</b> :	United Nation
S.D.G:	Sustainable Development Goal
Ho:	Null Hypotheses
UIN:	Islamic University
NICHCY:	National Dissemination Center for Children with Disabilities
SEEL:	Special Education Elementary Longitudinal Study
NCLB:	No Child Left Behind
NIL:	National Institute for Literacy
VI:	Visual Impairment
ESSA:	Every Student Succeed Act
UDL:	Universal Learning Design
<b>CD-ROMS:</b>	Compact Discs Read-only Memory
IP:	Instructional Practices
SPSS:	Statistic Product Service Solution
SME:	Small and Medium-sized Enterprise
FM:	Frequency Modulation
CRTV:	Cameroon Radio Television
<b>Ph.D.</b> :	Doctor of Philosophy
BD:	Bachelor Degree
RQ:	Research Question
OB:	Objective of the Study
CRIAPEG:	Ghana, the Centre for Research on Improving Quality of Primary Education

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## ABSTRACT

This study was to examine the impact of the teachers' instructional practices on the academic performance of learners with visual impairment in GBHS Bamenda in the North West of Cameroon. The targeted population in this study was 80 teachers teaching visually impaired learners in the study area. The objectives of this study were defined by 5 independent variables which were: teachers' knowledge of the subject matter; teachers' knowledge of the learners' impairment; teaching methods; instructional material; and assessment/evaluation methods. A purposive sampling technique was applied to identify the teachers within the study area. The study was guided by three theories: The learning disability theory which argues that a child with whatever kind of disability can live a normal life if given support just like any other normal child. The constructivist theory because teachers are expected to teach using the competency-based approach which is more learners centered, and enables learners to construct their knowledge. The data was collected coded and summarized based on the objectives of the study, analyzed using the SPSS23 program, and reported using a regression for the inferential statistics and frequency distribution tables and percentages. For the descriptive statistics. The Test-retest technique was used to test the reliability of the research instruments. The study found that teachers who do not have appropriate training consequently will lead to poor academic performance. Teaching visually impaired learners require more attention, extra skills, and a lack of knowledge in an inclusive classroom. The study also found that the instructional materials to assist learners with visual impairment are not readily available and that using them is time-consuming. The study also found that the visually impaired learners did not receive adequate support services to help them overcome their visual limitations, especially during assessment and evaluation. The study recommends that teachers should adopt an inductive heuristic approach in teaching visually impaired learners. Teachers need to make the curriculum and instructional practices adaptable to all. The study further recommended that teachers' trainers should include inclusive education in their curriculum and that the Ministry of Secondary Education should come up with proper guidelines about inclusive education. The government should organize workshops and seminars (pre-service training and inservice training) through the different schools and zones on how to improve performance, quality of teaching for visually impaired learners.

## RESUME

La présente étude avait pour but d'examiner l'impact des pratiques pédagogiques des enseignants sur le rendement scolaire des apprenants ayant une déficience visuelle au Lycée bilingue de Bamenda, dans le Nord-Ouest du Cameroun. L'objectif de cette étude était d'examiner l'impact des pratiques pédagogiques des enseignants sur le rendement scolaire des apprenants ayant une déficience visuelle. La population ciblée par cette étude était constituée de 81 enseignants d'apprenants déficients visuels dans la zone d'étude. Une technique d'échantillonnage intentionnel a été appliquée pour identifier les enseignants dans la zone d'étude. L'étude a été guidée par trois théories : La théorie des troubles de l'apprentissage, selon laquelle un enfant souffrant d'un handicap, quel qu'il soit, peut mener une vie normale s'il bénéficie d'un soutien, comme tout autre enfant normal. Le constructivisme : les enseignants devraient enseigner en utilisant l'approche basée sur les compétences, qui est davantage centrée sur les apprenants en leur permettant de construire leurs propres connaissances. La théorie de Gagne qui porte sur les pratiques pédagogiques. Les données ont été collectées, codées et résumées sur la base des objectifs de l'étude, analysées à l'aide du logiciel SPSS et rapportées à l'aide de tableaux de distribution de fréquences et de pourcentages. La régression, Pearson corrélation descriptive analyse a été utilisé pour comparer les proportions observées dans chaque catégorie par rapport au résultat attendu. La méthode du test-retest a été utilisée pour tester la fiabilité des instruments de recherche. La principale variable indépendante (VI) a été rendue opérationnelle en 5 dimensions qui sont : la connaissance de la matière par les enseignants, la connaissance des déficiences des apprenants par les enseignants, les méthodes d'enseignement, le matériel pédagogique et les méthodes d'évaluation. Elles ont ensuite été transformées en objectifs spécifiques et finalement en questions de recherche. L'étude a révélé que les enseignants ne disposent pas d'une formation appropriée, ce qui entraîne un mauvais rendement scolaire. L'enseignement aux apprenants déficients visuels requiert plus d'attention, des compétences supplémentaires et un manque de connaissances dans une classe inclusive. L'étude a également révélé que le matériel didactique destiné à aider les apprenants ayant une déficience visuelle n'est pas facilement accessible et que son utilisation demande du temps. L'étude a également révélé que les apprenants ayant une déficience visuelle ne bénéficiaient pas de services de soutien adéquats pour les aider à surmonter leur handicap visuel, notamment lors de l'évaluation. L'étude recommande aux enseignants d'adopter une approche inductive heuristique face aux apprenants ayant une déficience visuelle. Les programmes d'enseignement et les pratiques pédagogiques doivent être adaptés à tous. L'étude recommande en outre que les formateurs d'enseignants intègrent l'éducation inclusive dans leur programme et que le Ministère des enseignements secondaires élabore des directives appropriées sur l'éducation inclusive. Le gouvernement devrait organiser des ateliers et des séminaires de formation initiale et de formation continue dans les différentes écoles et zones quant à la manière d'améliorer la performance et la qualité pédagogique pour les apprenants ayant une déficience visuelle.

## CHAPTER ONE INTRODUCTION

Education is the social institution through which society provides its members with important knowledge, including basic facts, job skills, and cultural norms values. One of the most important benefits of education is that it improves personal lives and helps society to run smoothly (Education: A Global Survey). Countries with higher literacy rates tend to be in better economic situations. The right to education has been recognized as a human right in several international conventions, including the international covenant on Economic Social and Cultural Rights which recognizes a right to free, compulsory primary education for all, and the obligation to develop secondary education accessible to all. However, the global statistics show that many children are often left out of education due to varying reasons including discrimination particularly due to disabilities like visual impairment (says the world bank/GPE report). The convention against discrimination in education, adopted by UNESCO on 14 December 1960 aims to combat discrimination and racial segregation in education. In December 2016, 102 states including Cameron had ratified the convention.

The purpose of this study is to examine the impact of the teachers' instructional practices on the academic performance of learners with visual impairment in the Government Bilingual High School (G.B.H.S) Bamenda in the North West of Cameroon. G.B.H.S Bamenda is one of the Government schools practicing inclusive education in the country with a good population of children with disabilities in general and children with visual impairment in particular. The study used a quantitative approach method with structured questionnaires as the main instrument for data collection. Purposeful sampling was chosen with 73 teachers selected to answer the questionnaires. The hypothesis or the tentative answer to this research finding was to affirm that there is a relationship between teacher's instructional practices and the Academic performance of students with visual impairment. The challenges visually impaired students face in the classroom and educational environment is the overwhelming mass of visual material to which they are continuously exposed to such as textbooks, class outlines, class schedules, and chalkboards, (Keller et al, 2009). The curriculum in regular schools is also designed for fully sighted children and is delivered largely through sight-related tasks. If a student has difficulty seeing material at a distance, writing on chalkboards will be hard to discern. Without special adaptations, visually impaired students are generally disadvantaged in a regular classroom especially as teaching now follows the Competences Base Approach (C.B.A) requiring hands activity and interaction with materials can also present a challenge to students with visual impairment (Bishop1996).

To address the specific educational needs of children with disabilities, the Cameron government on October 1, 2008, is a signatory of the Convention on the Rights of Persons with Disabilities and the Optional Protocol thereto by the General Assembly of the United Nations on December 13, 2006. Article 24 of this convention states that:" States Parties recognize the right of persons with disabilities to education. To realize this right without discrimination and based on an equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning." This commitment means that the government of Cameroon is engaged in ensuring education for all including children with visual impairment. At the national level, the government of Cameroon enacted Law No 2010/002 of April 13, 2010, on the protection and promotion of persons with disabilities. Article 4 of this law defines support that children with disabilities need to enable them to access education on an equal basis with others.

In addition to this law, there was the further implementation of joint circular letters signed with MINESEC respectively on August 2, 2006, and August 14, 2007, to facilitate the admission of students with disabilities and those born of poor parents with disabilities in government high schools, and their participation in public examinations (ministry of social affairs website. Learners learn best if the subject matter is meaningful to them. It becomes meaningful and interesting if it is taught in an inclusive classroom if the content is delivered in a classroom where diversity is recognized. But if the curriculum is subject-centered, ability centered, teachers have no choice but to teach without considering the diversity in their classrooms and thereby frustrating others and teach only what is in the book, this may explain why many fail during assessment and evaluation. If your learners have varying learning disabilities or needs, then your content must be disability-sensitive.

#### **BACKGROUND TO THE STUDY**

#### **Historical Background**

The instructional practices used in the early 21st century began in antiquity. In ancient Greece, Socrates illustrated a questioning strategy intended to facilitate the learner's independent

discovery of important truths. An instructional practice similar to direct instruction was reported by Samuel Griswold Goodwich's account of teaching in a rural Connecticut school during the early 18th century. The children were called up one by one to Aunt Delight, who sat on a low chair and required each, as a preliminary, she then placed the spelling book before the learners and with a penknife pointed letters of the alphabet saying "what is this?" (Edward and Richey,).

As education extended beyond society's elite, educators became interested in instructional practices that would accommodate large numbers of students in efficient ways. An example was the Lancaster Method used in the early 19th century. This involved the gathering of many students in one large room, sorting them into groups of similar abilities, and getting them to recite lesson scripts with the aid of Nineteenth-century instructional practices that were teacher-centered, intended mainly to transmit basic information. In the early part of the 21st century, there was a shift in approach John Dewey and his disciples of Progressive education propounded the orientation of student-centered instructional methods aimed at helping students acquire higher-level thinking and problem-solving skills. Of particular importance was the project method that provided the intellectual base such as cooperative learning, problem-based instruction, and other approaches geared towards active student learning and group interaction.

Cognitive psychology and constructivist perspectives, later on, produced instructional strategies such as discovery learning and inquiry teaching that were at the center of the curriculum reforms of that era, and the cooperative learning and problem-based strategies popular today became more widely known and used. In the late 1960s, Bruce Joyce began describing the various approaches to teaching that had been developed over the years by analyzing each approach according to its theoretical basis, the learner outcomes it was designed to accomplish, and the teacher and student behaviors required to make the approach work. Joyce used the term model rather than teaching strategy to refer to a particular approach to instruction. In his initial work (Joyce and Weil, 1972) more than twenty models were identified. Joyce's conceptualization of the field was a significant contribution and has influenced greatly how educators have thought about instructional strategies worldwide.

The teaching of persons with visual impairment has gone through the evolutionary systems from the traditional era to the modern inclusive setting that we are today. This gives us an insight into how visual impairment was perceived by many so many years ago. Clearly, during this time, people with visual impairment were seen as helpless and dependent on others. The perception was that the cause of blindness could be attributed to the sin of their father (Willings, 1903). In 1954 the pine brook report identifies different options for students who are blind or visual impaired and the type of teacher preparation required.

Most blind children had only one means of education and that was in schools for the blind. Schools were opened all over Europe and the world. Benjamin Constant School in Rio de Janeiro, Brazil 1854 Brazil 1954, School for the Blind, Zagreb, Croatia 1995, Light and Hope Society for Blind Girls, Egypt 1973, School for the Blind in Thessalonica, Greece, Greece 1977, Calcutta School for the Blind, India 1994, Tomteboda School for the Blind, 1888 Sweden 1981, Iran Institute for the Blind Iran 1964, Salvation Army School for the Blind, Kingston, Jamaica 1987, National School for the Blind, Panama 1961, National School for the Blind, Mexico 1995, Worcester Institute for the Blind, now the Pioneer School, South Africa 1981, Belarus School for the Blind, 1887 Belarus 1997.

The education of students with special education needs has been a concern to the international community since the 1994 United Nations Salamanca statement and framework for action on special needs education (UNESCO, 1994). World nations are committed to providing access for students with special needs to be educated with their peers. Cameroon Law No. 83/13, Article 3, of July 1983, provided for the needs and protection of individuals with disabilities with three major provisions: integration of children in ordinary schools, admission in special classes, and admission into specialized institutions (Protection of Disabled Persons, 2003). As of 2003, only 10 institutions (segregated schools for more significant disabilities such as visual impairments, multiple disabilities (mostly physical), deaf/hard of hearing, and behavioral disorders) existed in Cameroon that serves the needs of individuals with disabilities; out of the ten, only two are government institutions (Yuh & Shey, 2008).

### **Contextual Background**

The context of this study relates to the instructional practices used by GBHS Bamenda in ensuring an inclusive learning environment for its students. GBHS Bamenda is a government public institution. Teachers are seen as a vehicle through which learning and performance are expected to be reflected by students with visual impairment. However, several variables may prevent this from happening. These include teacher's qualification, training of teachers, adapting off the syllabus, didactic materials, sighted attitude, and administrative among other variables. This framework portrays that teaching students with visual impairment bring about challenges especially on the part of the teacher (Mutunga, 2019). A great number of books, articles, and journals have been written on how to teach visual impairment, how to improve their academic performances including those concluded by Wolffe, Karen; Kelly, Stacy M.

However, Cameroon secondary schools are still faced with the problem of poor academic performances of visually impaired learners. When we talk of how to teach visual impairment, it means looking at the methods and strategies of teaching that can be employed in the teaching-learning process to bring about the realization of the set goals and objectives for learners with visual impairment. Law No 98/004 of 14<sup>th</sup> April 1998 lays down guidelines for education in Cameroon; section 2 art 1 states that education shall be a top priority of the nation. In addition, has one of the highest budget allocations from the national budget. This shows government efforts in improving education in Cameroon. From the above analysis, it can be said that education is an expensive commodity of the nation. However, it is widely accepted that instructional practices generate greater output and this leads to a substantive level of performance.

The teacher is the one that translates the educational philosophy and objectives into knowledge and skills and transfers them to all learners in the classroom. Instructional practices are therefore the crucial elements of success in school. With an increase in the manner in which lessons are dispensed, all learners can easily integrate themselves into society. Teachers use a variety of styles to teach in the classroom; however, the chalk-talk technique is the most common in Cameroon public schools which promotes rote learning (Watkins and Akande, 1994). Ogunmade (2000) also confirmed in his study of the status and quality of science teaching and learning in Lagos State, Nigeria, that the chalk-talk method, which encourages rote learning was mostly used by teachers.

The curriculum from which instructional practices derive has witnessed a series of modifications over the years. The new curriculum that was drawn up in 2012 was informed by the 1998 orientation law laying down guidelines for education in Cameroon and the 2009 growth and employment strategy paper. This resulted in a big shift from a skills-based approach to a competency-based approach (CBA). The introduction of the competency-based approach (C.B.A) in secondary education, as one of the main reforms of the Cameroonian education system in recent years, aimed to improve learning outcomes among all learners including learners with visual

impairment, through teaching practices. (MIH,2017). Secondary schools in Cameroon have undergone a major transformation towards changing the role of the administrators because of the role Government hold in the education of their citizens.

To respond to the needs of the fast-changing world and the need for reformation, the state considered education its greatest priority. The Cameroon government is trying to meet up with the educational needs of its citizens, and also to respect the international norms in the sector, has signed and/or ratified several international tools/ instruments to promote education. Being a member of the United Nation Educational and Scientific Organization (UNESCO) since 1945 (Enoh Meyomesse, 1960,), Cameroon is supposed to implement educational reforms as purported by the organ. In the year 2000, UNESCO launched the Education for all Initiative. Sustainable development goals number four ensures inclusive and equitable quality education and promotes lifelong learning opportunities for all. It emphasizes the need for education for all. UNESCO, collectively with UNICEF, the World Bank, etc. organized a world Forum on education 2015 at Incheon (Republic of South Korea) from the 19 to 22 may 2015, to adopt a Declaration for education 2030, defining the new visions of education for the next 15 years. The main objective was to assure equal, inclusive, and quality education and the possibility of lifelong learning.

However, neither the guidelines on education nor the growth and employment strategy paper addressed the issue of disability and disability inclusion specifically hence not taken up by the curriculum changes. While the government of Cameroon has embraced education for all, there have not been corresponding changes in the structure of education programs and the training of teachers to address the specific needs of diverse learners including learners with visual impairment.

#### **Conceptual Background**

This study anchor on two principal concepts: The concept of instructional practices and the academic performance of visually impaired learners. Teachers' instructional practices are operationalized using specific constructs including teachers teaching methods, instructional or didactic materials, assessment style, the teachers' competence on the subject matter, teachers' knowledge of learners impairment whereas the academic performance concept is viewed from a point of results, class participation, continuous assessment grades, assignment and group

presentations. Empirically, these concepts have been captured by varied literature emphasizing the roles of teachers and effective teaching as expressed by different instructional practices. It should be noted that teaching is considered both an art and a science (King and Watson, 2010; Marzano, 2003). The teachers have a significant influence on students learning and performance or achievement (Bill and Melinda Gates Foundation, 2010). If students are not performing as required, then teachers have to share the responsibility to such a situation (Collins, 1992; Ding and Sherman, 2006; Faulkner and cook, 2006; Marshall, 2012; Weiberg et al., Wright et al., 1997). The role of effective teaching has been recognized for years. The relationship between teaching and learning is at the core of many of the discussions in education today. Teachers must be qualified to teach. This means that teachers must be certified to teach and proficient in the subject matter. Effective teaching requires teachers to be evaluated, at least in parts, based on student's growth and achievement (Klein, 2011).

Teachers must be able to provide the products of effective teaching, measured through performance on assessment for all learners with no exception. As teaching and learning are undeniably intertwined, teachers are held responsible for learner's performance through the evaluation process. As there is a shift of focus from teacher-centered to learner-centered, learners' learning is at the center of education and teachers are accountable for their learning (Bill and Mellinda, 2010). The key areas of influence are content and pedagogy to meet the needs of learners with visual impairment. Teachers should modify course content, instructional plans, and delivery based on the focus of the learners. The primary objective of the school is students learning. To achieve this objective, schools must employ effective teachers and teachers must use effective instructional methods to ensure that all students are learning (Ritter and Shuls, 2012; Stronge et al., 2011).

Although teachers consider the expanded core curriculum (ECC) critical for students' success, they do not provide their students with adequate instructions based on the principles of the ECC. Hatlen (1996) in his study called for the adoption of an Expanded Core Curriculum (ECC) for students with visual impairments. The ECC is comprised of nine core clusters of knowledge base and skills that are essential to students with visual impairments due to their disability-specific needs. The ECC is designed specifically for students with visual impairments and focuses on functional academic skills (including communication skills), orientation and mobility, social interaction skills, independent living skills, recreation and leisure skills, career

education, use of assistive technology, sensory efficiency skill, and self-determination. A minimum level of competence for assessment and instructions in ECC should be established for novice teachers. These skills are needed along with the general education curriculum on how to implement the ECC and professionals should commit themselves to teach in a way to ensure that students have high performances

#### **Theoretical Background**

This study will examine three contemporary theories of learning to inform the objective of the study, these theories include The Social Model of Disability (Hodkinson and Vickerman, 2009). Learning and Studies of Instructional Practice theory by Gagne (1985). Constructivist theory by Jerome Bruner, 1966). According to Driscoll (1994), a learning theory "a set of constructs linking observed changes in performance with what is thought to bring about those changes. Instructional psychology is the study of the facilitation of human learning through instruction and can result in instructional design theories and models. Instructional design models employ instructional theories to prescribe types and levels of instructional support to optimize the achievement of identified learning goals. Snow and Swanson (1992) suggested that the components of an instructional theory are a description of desired end states or goals of instruction in a domain; a description of goal-relevant initial states of learners before instruction; an explication of the transition processes from initial to desired states; a specification of instructional conditions that promote this transition; an assessment of performance and instructional effects. Though there have been numerous calls for educational researchers to attend more closely to the details of how teaching is done, the instructional practice remains an inadequately studied topic. The theory of Learning and Studies of Instructional Practice seeks to remedy this by constructing a foundation for a practice-based science of instruction. An instructional theory is an integrated set of principles, based upon learning theory, other relevant theories, and sound replicable research, that permits one to predict the effects of specific instructional conditions on a learner's cognitive processing and the resulting learned capabilities. Gagne (1985) tie scribed the nature of an instructional theory as an "attempt to relate the external events of instruction to the outcomes of learning by showing how these events lead to appropriate support or enhancement of internal learning processes. The province of an instructional theory is to propose a rationally based relationship between instructional events, their effects on learning processes, and the learning

outcomes that are produced as a result of these processes." How does instructional theory relate to learning theories, instructional psychology, and instructional design models? In contrast to instructional theories that tend to be predictive and prescriptive, learning theories are typically descriptive and explanatory. It focuses on the fundamental questions; what roles should theories of learning play in the study of instructional practice? In educational research, learning theories represent alternative conceptualizations of what we take learning to be.

The second theory of interest is the Constructivist Theory (Jerome Bruner, 1966). This theory seeks to inform research objective number two of the study. Constructivism is a view that emphasizes the active role of students in building understanding and making sense of the information. Constructivist teaching is learner-centered where students are actively involved in knowledge construction rather than mere passive listeners. Constructivists' views can be organized in two forms: psychological and social. In Psychological constructivists' view, students construct knowledge by transforming, organizing, reorganizing previous knowledge Piaget (1980) whereas, in social constructivists' view, opportunities are provided to students to learn through social interaction in the construction of knowledge and understanding Vygotsky (1934)

The third theory of interest to this study is The Social Model of Disability. Its theory holds that disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society (Hodkinson and Vickerman, 2009). Then still on the social model of disability, as discussed by Rieser (2002). This model encourages society to view the issue of including persons with disabilities from a human right and equality perspective rather than a focus on the persons with disabilities from participating in any situation as what handicaps them (Oliver & Barnes, 1998). Persons with Disabilities (PWDs) are often made to feel that it is their fault that they are different. Impairments do not make them less human beings. This is emphasized well by the social model. The PWDs movement believes that the cure to the problem of disability lies in the restructuring of society, and not focusing on the individual's impairments.

In an inclusive setting, it is the school's responsibility to re-adjust to meet the needs of learners with visual impairments. In the social model, it is well emphasized that children with disabilities could experience difficulties in the education system. This could be due to extensive, demanding, rigid and inflexible curriculum, inaccessible school environment, lack of adequate resources and materials, and a negative attitude among others. The inclusive education approach however suggests that those difficulties should not be explained simply in terms of children's impairments. It discourages the view that the learner faces such problems due to his/her impairments. Under those circumstances, the option is not to establish a separate special school, which could further separate these children from their peers and families, neither is it cost-effective. Instead, the school should not be seen as creating barriers to learning for the learners with special needs by failing to create an enabling and supportive environment for them. A more appropriate response is to understand the barriers to learning and work out systematically to alleviate them. This model first sees the strength of the child, rather than the disability.

It advocates for the inclusion of all children, however "severe" the disability is in the mainstream education system (Diana, 2008).

According to Rieser (2002), the social model of disability makes an important distinction between the terms impairment and disability. It applies in this study in that many learners with special needs especially those with visual impairments are locked out of education opportunities due to barriers related to school, teacher, and expensive educational resources which are not locally available. To work towards inclusion calls for the removal of such barriers.

That could be done by trying certain intervention measures which could lead to the removal of barriers. When this is done, it is expected that the disability would be limited even though the impairments would still be there (Wormnaes, 2001). This study, therefore, used the social model of disability to supports the ideas of inclusive education and encourages the removal of barriers that hinder the learners with visual impairments from accessing quality higher education. The academic performance of students with visual impairments learning in secondary schools and especially in GBHS Bamenda may be highly affected by barriers highlighted in this model of disabilities and unless these barriers are removed, individual's academic performance of students with visual impairments highlighted in this model of disabilities and unless these barriers are removed, individual's academic performance of students with visual impairments highlighted in this model of disabilities and unless these barriers are removed.

To address the needs of learners with visual impairment teachers should ensure that: instruction has to be clear, supplement verbal material with clear verbal explanations, increase oral activities, use hands-on experience whenever possible, allow more time to complete tasks, etc.

#### **PROBLEM STATEMENT**

The Government of Cameroon has embraced the global agenda on education for all and education for sustainable development and has made ways for learners with a disability to access public and formal education alongside mainstream learners in the same school environment.

This is demonstrated through the signing of the UN convention on the rights of persons with disabilities and the enactment of laws, decrees at the national level to promote the rights of children with disabilities including the right to education. While the political will to ensure that children with disabilities receive education alongside their non-disabled peers, there has been little or no change in the curriculum to reflect this political will. Children with disabilities have various forms of impairments that limit their ability to participate in the teaching and learning process on the same basis as their peers without such impairments. Children with visual impairment in particular are characterized by a limitation or absence of vision.

To address the specific educational needs of children with disabilities, the Cameron government on October 1, 2008, is a signatory of the Convention on the Rights of Persons with Disabilities and the Optional Protocol thereto by the General Assembly of the United Nations on December 13, 2006. Article 24 of this convention states that:" States Parties recognize the right of persons with disabilities to education. To realize this right without discrimination and based on an equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning." This commitment means that the government of Cameroon is engaged in ensuring education for all including children with visual impairment. At the national level, the government of Cameroon enacted Law No 2010/002 of April 13, 2010, on the protection and promotion of persons with disabilities. Article 24 of this law defines support that children with disabilities need to enable them to access education on an equal basis with others.

In addition to this law, there was the further implementation of joint circular letters signed with MINESEC respectively on August 2, 2006, and August 14, 2007, to facilitate the admission of students with disabilities and those born of poor parents with disabilities in government high schools, and their participation in public examinations (ministry of social affairs website). Looking at the policy on inclusion of learners with disabilities at the international level and the national level like the sustainable development goals (S.D.G) number 4 which ensure inclusively and equitable quality education and promote lifelong learning opportunities for all and the law

orientation of education in Cameroon (1998) law number 98/004 of 14<sup>th</sup> April 1998: To lay down guidelines on Education in Cameroon

However, giving these lofty initiatives at the global, continental and national levels, Cameroon experiences challenges, discrepancies in inclusive or special education. There are seeming challenges with instructional practices as a result of the fact that teacher training colleges do not equip the trainee with special education skills in their training programs and this turn to play in the field as teachers are not conscious or competent to address specific needs of these learners with disabilities. This incompetency affects the performance of these learners negatively.

The visually impaired learners attend the same schools and in the same class as sighted students where no special is given to them, they face more difficulties in the sciences subjects because of the inadaptability of instructional practices by teachers. The adaptability and innovations of instructional practices will improve the disabled learners' special needs as well as, their academic performances. Teachers lack the knowledge of the subject matter of special education so; they fail to integrate subject approaches that effectively involve students with special needs. The teachers at the level of the class lack the knowledge of the needs of disable students. In this way, their performances are not always optimum. Also, there is the challenge or the absence of Government monitoring implementation frameworks for inclusive education.

Instructional practices are to build skills, aptitude, values in a learner. If learners do not acquire these skills after the training program, consequently, some of them will drop out due to inadaptable instructional practices. This will lead to unemployment, an increase in poverty, a liability to the government, a fall in productivity, social inequality, inefficiency, alienation, and a low level of human resources in the form of human capital

It is therefore important to see if the existing curriculum can respond to the needs of the learners with visual impairment in this changing context. Thus, integrating more specific and productive teachers' instructional practices suitable to learners with visual impairment. The poor performance of learners with visual impairments even though they were educated with their sighted peers prompted the researcher to investigate the prevailing situation that hinders them from performing to their optimal academic potential.

Although a lot of research has been carried out on teachers' instructional practices, teaching methods and strategies, inclusive education and challenges of providing classroom support to students with blindness in general education, development of an instrument design model on students writing skills, teaching methods, and academic performance, teaching strategies and bilingual education for blind students, etc. but little or no studies have been found on teachers' instructional practices and the academic performance of learners with visual impairment in inclusive schools. Therefore, this study is initiated in closing and narrowing such a gap by providing possible recommendations that may be used as input.

### AIM OF THE STUDY

Based on the aforementioned problem statement, this study seeks to examine the impact of teachers' instructional practices on the performance of learners with visual impairment in GBHS Bamenda. Learners' performance is a function of lots of pedagogical variables which could be posed from both the micro and macro learning environment. Prime to this is the instructional practices that provide a direct means of learning and teaching process to be completed. Scaling the capacity of instructional models and practices is strategic in getting performance augmented in an inclusive learning environment.

## **OBJECTIVES OF THE STUDY**

Two cardinal objectives guide the assessment of the instructional practices and the performance levels of learners with visual impairment in the context of GBHS Bamenda. These are as explained below:

### General objective

To examine the impact of teachers' instructional practices on the academic performance of learners with visual impairment in GBHS Bamenda. The objective is broken into specific objectives as shown below;

## Specific objective

**OB1:**To examine the impact of teacher's knowledge of the subject matter on the academic performance of students with visual impairment

**OB2:** To determine how knowledgeable teachers are, concerning their impairment.

**OB3:** To examine the extent to which teaching methods influences the academic performance of learners with visual impairment

**OB4:** To evaluate the influence of instructional materials on the academic performance of learners with visual impairment

**OB5:** To determine the extent to which assessment method influences the academic performance of learners with visual impairment

## **RESEARCH QUESTION**

## General research question

What is the effect of teacher's instructional practice on the performance of learners with visual impairment in GBHS Bamenda?

## Specific research question

This research addressed the following research questions:

**RQ1:** What is the effect of teachers' competence of subject matter on the performance of learners with visual impairment?

**RQ2:** To what extent does the teacher's knowledge of the learner's impairments affect their academic performance?

**RQ3:** To what extent do teaching methods influence the academic performance of students with visual impairment?

**RQ4:** What is the impact of instructional materials on the academic performance of students with visual impairments?

**RQ5:** To what extent does the assessment method influence the academic performance of students with visual impairment?

## **RESEARCH HYPOTHESES**

## General hypothesis

There is a significant relationship between teacher's instructional practices and the performance of students with visual impairment in GBHS Bamenda.

## Specific hypothesis

**Ho1-**There is no effect on the teacher's knowledge of the subject matter and the performance of learners with visual impairment.

Ho2-There is no effect on teacher's knowledge of the learners' impairment and their academic performance

**Ho3**-There is no effect on teaching methods and the academic performance of learners with visual impairment

**Ho4-**There is no effect on the use of instructional material and the academic performance of learners with visual impairments.

**Ho5**-There is no effect on the assessment methods used and the academic performance of learners with visual impairment.

## SIGNIFICANCE OF THE STUDY

The interest is on the impact of teachers' instructional practices that demands the presentation of proposals to improve the performance of learners with visual impairment in all subjects in inclusive schools. Findings are based on both academic and scholarly significance that could be used in educational research of teachers' instructional practices, curriculum development, and evaluation. It is hoped that the findings of the study would stimulate interest and further research in the area of education and educators will see the need to plan lessons, instill teaching learning activities for all learners under favorable conditions.

## Empirical Significance of the Study

Firstly, Gilbert Niwangaba University of OSLO 2014 in his study of Teaching tools teachers use and their influence on the inclusion of blind children in an ordinary classroom in primary schools with the dependent and independent variables as DV=Inclusion of a blind child in an ordinary classroom. The IV=Teachers' teaching tools carried out a study using a Qualitative research design. He used a purposeful or purposive sampling technique and found out that teachers had varied differences and similarities in the teaching tools which directly influence the academic, social and physical inclusion of blind children in ordinary classrooms in primary school. The gap in his study is that learners with normal vision were not included. This study is significant to the study topic because one of the modalities for instructional practices is teaching tools

Secondly, Obilan Abubakar (2017) Teaching/learning methods and the student's academic performance in the English language in public secondary school in Musanze District Rwanda with the dependent and independent variables as DV= Students Academic performance schools and IV=Teaching method He found out that when teachers comprehend the learning differences of his/her learners, it becomes easier for them to design more effective or appropriate teaching methodology to resolve the different learning needs of their students. Mix research design Teaching/learning methods used by teachers do affect the performance of these learners. Performance in intermediate examination is linked with students' outline. This consist of the approach towards communication learning, facilities, proper guidance, and family stress. This study is significant to the study topic because one of the modalities for instructional practices in teaching methods

Thirdly, Erfan Soleimani, Setat-Mhammad, Rostami. Amani, shahin Guita Movailali in the needs and problems of learners with visual impairment. The dependent and independent variables of the study are IV= Needs of learners and DV=Problems the learners face with visual impairment. A mixed research design was used. The study found out that improving the services provided to learners with visual impairment (W.V.I) following the adaptation of services to their needs paves the ground to build cooperation, reduce poverty, and enhance productivity. This study is significant to the objective of the study because it is to bring to the lamplight the problems and needs of learners with visual impairment.

Fourthly, Ferris state university teaching strategies for vision-impaired students disability services, retention, and student success. The dependent and independent variables are IV=Teaching strategies DV=Students success with a disability. The study found out that, if alternative forms of assessment, equal opportunity, and reasonable opportunities are given to learners with visual impairment (W.V.I) they will demonstrate what they have learned, and will do better in their performances. This study is significant to the study topic because one of the modalities for instructional practices is the assessment and evaluation of learners with visual impairment.

Furthermore, Beth Mukarwego N asiforo (2015) in a study of Academic impediments students with visual impairment encounter in colleges at the University of Rwanda, had an independent variable as Academic impediments and an independent variable as students with

visual impairment. The researcher found out that the curriculum was not adapted, learning resources that aid learners with visual impairment (W.V.I) were not available, Exams and tests were not adapted by the lecturers to suit the needs of learners with visual impairment. A Qualitative research method was used. This study is significant to the study topic of teachers' instructional practices and the researcher work on some of the instructional practices found in the current study. The study was only a qualitative study while the current study is on the quantitative study. But the similarity is that the studies are both on learners with visual impairment.

Meanwhile, Mokwena Morelle, carried out a study on the Challenges experienced by learners with visual impairment in two mainstream primary schools in Klerksdorp, with the dependent and independent variables as DV=Inclusion of a blind child in an ordinary classroom IV=Teachers' teaching tools The study uses a Qualitative research design The researcher found out that learners with visual impairment(W.V.I) are now physically integrated into the mainstream classes and schools, but they are not yet truly included. The teachers are not adequately trained and ready to accommodate them. This study is significant to the study topic of teachers' instructional practices and the researcher worked on some of the instructional practices found in the current study. The study was qualitative while the current study is the quantitative study. The study was carried out in two mainstream schools while the present study was carried out in one school. But the similarity is that the studies are both on learners with visual impairment and the objective is to improve on performance and social inclusion.

The study may help many more writers/researchers to venture into different domains of disabilities thereby creating awareness and the implementation of the curriculum to suit all.

#### Theoretical Significance

The theories cited above will gain a new understanding when applied to this study in the area of instructional practices and the academic performance of learners with visual impairment. As cited by Rieser (2002), the social model of disability makes an important distinction between the terms impairment and disability. It applies in this study in that many learners with special needs especially those with visual impairments are locked out of education opportunities due to barriers related to school, teacher, and expensive educational resources which are not locally available. To work towards inclusion calls for the removal of such barriers. The academic performance of

learners with visual impairments studying in secondary schools and especially in GBHS Bamenda may be highly affected by barriers highlighted in this model of disabilities and unless these barriers are removed, individual's academic performance of students with visual impairments may not be achieved.

#### SCOPE AND DELIMITATION OF THE STUDY

This section will clarify the scope of this study by looking at different contextual issues and identify the limitations to give a better understanding of the context which informed the findings and conclusions of this study.

### **Geographical Scope**

This study is limited only to GBHS Bamenda, Mezam Division of the North West Region of Cameroon typically for the case of forms 1 to 5. This is because it is the biggest Government public school in the Division, it is at the center of the town, a model school, the policy starts in this school and what happens here is reflected in other schools in the region. This is one of the schools which practices inclusive education in the region. Other Government schools, as well as private schools, were not concerned with this study. It focused only on instructional practices and the academic performance of learners with visual impairments. Hearing and other impairments were not included in this study. Only the literature related to the variables of this study was reviewed to provide information on how teacher's instructional practices can affect the performance of learners with visual impairments in the GBHS Bamenda Northwest region of Cameroon. Learners who were in session during the academic years 2020-2021 were the only ones who participated in this study.

Finally, the study confined itself to the description of how teacher's instructional practices can change the performance of learners with visual impairments, and how these practices affect the academic performance of students with hearing impairment was not the concern of this study

#### **Empirical Scope**

This study is limited to literature that relates only to teachers' instructional practices and the performance of learners with visual impairment. The following constructs will be previewed;

teacher's competencies, the teacher's knowledge of the learners' impairment, teaching methods, instructional material, the assessment methods.

#### **Theoretical Scope**

This study is limited to three contemporary theories of learning to inform the objective of the study, these theories include:

Theories of Learning and Studies of Instructional Practice (Situational learning theory, by Jean lave and Etienne Wengne 1991),

Constructivist theory by Jerome Bruner, 1966), and The Social Model of Disability (Hodkinson and Vickerman, 2009).

This is because they provide information relating to instructional practices and the performance of learners with visual impairment.

#### Methodology Scope

The methodology and research design will be a quantitative research design, data collection which will be questionnaires.

## **OPERATIONAL DEFINITION OF TERMS**

## **Instructional Practices**

Instructional practice is considered as basic thinking in one systematic system that includes analysis, design, development, implementation, and evaluation (Dick, Carey & Carey, 2005).

According to Siemens (2002), instructional practices are based on theoretical and practical research in the areas of cognition, problem-solving, and education psychology. "It is the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks."

According to Bloom (1956), Instructional practice is the systematic process of developing and designing instructions using learning and instructional theory to ensure the quality of the learning materials.

According to Reiser (2012), instructional practice is a field of study which covers the design, development, implementation, evaluation, management processes, resources which is

intended to improve learning and performance in a variety of settings, particularly educational institutions and the workplace.

According to the study, it agrees with the definition by Siemens (2002) who emphasizes that "It is the art and science of creating an instructional environment and materials that will bring the learner from the state of not being able to accomplish certain tasks to the state of being able to accomplish those tasks." And to add that Instructional practices are the systematic approaches that the teacher uses in the classroom to transfer tacit knowledge, skills, and competencies to learners taking into consideration the diversity of the learners in the classroom.

To conclude, these effective practices have been identified through research on learners learning. These practices support thinking in each of the four domains of cognition: knowledge acquisition, cognitive processes, metacognitive processes, the self-system (disposition). Best instructional practices are like vehicles used by teachers to efficiently move students forward in their learning. Good instructional practices are the quality of Teaching, Content, Collaboration, the Embedding process, and the Evaluation/assessment method. We use the term instructional practices when trying to untangle teachers' activities and approaches during classwork. Teachers' questioning as an instructional practice may thus be linked to all three support elements, instructional, organizational, and emotional. Teachers' instructional activities during classwork are based on teachers' oral feedback and interactions.

## Academic Performance

Academic Performance is the outcome of education, the extent to which a student, teacher, or institution has achieved their educational goals (Annie, Howard, and Mildred, 1996)

Academic Performance is defined as academic achievement, engagement in educationally purposeful activities, satisfaction, acquisition of desired knowledge, skills and competencies, persistence, attainment of educational outcomes, and post-college performance. Kuh et al.'s (2006).

According to the study, Academic performance represents achievement outcomes that indicate the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college, and university which agrees with what Kuh et al( 2006) said.

#### Inclusive Education

Friend (2008) says that inclusive education is about educating all children so that they reach their potential

Norah &Tony( 2002) defines inclusion as the provision of services to children (persons) with disabilities including those with severe impairments in the neighborhood school in ageappropriate general education class with the necessary support services and supplementary aids to ensure child's success-academic, behavioral and social, and to prepare the child to participate as a fully contributing member of the society.

According to my, inclusive education is a process by which the school systems, strategic plans, and policies adapt and change to include teaching strategies for a wider more diverse range of students. It implicitly means to identify a child's learning style and adapt the classroom and teaching strategies to ensure high-quality learning outcomes for all members of the class.

## Inclusion

Halvorsen and Neary(2001) define inclusion as attending the same school as peers without disabilities.

Theoharis & Causton (2014) defines inclusion as the placement of students with disabilities having full access to the general education curriculum, instructions as peers

Wehmeyer (2010) defines inclusion as students with disabilities are participating in academics, extracurricular, and other school settings alongside their peers without disabilities.

#### **Teaching Method**

Teaching methods are the procedures that are common in the teaching of different subjects. (Leke Tambo, 2012)

To the study, the teaching method comprises the general principles, techniques, pedagogy, and management strategies used for classroom instruction following a plan.

## **Instructional Materials**

Obanya (1989) defines instructional materials as didactic materials which make the teaching-learning process possible.

Abdullahi (1982) defines instructional materials as materials or tools locally made or imported that could make tremendous enhancement of lessons impact if intelligently used.

Remillard&Heck(2014) define Instructional materials as resources that organize and support instruction, such as textbooks, tasks, other printed matter, video, and audio recordings, computer software, and digital content which are used as part of the instructional process.

According to the study, instructional materials refer to the human and non-human materials and facilities that can be used to ease, encourage, improve and promote teaching and learning activities.

#### Assessment and Evaluation

Fenton (1996) defines assessment and evaluation as the collection of relevant information that may be relied on for making a decision.

Black and William (1998) define assessment as all the activities teachers and their learners undertake in assessing themselves, to get information that can be used as feedback to modify the teaching and learning activities in which they engaged.

According to the study assessment and evaluation refer to the wide variety of methods or tools that educators use to measure, define, select, design, collect, analyze, interpret, measure and document the academic readiness, learning progress, skills acquisition, or educational needs of learners learning.

## Visual Impairment

NICHCY Disability Fact sheet (2004) defines visual impairment as the consequences of a functional loss of vision, rather than the eye disorder itself.

According to the study, it is the limitations imposed by visual loss or reduction on a person's ability to interact with the environment. It also includes children with total blindness and those with low vision.

### Teachers' Competency

Tardif (2006) defines competency as an act of combining a variety of internal (cognitive and emotional) and external resources (internet, documentation) within a family of the situation

Slavik (2008) defines teacher competence as the excellence capability which includes knowledge, skills, attitude, and experiences to perform or carry out a specific task.

## CHAPTER TWO REVIEW OF RELEVANT LITERATURE

The purpose of this study is to examine the impact of the teachers' instructional practices on the academic performance of learners with visual impairment in G.B.H.S Bamenda in the North West of Cameroon. Its focus is on the review of literature relating to the study topic or the problem of investigation. However, the definitions and the terms used as variables in the investigation, theoretical as well as empirical explanations related to the problem have been presented. In addition to the research results of various studies have been presented and analyzed as well.

#### **INSTRUCTIONAL PRACTICES**

Based on an understanding of how people learn the science of instruction is concerned with the rational development of instructional design strategies. Effective design of instructional materials elicits appropriate cognitive processes in the learner and mediates more successful learning outcomes. 'Instruction' is described by Gagné (1970) as an act of 'arranging the conditions of learning that are external to the learner'. In terms of forms, instruction can be 'pre-designed, as in the case of the programmed instruction of an online learning course, or simply a well-designed workbook or textbook; or more flexible as in the case of immediate, unplanned communication made by a teacher to the learners during class time (Gagné, 1970).

Gagné and Briggs (1979) define 'instruction' as all the intended events that can affect the learning of human beings. In this sense, the use of a picture, a text, a combination of objects, or any other means that may assist and bring about learning can be considered 'instruction'. Gage (2009) distinguishes instruction from 'teaching' by emphasizing that the former has a larger connotation than the latter one. While these explanations emphasize what the act of instruction may look like, Reigeluth's and Carr Chellman's (2009) focuses on what instruction does for learners, i.e. the function of instruction in the process of learning. According to them, instruction is whatever is done to learners to help them construct new skills and knowledge. In other words, instruction is to foster construction; and any so-called 'instruction' that fails to do so cannot be considered as such. Therefore, they define 'instruction as anything that is done purposely to facilitate learning' (Reigeluth & Carr-Chellman, 2009). In Reigeluth (1983), principles of instruction are one basic component of the body of knowledge that the instructional science seeks to construct, exist naturally, showing the relationships between actions or changes and can be discovered. Based on this concept, instructional practices are considered as basic thinking in one systematic system that includes analysis, design, development, implementation, and evaluation (Dick, Carey & Carey, 2005 in Prawiradilaga, 2007).

Research has linked the following instructional practices with success for developmental learners: Sound principles of learning theory are applied in the design and delivery of courses in the developmental program, Curricula and practices that have proven to be effective within specific disciplines are employed, the developmental education program addresses holistic development of all aspects of the student. Attention is paid to the social and emotional development of the students as well as to their cognitive growth. This can be seen in the culturally Responsive Teaching theory and practices. They are applied to all aspects of the developmental instructional programs and services. A high degree of structure is provided in developmental education courses. Developmental education faculty, employ a variety of instructional methods to accommodate student diversity. Programs align entry/exit skills among levels and link course content to college-level performance requirements. Developmental education faculty routinely shares instructional strategies. Faculty and advisors closely monitor student performance. Programs provide comprehensive academic support mechanisms, including the use of trained tutors. Instructional practices are an important aspect of learning because they can improve the quality of learning to become meaningful learning. They are also based on students' character and personal condition (Hamzah Uno, et al. 2010).

In conclusion, instructional practices are efforts to create effective learning methods to achieve learning goals. Some of the components in instructional practices include teachers' knowledge of the students, teachers' qualifications and competencies about the subject matter, method of teaching, assistive resource materials, and assessment during tests or examinations. In terms of students, instructional practices should consider the background of learners, level of competency, physical condition, motivation, and learning style. By analyzing students' backgrounds, teachers can develop learning objectives based on learners' abilities and speed so that learners can master a certain skill in one set of activities. After analyzing students and developing specific learning objectives, the appropriate method can also support the effectiveness of instructional practices. Method of teaching is related to learning strategies, use for the presentation of lessons and material in the class during the teaching /learning process.

This component is a clear indicator of students' achievement/performance in the class after mastering the lesson. Assessment can be conducted by doing a formative test (ongoing test), summative test (final test/examination), observation, survey, or interview (Prawiradilaga, 2007). Based on the components of instructional practices, it can be summarized that instructional practices have three characters: a) student-centered learning; b) systematic and c) empirical learning.

# Principles of Instruction Practices.

In Merrill (2009), a principle of instruction is defined as a relationship that is always true under appropriate conditions regardless of the methods or models which implement this principle. The 'always true' part implies universality, whereas the 'under appropriate conditions' part implies situationally. Principles are not in and of themselves a model or method of instruction, but rather relationships that may underlie any model or method of instruction. A principle of instruction can be implemented in a variety of ways by different models and methods of instruction (Merrill, 2009).

Motivated by the argument that despite the diversity of existing instructional models and theories, the underlying principles of all these are fundamentally the same, David Merrill had systematically reviewed various instructional design theories, models, research and in his final work in the series 'the First Principles of Instruction' published in 2002, 2007, 2009. These principles are five in number and they are as follows; the demonstration principle, the application principle, the task-centered principle, the activation principle, and the integration principle.

Learning is promoted when learners observe a demonstration, apply the new knowledge, when learners engage in a task-centered instructional strategy, when learners activate relevant prior knowledge or experience and when learners integrate their new knowledge into their everyday world (Merrill, 2009;). Different teaching/learning methods can be used in implementing these principles which will create effective learning environments. Principle number one emphasizes problem-centered instruction or involving students in real-world tasks. For effective instruction, problems should be relevant, interesting, and engaging and there should be a progression from simple to complex problems. In the second demonstration of activating previous knowledge, prior mental models or schema are activated to promote instructional effectiveness. This is to avoid overwhelming students, who lack foundational knowledge, provide them with relevant experience to be used as a foundation for the new knowledge. This step is often ignored by faculty members who assume all students

have similar educational backgrounds, although admission committees try to diversify the student body by accepting qualified students of different backgrounds.

In the third phase of the principle, information is presented to the learners. In this phase, we'll discuss basic educational theories for effective instructional strategies and give examples of instructional design models that could be used to guide the design and development of instructional materials.

The fourth phase is to apply learned knowledge in different authentic situations and to provide feedback for guidance. The last phase is the integration or the transfer of knowledge, and its use. Differentiation, or accommodating learners with diverse needs, including professional (experience), regional (necessitated by operating in geographically diverse environments such as desert, jungle, offshore), cognitive styles (preferred ways of processing new information), and ethnic (cultural) diversity. For a principle to be considered as such, it must satisfy the following criteria, is included in most of the instructional design models and theories that the author had reviewed, promoting efficient, effective, or engaging learning from a given program, is supported by empirical research, being general and universal so that it can be applied to all learning and teaching regardless of programs or practices, being design-oriented, i.e. the principles offer guidance on how the instruction should be designed to promote learning rather than describing what learners do on their own while learning (Merrill,2002a, 2007, 2009).

When referred to two categories of principles described by Reigeluth (1983) in the previous section, this list belongs to the group of causal principles as it implies a better learning outcome as a result of incorporating a certain instructional strategy (e.g. 'demonstration'). This prescription is, nevertheless, not merely a collection of separate 'blueprints' that might be used in designing effective instruction. Rather, the principles are interrelated and together form a four-phase cycle of effective instruction needed for teaching any whole task.

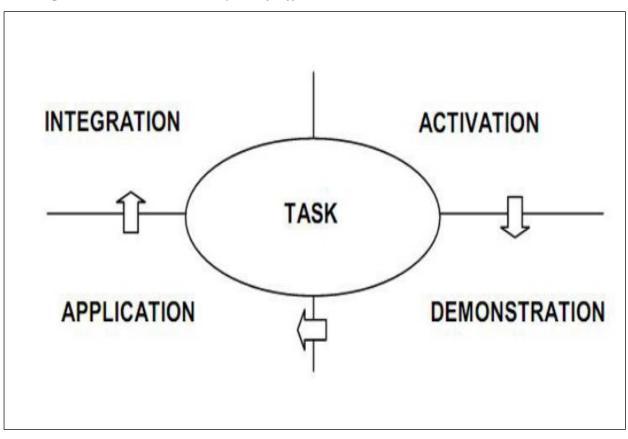
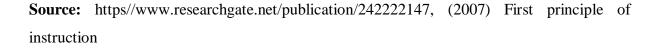


Figure 1: The Four-Phase Cycle Of Effective Instruction



In this cycle, the Activation phase comes first when learners are not only directed to recall relevant prior knowledge or experience but also provided with an appropriate organizing structure which may then facilitate their acquisition of new information. The next phase, Demonstration, guides the learner to understand new knowledge through demonstrating new information to be learned rather than merely telling it. This phase is well done when demonstrations are consistent with the type of information. It is agreeing with what is said in literature that learning is promoted when learners observe a demonstration, apply the new knowledge when learners engage in a task-centered instructional strategy, when learners activate relevant prior knowledge or experience and when learners integrate their new knowledge into their everyday world, the end up with good results at the end of the examinations.

## **Types of Teachers Instructional Practices**

The primary purpose of teaching at any level of education is to bring a fundamental change in the learner (Tebabal & Kahssay, 2011). To facilitate the process of knowledge transmission, teachers should apply appropriate instructional practices that best suit specific objectives and level exit outcomes. In the traditional epoch, many teaching practitioners widely applied teacher-centered methods to impart knowledge to learners comparative to student-centered methods. Until today, questions about the effectiveness of instructional practices on student learning have consistently raised considerable interest in the thematic field of educational research (Hightower et al, 2011).

Moreover, research on teaching and learning constantly endeavor to examine the extent to which different instructional practices enhance growth in student learning. Quite remarkably, regular poor academic performance by the majority of learners is fundamentally linked to the application of ineffective instructional practices by teachers to impart knowledge to learners (Adunola, 2011). Substantial research on the effectiveness of instructional practices indicates that the quality of teaching is often reflected by the achievements of learners. According to Ayeni (2011), teaching is a process that involves bringing about desirable changes in learners to achieve specific outcomes. For the instructional practices, used for teaching to be effective, Adunola(2011) maintains that teachers need to be conversant with numerous teaching strategies that take recognition of the magnitude of the complexity of the concepts to be covered.

There are various types of instructional practices.

They are cooperative learning method, or game-based learning, hands-on learning method or demonstration method, lecture method, expeditionary learning, kinesthetic learning, differentiated instructions, group discussion, illustration, problem-based learning, instructions, exercise, explanation, conversation, inquiring based instruction, behavior management which when used effectively the learners with disability (visually impaired) will not be left out of the process.

According to Ayeni (2011), teaching is a continuous process that involves bringing about desirable changes in learners through the use of appropriate methods. Adunola (2011) indicated that to bring desirable changes in students, instructional practices used by educators should be best for the subject matter. Furthermore, Bharadwaj & Pal (2011) sustained that instructional practices work effectively mainly if they suit learners' needs since every learner interprets and responds to questions in a unique way (Chang, 2010). As such, alignment of instructional

practices with students' needs and preferred learning influence students' academic attainments (Zeeb, 2004).

## **ACADEMIC PERFORMANCE**

Academic performance is the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates and results from standardized tests. A student's GPA is typically measured on a scale of zero to four with higher GPAs representing higher grades in the classroom. Graduation rates are collected by state and education officials as a baseline measurement of secondary education performance. A different perspective on investigating the academic performance of students with disabilities comes from the findings presented in a nationwide study, the Special Education Elementary Longitudinal Study (SEELS), funded by the Office of Special Education Programs within the U.S. Department of Education was an article whose aim was to describe the design features of two longitudinal studies, the special education elementary longitudinal study, and the national transition study and outline their potential implication for policy, practice, research, advocacy, and system development for children with emotional disturbances.

SEELS is designed to provide a national perspective on how students with disabilities are faring academically.

### Factors Influencing the Academic Performance of Learners With Vision Impairment.

Many factors influence the academic performance of learners with vision impairment as are elaborated below.

# Large Class Sizes

McGiverin et al (2002) conducted a meta-analysis of 10 studies of Indiana's Prime Time project, a longitudinal study that aimed to reduce class size. They reported that learners in smaller classes had significantly higher achievement test scores than learners in larger classes. The significant academic achievement in smaller classes is the intended destiny of all stakeholders in Education. Koh and Shin's (2017) also observed that class sizes are other demands for teachers that affect their feelings and performance in inclusionary practices. (Bruwiler & Blatchford, 2011; Njue, et al 2014) also observed that the rate of learning support is compromised as reduced class enrolment is meant to maximize the support to disadvantaged learners. In the context of this study, it is not done as regular classroom enrolment in Cameroon schools was at 60(cir.No 22/E/43 of 10<sup>th</sup> July 1992) per class as is seen in the internal rules and regulations of the school.

### Shortage of Human and Material Resources

The lack of skills by teachers teaching learners was one of the contributing factors to the learners' poor academic performance in examinations and tests (Mphale1 & Mhlauli1, 2014). However, according to Koh and Shin (2017), barriers and concerns of this nature are frequent even in countries like the United States of America. Most frequent in their study were inadequate and insufficient training for teachers to help them teach in inclusive classrooms and lack of resources for effective inclusive education practices. One of the concessions in the education of learners with visual impairment is providing aides or other special arrangements to undertake to teach, learning, or assessment tasks (Fraser & Maguvhe, 2008; Capps, Kingsley, Kuo & Roecker, 2014). The provision is meant to increase support because some learners may require one on one teaching. Classroom support helps to increase learner participation and academic achievement. The use of special needs teachers by the school administration and other learning support workers would bring some needed additional resources to augment teachers' efforts in the classrooms

## Attitudinal Barriers

The performance of learners with vision impairment is partly due to self-prophecy fulfillment. The learners are resigned to the belief that learners with vision impairment do not pass especially science subjects. Secondly, the many diagrams that characterize science assessment tasks frustrate the learners that they have some negative attitude towards the subjects. Teachers' lack of inclusive preparations that fails to arrange for embossed diagrams before meetings with the learners to encourage the learners' to drop the negative attitude towards sciences. Teachers, too, have their attitude towards the teaching of learners with vision impairment. They think that the Government should awards skill allowance to those who teach learners with special needs and so teachers' attitude, therefore, falls short of a positive one. Some of their teaching sessions are devoid of a sense of care, responsiveness, adaptation, cohesiveness, and synergy that binds people together (Landberg, Kruger &Swart, 2016); hence, the learners' poor academic showing in their subjects.

## **Teaching and Learning Materials**

The teaching content, assessment tasks are overwhelming with graphic representations that are too much for learners with visual impairment during examinations. Learners are sometimes tired of exploring the diagrams which they rarely understand and eventually perform poorly. Some of the diagrams included in assessment tasks have no bearing on the answering of questions and these just increase material for reading when in fact the effort should be to reduce it. Njue, Aura, and Komen (2014) advised that individual differences of the learners should be put into consideration and the teachers should therefore choose materials that maximally benefit individual learners. Efforts should be made to avail recorded, brailed or, enlarged teaching and learning resources to promote equal access to education for all learners.

#### **Teaching Methods**

The No Child Left Behind Act of 2001 (NCLB) recognizes accountability actions including annual assessment of learners in all the school subjects and the technical areas such as sciences. The teacher-centered teaching methods that do not accommodate all learners are counterproductive and detrimental to learners' performances. (Habulezi, Molao, Mphuting & Kebotlositswe, 2016), Teachers are assets, rich resources of information and support. Therefore, they need to be responsive, creative, accommodative, and inclusive in their routine facilitation of classroom activities for the benefit of all learners.

In the case of learners with visual impairment, pre or post-lesson sessions would be appropriate to compensate for the missing incidental information acquisition and to promote parity in classroom participation. Landberg, Kruger, and Swart (2016) advise that teachers should encourage critical thinking, argumentation, reflection, and action on the part of learners in the learning situation. In addition, Rose and Meyer's (2002)'s three principles of universal design of learning, (multiple means of representation, multiple means of action and expression, multiple means of engagement), hold great potential to establish truly accessible learning environments for all that can improve learners' performance. Holbrook and Koenig (2010) agreed that in the absence of vision, it was important to give learners sensory training to the remaining senses like the senses of touch and hearing so that they might be used as sources of information.

Teachers are expected to read and described what they wrote on the chalkboard. This will complement the missing incidental learning other learners with sight enjoy. The tactile diagrams presented to the learners with vision impairment should be topic tailored relating to

past examination diagrams. This practice will give learners equal and fair opportunities to access teaching and learning materials.

## Large Teaching Loads

According to Landsberg, et al (2016), they observed that teachers are overwhelmed by workloads that overstretch them such that they even fail to implement intervention strategies or support stakeholders. Teachers were unable to employ intervention strategies due to the increase in enrolments and other demands in their daily routine operations, which include brailing, remediation, consultations, and transcription among others. This may be the reason that teachers concentrated on their duties in school and did not want to associate themselves with the learner with vision impairment. Understanding the important role teachers play in supporting learners and stakeholders in education, would be very helpful in improving their academic performance generally. Policies and awareness campaigns would be very helpful in this regard (Mutanga& Walker, 2017).

In conclusion, learners with visual impairment are facing challenges in learning due to multiple factors. Even well-meaning efforts if not properly handled retrogress learner performance. Objectionable teacher and learner attitudes also play a pedagogical role that is not tailored to meet learners' needs. Although there are tolerable human and material resources, the resources are not good enough to yield the desired academic performance of the learners. Intensive intervention measures are targeted at improving learners' academic performance in all subjects are suggested. These should include enhanced teaching and learning activities, immediate feedback, and training of teachers, learning support staff, and acquisition of specialized equipment. Continuous public sensitization on positive inclusive education practices should be the quest for excellence.

### THEORETICAL REVIEW

As a theoretical framing of this study, we see teachers' instructional practices as part of their scaffolding repertoire. Scaffolding as an approach to teaching was introduced (Wood et al in the late 1970s). They defined scaffolding as support 'that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts' (Wood et al., 1976). Journal of child psychology and psychiatry. The term scaffolding is closely linked to sociocultural perspectives on teaching and learning, and the teacher must adapt their scaffolding to the individual pupil (Myhill et al, 2005).

A key challenge of such interaction is how involved or how distant the teacher should be in these conversations and the degree of direct and explicit instruction versus the degree of facilitation. Scaffolding in teacher-student interaction as can be seen in Educational Psychology Scaffolding means include instructional practices based on constructivist approaches, such as challenging the pupil through hints and questioning. It also includes cognitive approaches, such as giving the pupil the answer through explanations and direct instruction.

#### Constructivist Theory By John Dewey (1859-1952)

According to John Dewey, people learn best through a hands-on approach. This theory by John Dewey, states that constructivism can build individual and social knowledge. The essence contained in constructivism theory is the meaning of a learning process. Dewey in Jia (2010) claims that knowledge is uncertain. Knowledge must be applied because it is an interpretation of reality. Constructivism had an impact on the intellectual learner in the mid-90s. Constructivism was born based on Piaget's cognitive development and Vygotsky's structural theory in which constructivism has an impact on the development of both micro and macro world technology

Constructivist teaching philosophy is about learners' autonomy and where the learners thinking drives the lessons, dialogue, inquiry, and puzzlement are valued, assessing learning is in this context. Teachers can draw on new ideas as they make decisions about which teaching techniques are most appropriate for all learners. The proponent and underlined premise of constructivism is a view that emphasizes the active role of students in building understanding and making sense of the information. Jerome Bruner (1961) proposed that learners construct their knowledge and do this by organizing and categorizing information using a coding system. Constructivist teaching is learner-centered where students are actively involved in knowledge construction rather than mere passive listeners. Every learner receives and processes information in different ways. Some learn by listening and sharing ideas, some learn by thinking through ideas, some learn by testing theories, some learn by synthesizing content and context, and some learn by reasoning logically and intuitively.

Learning disabilities are a group of disorders manifested by difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, mathematical abilities, or social skills (National Institute for Literacy, 2002) These disorders are presumed to exist

due to a central nervous system. Constructivists' views can be organized in two forms: psychological and social. In Psychological constructivists' view such as Piaget (, students construct knowledge by transforming, organizing, reorganizing previous knowledge whereas, in social constructivists' view such as Vygotsky (, opportunities are provided to students to learn through social interaction in the construction of knowledge and understanding. The general sense of constructivism is that it is a theory of learning or meaning-making, that individuals create their new understandings based on an interaction between what they already know and believe and ideas and knowledge with which they come into contact (Resnick, 1989). However, Thompson (2000) suggested that constructivism is not a theory of learning but a model of knowing, and constructivism may be used to build a theory of learning.

Nonetheless, the view of constructivism as a learning theory has guided most of the development of constructivist pedagogy. Constructivism is a construct and movement that has become massively complex, with different founders and advocates, schools, foci, and disciplinary approaches. One of the most unique and challenging issues that parents, teachers, school administrators, politicians, and philosophers have debated is how to enhance the academic learning experience and opportunities for all students Brandon et al, 2010 Snowman, McCown, & Biehler, 2009 Sultan, Woods, & Koo, 2011 Ultanir, 2012 Koh, Chai & Tsai, 2014 Misconceptions on how students construct knowledge and how teachers should deliver instruction in our nation's schools currently exist.

These include lessons dominated by expository methodology in which the teacher is the expert. Using the expository teaching, students are viewed as a "blank slate" onto which information is etched by the teacher. It is time teachers begin to make a difference in learners by encouraging interaction, curricular activities, that will be on primary sources of data and manipulative materials. Initiating these lessons will foster cooperative learning, and provide opportunities for learners' interdisciplinary curriculum. Learners would then be responsible for their learning within an environment that includes all the aforementioned teaching methods.

This study calls for all educators including teachers who have learners with special needs in their classrooms, to begin to make important paradigm shifts in the way they teach and care about learners learning. Teachers must abandon the old traditional teaching model in which curriculum is presented as part of the whole, with emphasis on basic skills.

In a constructivist classroom, the curriculum is presented whole to part with emphasis on big concepts. These best teaching practices influence and enhance learners thinking, acting, demonstrating, and exhibiting knowledge. In a constructivist classroom, learning should move from simple to complex curricular activities. This will serve as a bolster of relevance in learners and teachers generally behave interactively, mediating the environment for learners learning. Constructivist instructions are practical in nature; focus on real-life applications that might be used to re-focus the process of educational reform. This method of instruction suggests new norms, the culture of teaching, and structures for classroom practices in 21st-century education. Moreover, this study will acquaint educators (teachers in particular) with the philosophical roots of the constructivist model and enable them with the tool to implement this model in their classrooms. Teachers should encourage learners to come to class with expectancy and excitement, essentially to learn by doing. Some critiques of constructivism theory think that the model is old wine in the new bottle of education or a weak concept that does not provide learners with lifelong learning.

This study asserts that constructivism is new wine in a new bottle; every teacher must be encouraged to jump on this bandwagon to provide all learners with a unique and life-long learning experience. Teachers must come together to understand the idea that knowledge is constructed by individuals differently and is a product of the human mind. All learners need teaching strategies (instructional practices) that arouse their unique interest and curiosity to learn. The use of real-life applications and asking stimulating open-ended questions enhance the learning experience for all learners. Today, the challenges of teaching a diverse learner population are at the forefront of all education initiatives nationwide. The use of the constructivist teaching model can help teachers meet some learning challenges of our learners with special needs and therefore bridge the performance gap in the 21st century. It is the most effective instructional practices that work well in an inclusive classroom, as learning begins with learners understanding of a subject and is developed by participation in realistic and meaningful learning experiences (Snowman, et.al 2009) (Ultanir, 2012) (Koh, et al 2014) Hashim & Kasbolah,(2012) (Sultan, et al 2011).

Using Constructivist teaching strategies to enhance the academic performance of learners with visual impairment and social activity should be part and parcel of classroom instruction. According to Watson, the constructivist model encourages all learners, including learners with visual impairment to develop a sense of autonomy and initiative they might not otherwise develop in an expository classroom. Teachers should encourage learners to express their ideas so that these ideas can be visualized and relate with big concepts and by doing so, develop problem-solving skills. The major responsibility for today's teachers should focus on providing a realistic learning environment for their learners by modeling, through experimentation, leading questions, and scaffolding to elicit student's knowledge.

Several theorists including teachers and administrators have rebelled against constructivism. Some called it propaganda, disastrous fad, teaching strategies with low intellectualism, colorful and jazzy drill and practice ways of instruction (Hayes, 2012) (Mayer, 2004 (Kirschner et al., 2006) (Clements & Batista, 2009) Furthermore, some advocates explained failures, not because the methods are at fault, but because these educational methods require a great deal of expertise and have not always been implemented well in the actual classroom and this doesn't refute the message, only the implementation (Clements & Batista, 2009;)(Marzano, 2011); (Tobias & Duffy, 2009).

Those who argued against constructivist teaching fail to understand its roots and principle. Constructivist methods were simply developed because the nation recognized that our students were not being educated to live in our new information society, this is why the new Every Student Succeeds Act would make sure that our students are educated to their full potential. Constructivist teaching and learning are based on students constructing their knowledge and understanding through their activity. In so doing, they can make connections between the new knowledge and previous activity. Those in support of the constructivist approach say that learners perform higher with the constructivist method than those learners who were taught using the traditional methods.

Teachers should make all efforts to relay the necessary information and then help students make connections to the real world. Most teachers do not have constructivist backgrounds and so more teacher extensive training and professional development on how to teach using constructivist methods are needed. Learners, parents, and teachers are part of the Every Student Succeeds Act of 1974(ESSA) that states that "full educational opportunities" should be our first national goal and the Equal. Teachers must make sure that students are taught necessary skills, more problem-based instructions, and how to help students build on prior knowledge. Administrators must equally make funding available to train teachers across all school districts and encourage the support of non-teaching staff to make constructivist teaching a reality, no matter one's opinion on constructivism.

For those learners with vision impairment, teachers must remain positive. Positive attitudes can greatly improve the quality of service a teacher provides to learners with vision impairment and their families. Teachers must use fewer words and tell students what to do to fix mistakes. Using fewer words, increasing wait time for compliance, physically showing directions, and asking the student to repeat the directions and show the teacher what they are required to do. Stand close to the students and congratulate them when they begin to comply. Educators dealing with these learners must comply with them by making directions clear, provide concrete, and consistent feedback. These are ways teachers can help students with VI increase their participation in the classroom and enjoy school (Watson, 2001;) U. S. Congress. (1988)

To summarize, constructivism is a model of how learners learn and how learning takes place. The learner is always active when learning takes place. The central focus is that knowledge is constructed by learners, therefore; instruction must be learner-centered. Knowledge is constructed in a social context; pedagogy must encourage learners' interactions and knowledge construction is strongly influenced by prior experience; learners must be treated as individuals. The Universal Journal of Educational Research is an accurate reflection of reality; there is room always for discussion and critical thinking. The constructivist theory requires active learning, provides opportunities to solve real-world problems, answer real questions, address real needs, and offer the learner an opportunity to perform as an expert or professional in their chosen field. Approaching instruction from the constructivist continuum reaches a broader range of learners and increases comprehension and self-confidence in all learners, teaching learners to think for themselves, ask questions and seek answers. The usage of instructional practices as a multiple approach and perspectives when problem-solving is vital to the success of all learners in GBHS Bamenda classrooms.

# Social Learning Theory by (Albert Bandura 1977)

Albert Bandura emphasizes the importance of observing, modeling, and imitating the behaviors, attitudes, and emotional reactions of others. Social learning theory considers how both environmental and cognitive factors interact to influence human learning and behavior. This theory holds that disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society (Hodkinson and Vickerman, 2009). The social model defines disability as the creation of particular exclusionary social and economic practices and structures rooted in cultural attitudes and seek to dispel the understanding that there is a causal relationship between impairment and disability (Terzi, 2004). Oliver (1996 in Terzi, 2004) argues that the social model does not deny the problem of disability but pinpoints it within society. Put in another way disability is seen as

being enforced on disabled people in addition to their impairment by a repressive and discriminating social structure.

The social model rejects the basic concepts underpinning the medical or individual model and according to Oliver (1990 in Terzi, 2004) tackles marginalization and discrimination by removing the disabling barriers produced by dominant social and cultural institutions. It deconstructs and disputes these barriers by aiding in understanding (Terzi, 2004). The social model is based on principles of social justice which according to Schugurensky (2010) would characterize a society as one which aspires to the principles of equity and solidarity, which values and understands differences, and which places high value on human dignity. Artiles, et al (2006) imply that social justice views pervade the discourses on inclusion and are the means to achieve equity for students with disabilities.

They argue that the social justice model is not merely a traditional model with individualistic views of allowing access, or communitarian views of being socially responsible, but a transformative model where underlying ideological and historical assumptions of difference are examined, where the practice is deliberately negotiated, where marginalization is critiqued and discredited, where merit-based school cultures are questioned and where resources are distributed in a nurturing and meaningful commitment. Based on social justice being transformative, one of the guiding principles of the social model, therefore, and in direct contrast to the medical model of diagnosis, is the principle that attitudes, values, and beliefs in society cause disability, and therefore society needs to be treated and cured (Johnstone,& Oliver,2001) By incorporating the principles of social justice, the social model sees education as the catalyst for overcoming the prejudicial attitudes of society towards people with impairments (Hodkinson & Vickerman, 2009).

According to Winzer & Mazurek (2010), this model is the chief principle upon which inclusion is founded and, says Johannessen (2010), is about action taken to ensure that equity in education and freedom from discrimination is achieved. In education, the social model is operationalized using inclusive schooling (Winzer & Mazurek, 2010). This model views education more broadly as a vehicle for overcoming prejudicial attitudes towards disabled people in society (Hodkinson & Vickerman, 2009). According to this model, education would comprise very different practices from those provided in terms of the medical deficit model and would need to undergo a significant change in principles and practices when providing for disabled children.

Accordingly, curriculum approaches, classroom management, and the ethos of all stakeholders would have to change to rupture current stereotypical and discriminating attitudes.

Furthermore, this model envisages an environment in which segregated schooling would be replaced with schools that are accessible and provide space and structure for participation by all (Hodkinson & Vickerman, 2009). The above models provided the substance for the argument that the discourse one adopts carries powerful messages for practice. For example, the medical deficit stance views understandings of inclusion entrenched in normative discourses as promoting tolerance rather than inclusion.

On the other hand, the social model argues that disabilities and difficulties should not lessen equal access and participation in education and society, and contends that, through inclusive education, equity in education and society could be achieved. The social disability model's approach to inclusion, embraces all people, regardless of race, ethnicity, disability, gender, sexual orientation, language, socio-economic status, and any other aspect of an individual's identity that might seem different.

Supporters of this view have a vision of an inclusive and equitable society, which takes into account a broad range of diversity beyond disability (Polat, 2011), and sees inclusion as the educational ideal which is promoted through schools. Samantha, both a teacher and a parent at the school, felt it's vitally important that social justice and diversity be promoted by creating a human rights culture where all are respected especially in this particular privileged environment. This she felt could be achieved by exposing children to a larger diverse population. Lana, a parent, challenged the pragmatic approach to conditions and concerns of compromised standards. She suggested that inclusion is rather about quality education which is dependent on the quality of the teachers. "I think that those kids themselves shouldn't compromise the education.

If a teacher is well trained and equipped and knows how to handle it, there should be no issue at all" (Lana). She saw inclusion as a form of schooling which "attempts methodologically and pedagogically, all ways to try and facilitate learning and bridge differences". This diversity discourse (social justice), the basis for inclusion, is in direct contrast to the special education and pragmatic approaches. Stakeholders who believed in this approach started to believe in this discourse through their personal experiences with disability, for example, Dave, who had grown up with a disabled father. They viewed inclusion as benefitting all learners and advocated inclusion as a means to remove the injustices of the past and the present by encouraging learning and self-growth within the community. Inclusion involves major changes in the educational system and it is hard to see how such changes could be accomplished without the diversity ethos of the people involved.

The current legislative act that revises the No Child Left behind Law is a breakthrough to special education and constructivism. The sweeping changes would affect how learners are judged and would eliminate a deadline for academic proficiency and streamline learners' annual testing regime if administered correctly. The new Every Student Succeeds Act will be better for learners with vision impairment in GBHS Bamenda because it provides more flexibility on testing.

## Gagne Instructional Theory (1985)

Robert Gagnes' theory states that there are different types or levels of learning and each different type requires different types of instruction. Robert Gagne's theory of instruction has offered a great number of useful ideas to instructional designers, trainers, and teachers. Gagne identified five major categories of learning: verbal information, intellectual skills, cognitive strategies, motor skills, and attitudes. Each type of learning level is influence by internal and external conditions of the learning environment. For example, for cognitive strategies to be learned, the learner must be given the chance to practice developing new solutions to problems; to learn attitudes, the learner must be exposed to a credible role model or convincing arguments.

Gagne suggested that for each learning task for intellectual skills, learning can be organized in a ranking manner according to its complexity as follows: stimulus recognition, response generation, procedure following, use of terminology, discriminations, concept formation, rule application, and problem-solving. The primary significance of the ranking is to identify preconditions that should be completed to facilitate learning at each level. Preconditions are identified by doing a task analysis of a learning/training task. Learning ranking provides a basis for the sequencing of instruction.

Gagne's theory of instruction as explained earlier is commonly broken into three areas. The first is the taxonomy of learning outcomes. Gagne's taxonomy of learning outcomes is somewhat similar to Bloom's taxonomy of cognitive, affective, and psychomotor outcomes. Bloom and Gagne believed that it was important to break down humans' learned capabilities into groups or domains. Gagne's taxonomy is made up of five categories of learning outcomes: verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills.

Gagne, Briggs, and Wager (1992) spell out that each of the categories leads to a different class of human performance. Teaching is an instructional action performed by a

person (i.e. a teacher), it should be understood as only a particular form of instruction. Instruction, on the other hand, can be available to learners even in the absence of a teacher and should not be understood as being restricted to only face-to-face interaction between learners and teachers Gagne (2009),.

Crucial to Gagne's ideas of instruction is what he calls "conditions of learning." He breaks these down into internal and external conditions. The internal conditions deal with the previously learned capabilities of the learner. Or in other words, what the learner knows before the instruction. The external conditions deal with the stimuli (a pure behaviorist term) that are presented externally to the learner. For example, what instruction is provided to the learner?

Gagne formulated nine events of instruction. These events are intended to promote the transfer of knowledge or information from perception through the stages of memory. Gagne bases his events of instruction on the cognitive information processing learning theory.

To put Gagne's theory into practice, firstly, the teacher states clearly the objectives of the instruction. These objectives are categorized into one of the five domains of learning outcomes. Each of the objectives must be stated in performance terms using one of the standard verbs (i.e. states, discriminates, classifies, etc.) associated with the particular learning outcome. The teacher uses the conditions of learning for the particular learning outcome to determine the conditions necessary for learning. Finally, the events of instruction necessary to promote the internal process of learning are chosen and put into the lesson plan. These events in effect become the framework for the lesson plan or steps of instruction.

Gagne in his theory suggests that learning tasks for intellectual skills can be organized hierarchically according to their complexity. These are stimulus recognition, response generation, procedure following, the use of terminology, discriminations, concept formation, rule application, and problem-solving. The primary significance of the hierarchy is to identify the needed or conditions that should be completed to facilitate learning at each level. Conditions are identified by doing a task analysis of a learning/training task. Learning hierarchies provide a basis for the sequencing of instruction.

Secondly, the theory outlines nine instructional events and corresponding cognitive processes which are: Gaining attention (reception), Informing learners of the objective (expectancy), Stimulating recall of prior learning (retrieval), Presenting the stimulus (selective perception), Providing learning guidance (semantic encoding), Eliciting performance

(responding), Providing feedback (reinforcement), Assessing performance (retrieval), Enhancing retention and transfer (generalization). All of these events should satisfy or provide the necessary conditions for learning and serve as the basis for designing instruction and selecting appropriate media (Gagne, Briggs & Wager, 1992).

Gagne's theoretical framework covers all aspects of learning and the focus of the theory is on intellectual skills. This theory has been applied to the design of instruction in all domains (Gagner & Driscoll, 1988). In its original formulation (Gagne, 1 962), special attention was given to military training settings. Gagne (1987) addresses the role of instructional technology in learning. Gagne (1985) provides examples of events for each category of learning outcomes. The specific operations that constitute instructional events are different for each different type of learning outcome. Learning hierarchies define what intellectual skills are to be learned and a sequence of instruction as is shown below.

### Gain Attention

For effective learning to take place, the teacher must first of all capture the attention of the learner. The teacher, in a demonstration lesson, will show and tell learners how he/ she has used the materials in the classroom. The teacher will ask learners questions about what he/she has demonstrated. Giving background information creates validity. The use of hands-on materials grabs the learners' attention. Asking questions, in the beginning, creates an interactive atmosphere and stimulates learners' interest.

# Informing the learner of the objective

The teacher should always present to the learners the objective of the lesson and what is expected of them at the end of the lesson. These will make learners aware of what to expect so that they are aware and prepared to receive information.

# Stimulate recall of prior learning

When the teacher associates previous knowledge with the new one, it facilitates the teaching/learning process. Information can be easily stored in long-term memory if the knowledge is linked to personal experiences. For learners to build on prior knowledge questions can be asked about their personal life and this will stimulate recall. This will bring the learner to understand the lesson at hand. When learning something new, accessing prior knowledge is a major factor in the process of acquiring new information.

## **Presenting the Stimulus/content**

This event of instructions is where the new content is presented to the learner.

The teacher gives learners step-by-step tutorials on how to acquire knowledge. The main issue here is the acquisition of information, therefore, the stimulus employed is written content and this allows the learner to receive feedback on individual tasks. Bloom's taxonomy and learning strategies can be used to help in the sequencing of lessons. Therefore content should be selected and organized meaningfully.

### Guide learners

The teacher may demonstrate how to create a diagram on the video projection screen/TV monitor. The teacher shows the learner how to use the tools to type in a text, add links, add symbols, use sounds, etc. Learners are allowed to try the tools. The teacher uses "discovery learning" because learners are adults and it gives them the freedom to explore. The teacher facilitates the learning process by giving hints to demonstrate on their computers and cues when needed. Since the audiences are teachers with some basic level of technical skills and the software program is easy to follow and understand, guidance is minimal.

## Elicit performance

This event of instruction requires the learner to produce or practice the new skills based on what has been taught to enables the learner to confirm their learning. Eliciting performance provides an opportunity for learners to confirm their understanding and repetition which helps in the retention of knowledge.

#### **Provide Feedback**

As learners practice new behavior teachers must give immediate feedback to learners after eliciting responses. Additional guidance and answers provided are called formative feedback which analyses the learners' behavior. Regular feedback enhances learning.

### Performance Assessment.

This is when teachers assign practical activities and Create diagrams that focus on the lesson of the day for example an Animals farm. The teacher has to check the work because Independent practice forces students to use what they learned and should apply it. Assessing such gives instructors means of testing student learning outcomes.

## Enhance Retention and Transfer Of Knowledge To All

Repetition of learned concepts is a tried and true means of aiding retention of knowledge obtained or acquired. The teacher may ask learners to create activities using what was presented to them in class during a demonstration lesson. The teacher may also charge the learners with teaching another learner from the knowledge gotten from the teacher. All of these are to help the learner in applying learning in real-life situations which is a step towards Mastery Learning.

# HYPOTHESES DEVELOPMENT

## **Competence and Performance of Teachers**

Competent teachers are the most critical piece in improving students' performance and closing the achievement gap. The single most important influence on student learning is the quality of teaching, yet most schools don't define what good teaching is (Danielson, 2006). This is a problem because if it is not defined, teachers may not be given the opportunities to improve practices in the classroom, which invariably may affect student's performance negatively. There currently is an abundant knowledge base to inform us that in schools teachers play a critical role in student learning and achievement. Research reveals that teachers' instruction and interaction with students are the cornerstones around which to build effective schools.

A summary of the available studies accumulated over the past 40 years on a key education driver, teacher competencies offers practical strategies, practices, and rules to guide teachers in ways to improve instruction that improves student performance and the quality of the work experience. Four groupings of these competencies can help organize and simply for teachers what they need to master to maximize their performance: classroom management, instructional delivery, formative assessment, and personal competencies. These four categories also provide the essential core around which decision-makers can construct teacher preparation, teacher hiring, teacher development, and teacher and school evaluations.

Competencies are the skills and knowledge that enable a teacher to be successful. To maximize student learning, teachers must have expertise in a wide-ranging array of competencies in an especially complex environment where hundreds of critical decisions are required each day (Jackson, 1990). Few jobs demand the integration of professional judgment and the proficient use of evidence-based competencies as does teaching. Competence is a measure of both proven skills and proven knowledge. It can be viewed in terms of behavioral

competence (soft skills) that is, how something is done, and functional competencies which are the ability to perform some technical tasks like operating machinery, making a dress, etc. (Luka M.M.2019).

Competences as defined by European bodies, as well as by educational experts, consist of three interrelated ingredients: the understanding part, the overt behavioural repertoire, and including values, beliefs, and attitudes based on the cognitive, affective, and psychomotor domain of learning respectively. A competent person performing a task will possess a combination of skills, knowledge, attitudes, and behaviours required for the effective performance of the task or activity by measuring learning rather than time. (Neil O'Sullivan and Dr Alan Burce 2014).

One of the concerns of governments in developing educational policy is monitoring the quality of education in two mutually exclusive domains. One is an input-oriented approach where the government aims to achieve high quality of the education system by focussing on teacher training, and by issuing curriculum guidelines and teaching materials. The actual results of teaching, that is, exam performance, dropout rates, and the like, are not the focus of attention for governments using an input-oriented approach. Output-oriented approaches, by contrast, pay close attention to such performance measures. In this light, educational progress and success are measured against standards that are used as instruments of quality control (Glaesser J. 2019).

In the context of education, (Whitty and Willmott, 1991) citing Glaesser J. 2019 said, 'competency-based and performance-based approaches to teacher education are by no means new' Competence was a goal of teacher education in the US from the 1970s. In the UK, the idea was mostly used in further education and vocational education from the early 1980s but has since gained prominence in teacher education (Carr, 1993; Whitty & Willmott, 1991).

Research has established the importance of cultural competency in improving students' academic and behavioral outcomes (Hanover 2014),. As such, educators are increasingly focused on identifying effective methods for growing culturally responsive practices in education. It discusses only specific areas of focus and key strategies for building cultural competency among district staff. The analysis addresses the issue at the levels of both institutional practice (School/District Culture, School Policies, Professional Development and Family and Community Involvement and individual professional development.

The issues around social competence for students with mild disabilities and social support structure as a basis for collaborating with general education teachers to create socially inclusive learning environments and build social competence was discussed by Hedda Meadan and Lisa Monda-Amaya (2008), This can be done in three levels which are; by Creating an accepting classroom environment, creating a "place/voice" for each learner in the classroom, and Creating opportunities for social interaction. They brought forth some strategies for teaching these social skills either in a large or small classroom which are; to teach problem-solving skills, group contexts (role-playing, games, and vignettes), to teach effective communication and group interaction, teach conflict-resolution skills, provide character education and that can also use their teacher-developed curricula. Therefore, teachers need to create environments that support and promote social competence and acceptance for all learners.

Research confirms this common perception of a link and reveals that of all factors under the control of a school, teachers are the most powerful influence on student success (Babu & Mendro, 2003; Sanders & Rivers, 1996). The research indicates that these competencies can be used to organize the numerous specific skills and knowledge available for building effective teacher development. Better learning happens in a dynamic setting in which teachers offer explicit active instruction than in situations in which teachers do not actively guide instruction and instead turn control over content and pace of instruction to learners.

## The Competency Learning Cycles in Education

Learning has some gaps which lead to the development of plans for addressing the gaps, followed by the implementation, review, and evaluation to determine whether learning has occurred and the gaps that have to be addressed in the next cycle. Competencies provide the foundation for assessing the gaps between the desired skill levels required in the organization (educational policies) to achieve the organizational vision, mission, and mandate and those currently existing among the employee population (learners). Competencies assist in effective learning and development by identifying the behaviors, knowledge, skills, and abilities that are necessary for successful performance in the job and the organization. They support learning by: It is seen that competencies assist in effective learning and development by identifying the the provide the organization.

Competencies support learning by focusing on the critical competencies needed for success in the learners, providing standards for measuring performance and capabilities, providing the framework for identifying learning options for example curriculum/programs to meet learning, educational and societal needs, providing standards for determining how well learning has occurred, both at the individual and policy level Whether in the educational milieu or not, learning follows a cycle as shown in figure 2.

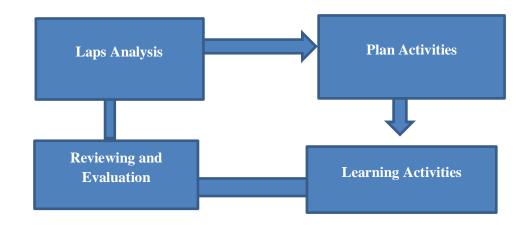


Figure 2: Competency model learning cycle

There is abundant research to support the notion that teachers' competency plays a critical role in improving student achievement in schools. Further, Avramids (2002) support the view that teachers, who perceive themselves as competent inclusive educators, often have more positive attitudes toward inclusive education. Teachers acquire increased competence as a result of increased training in the field of inclusive education. From the literature, it is seen that these competencies are the core to which teachers build preparation, development, and evaluations which leads to better academic performance especially for learners with vision impairment. Tanyi, (2016), said most teachers lacked training and specialized training to instill in learners with disabilities, even the basic social skills.

According to Tanyi, (2007), one of the problems learners with disabilities faced in schools, are the adjustment of the curriculum. Baker and Zigmond (1990) conducted a study to determine whether regular classroom education is equipped to accommodate students with special needs. The research examined the behavior of regular classroom teachers involved in full-time mainstreaming. From the findings, it was revealed that regular classroom teachers did few changes to accommodate individual differences and did not provide additional enrichment

or extension of activities for special needs students. Teachers also taught the whole class, with no grouping for instruction or differential pacing to accommodate learners with disabilities. Coastes (1989) also carried out a study on the opinions of regular and special educators and the findings showed that none of the group of teachers was dissatisfied with the special education delivery system.

# **TEACHING METHODS**

These are those techniques and strategies used by teachers in their effort to facilitate student learning. Teaching is the activity that translates curriculum goals and objectives into experiences that learners acquire during their interaction with the teacher. Some methodologies may not be appropriate for certain subjects and some learners. The methodologies teachers commonly used are:

- ✤ Lecturing
- Demonstration
- ✤ Illustration
- Experimentation
- Cooperative learning
- Dramatization
- ✤ Role-play
- Project and research.

Learning experiences can take place when one or a combination of these is employed by a teacher during a teaching and learning interaction. These teaching methods as mentioned above are defined as follows:

# The Lecture Method

In this method, the teacher exposes the subject matter to the learner in a systematic manner. During the explanations, the learners are expected to listen, take notes, and not ask questions. The learner should know from the beginning what the teacher intends to achieve in the lecture to be psychologically and mentally prepare. This method of teaching is best for the learner with visual impairment.

### Illustration Method

In the illustration method, relationships, facts, principles, and ideas are explained with the use of graphs, charts, diagrams, pictures, films slides, and other teaching materials. After such illustration, the teacher does need to test if the method was appropriate and if the learners have learned what was intended to be learned. This can be done through formative assessment.

# **Demonstration Method**

In this method, the teacher does something in the presence of the learners to show them how that thing is done. During the demonstration method, the teacher should ask questions to know if the learners are following up. The learner should know from the beginning what the teacher intends to achieve in the demonstration lesson to be psychologically and mentally prepare. This method of teaching entails the manipulation of concrete materials and so need for the learners with visual impairment to touch and feel them during the explanations.

## Experimental Method

This is the teaching and learning method whereby, learners are expected to investigate some aspects of a given topic under the supervision of the teacher. This teaching method is also known as the field study or laboratory method. The learners handle tools, appliances, materials, and analyze data, facts, and concepts objectively to conclude. These instructional materials to be used should be pre-tested to ensure their reliability.

## **Cooperative Learning Method**

In this method, learners are expected to work together in small mixed groups which facilitate interaction and learning from each other including the teacher. During this process, each learner is expected to be active and to work for the success of the group. The final work is then presented to the teacher for corrections

# Dramatization Method

This is a method in which learners try to clarify a life situation, issues, or problems to themselves and the audience. Learners are expected to memorize and rehearse already prepared scripts. During this process, each learner is expected to be actively responsible and to work for the success of the group.

### **Role-Play Method**

When dramatization is effected without a script, rehearsals, or memorization, it is referred to as role-play. In role-play, the action comes directly from the learners' creative use of personal knowledge of the situation or issue. Since learners use their own words to act rather than prepare text, the issues concern should be clear in their minds for the method to be effective. If these conditions are lacking, role-play can become a form of entertainment and not a means of learning.

#### **Project and Research Method**

The project and research method is an integrated approach to learning aimed at achieving a pre-conceived learning task or geared towards solving a particular problem. Learning is accomplished through discovery and problem-solving. In the project and research method, some organized learning is being put in place as follows; identify a problem and assess it, formulate objectives and spell out actions to be taken, carry out the implementation of what was planned, and evaluates the different stages of the project.

In summary, when teachers know the learners in the classrooms and the way they are supposed to learn, they will select appropriate teaching method(s) suitable for the learners and the subject matter.

# **Types of Teaching Method**

### **Teacher-Centered Methods**

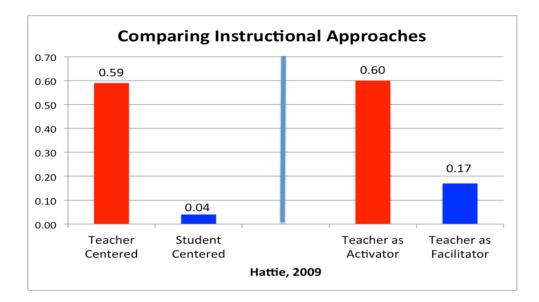
Under this method, students simply obtain information from the teacher without building their engagement level with the subject being taught (Boud & Feletti, 1999). The approach is least practical, more theoretical, and memorizing (Teo & Wong, 2000). It does not apply activity-based learning to encourage students to learn real-life problems based on applied knowledge. Since the teacher controls the transmission and sharing of knowledge, the lecturer may attempt to maximize the delivery of information while minimizing time and effort. As a result, both the interest and understanding of students may get lost. To address such shortfalls,( Zakaria, et al,2010) specified that teaching should not merely focus on dispensing rules, definitions, and procedures for students to memorize, but should also actively engage all learners as primary participants and as the main focus.

### Student-Centered Method

With the advent of the concept of discovery learning, many scholars today widely adopt more supple student-centered methods to enhance active learning (Greitzer, 2002). Most teachers today apply the student-centered approach to promote interest, analytical research, critical thinking, and enjoyment among students (Hesson & Shad, 2007). The teaching method is regarded as more effective since it does not centralize the flow of knowledge from the lecturer to the student (Lindquist, 1995). The approach also motivates goal-orientated behavior among students, hence the method is very effective in improving student academic performance or achievement (Slavin, 1996).

#### **Teacher-Student Interactive Method**

This teaching method applies the strategies used by both teacher-centered and studentcentered approaches. The subject information produced by the learners is remembered better than the same information presented to the learners by the lecturer (Jacoby et al, 1978); The method encourages the learners to search for relevant knowledge rather than the lecturer monopolizing the transmission of information to the learners. As such, research evidence on teaching approaches maintains that this teaching method is effective in improving students' academic performance (Damodharan&Rengarajan, 1999).



#### Figure 3: Comparing Teaching methods

Source: Hattie, 2009

The No Child Left Behind Act of 2001 (NCLB) recognizes accountability actions including annual assessment of learners in all the school subjects and the technical areas such as sciences. The teacher-centered teaching methods do not accommodate all learners, (Habulezi et al 2016), are counterproductive and detrimental to learners 'performances. Teachers are assets, rich resources of information and support. Therefore, they need to be responsive, creative, accommodative, and inclusive in their routine facilitation o classroom activities for the benefit of all learners. In the case of learners with vision impairment, pre or post-lesson sessions would be appropriate to compensate for the missing incidental information acquisition and to promote parity in classroom participation. In (Landberg, et al, 2016) advise that teachers should encourage critical thinking, argumentation, reflection, and action during learning.

In addition, Rose and Meyer's (2002) are three principles of universal design of learning, (multiple means of representation, multiple means of action and expression, multiple means of engagement), hold great potential to establish truly accessible learning environments for all that can improve learners' performance. Holbrook and Koenig (2010) agreed that in the absence of vision, it was important to give learners sensory training the remaining senses like the senses of touch and hearing so that they might be used as sources of information. Teachers are expected to read and described what they wrote on the chalkboard. This will complement the missing incidental learning other learners with sight enjoy. The tactile diagrams presented to the learners with vision impairment should be topic tailored relating to past examination diagrams. This practice will give learners equal and fair opportunities to access teaching and learning materials.

### Teaching Methods for Learners with Visual Impairment

Classroom accommodations will be quite varied and should be individualized according to the specific needs of the student. However, some basic best practices can guide the development of the most effective adaptations. One thing to always consider is that it is often difficult for these students to become as fully independent as they are capable of being.

The classroom teacher should encourage independence as often as possible to avoid the trap of "learned helplessness" (Simon, et al, 2010). Encourage the student to move independently through the classroom, and organize your classroom accordingly. Materials, desks, and other objects in the classroom should be maintained in consistent locations. Ensuring that cabinets are fully closed, chairs pushed in, and doors are not left half-opened will help with safety in navigating the classroom. Part of becoming independent for students with visual

impairment is learning when to advocate for assistance (Baraka, 2013). Not all instructional tasks will be immediately possible for a student with a visual impairment, even with accommodations.

The key is designing instruction so that the learners have the most opportunity to act independently. Adapting your classroom to accommodate a student with visual impairment is a relatively easy task, it just requires an awareness of the student's level of visual functioning (how the student sees) and how the student works and learns. For example, for the student with low vision Verbal cues can be used with those students, who cannot see body movements or physical cues. A trained teacher of students with visual impairments can help the regular classroom teacher to make a few simple changes to classroom design that may mean all the difference in the education of the student with visual impairment (Mapsea, 2006). According to Baraka (2013), lectures may take longer for students to write down notes and they may be unable to see PowerPoint slides or board work. Diagrams and new vocabulary can be problematic unless an oral description or additional clarification is given. Recording lectures can also be useful and staff should be prepared to accept such requests.

There are three principles of special methods that should be used for effective teaching for learners with visual impairment. Lowenfeld (1973).

# Principles for teaching learners Visual impairment

Visual impairment affects how a child learns, not what a child learns. One of the most important things to remember about a child who is visually impaired is that he or she can learn almost anything that anyone else learns, but that she has to learn differently. A child with a visual impairment receives information in bits and pieces, from several sources (touch, smell, hearing, etc.) and somehow has to put that information together into a whole.

Also, the information that they obtain through their other senses is inconsistent (things do not always make noise or produce an odor), fragmented (comes in bits and pieces), and passive (not under the child's control) (Kay Alicyn Ferrell, Ph.D., Division of Special Education, University of Northern Colorado)

As seen in Crane P., Curthbertson, D., Ferrell, K.A.,& Scherb, H.(1997) "Equals in partnership; Basic rights for families of children with blindness or visual impairment" Teaching learners of this nature follow some principles.

### Make No Assumptions.

Most children learn incidentally, without specific instruction, because they have watched someone else do something, or because they associate what they have seen with what they have heard. For the child with visual impairment or blindness, learning cannot be left to chance.

# Understand the learning proceeds from parts to wholes.

People learn by looking at the whole picture before examining the parts, learners with visual impairment learn the other way around. They are forced to rely on many discrete pieces of information and are limited by what can be touched, felt, or seen at any point in time. Instruction needs to be systematic, clear-cut, and concrete; if it is not, children who are blind and visually impaired will not be prepared for higher levels of learning.

### Use concrete objects.

Teachers should provide early and ongoing opportunities for learners to learn about their environments through tactile exploration of real objects and situations as well as through other available senses. With normal vision, it is easier to see that one object ( a stuffed cat, for example) stands for another object ( a living, breathing animal). But from the point of view of the child with visual impairment, the two items share very few characteristics. The confusion that results when symbols are introduced too quickly is not worth the re-learning that has to occur later. Of course, it is not always possible to use real objects rather than the representation of objects. But it is important to understand that the process cannot be taken for granted.

#### Adopt the child's point of view.

Teachers are primarily trained to use visual methods of instruction and often do not realize the importance of using the multi-sensory approach with children who are visually impaired. It requires a different way of thinking about a lesson you have to think about it from the child's point of view but relating the lesson to the child's own experience can make the difference between rote memory and true understanding.

### Address children by name.

While other children can use eye contact to get information about people surrounding them, children with visual impairment cannot. Teachers should use their voices to provide clues, set limits, and establish expectations. Introduce students with visual impairments the same way you would introduce any other student, Include students" with visual impairment problem in all classroom activities, including physical education and home economics, Encourage students with visual problems to seek leadership and high visibility role in the classroom, Use the same disciplinary procedures for all students, Use verbal cues as often as necessary to cue students with visual impairments about something that is happening,

# Allow time

Learners with visual impairment often take a longer time to do an everyday task. In some instances visually impaired learners may need extra time to complete their assignments and tests. This is typical because reading braille or using some form of technological aid can take additional time. Give an appropriate amount of time for visually impaired learners to complete their work, and hand it in good time without any lateness. Set deadlines and make sure they stick to them.

## Use the body as a reference point.

Instead of pointing to a location, or guiding that child to it, you can say, "The coffee mugs are on the shelf to your right, about shoulder level."

### Make doers, not done-to-errs.

With all the information that they have to process, it is often tempting (and sometimes quicker) to assist the child with blindness or visual impairment by doing things for him or her. This can sometimes lead to dependency and in turn a low self-concept. Encourage learners with visual impairments to use their specialized equipment such as braille writer, Always tell a person with visual impairment who you are as you approach them, Expect the same level of work from the students with visual impairments as you do from the other students. (Gay, 1976), pointed out that, school staff needs training and support to take on these new roles and responsibilities. In other words, an inclusive education program that demands that the school program be flexible enough to accommodate the diversity of abilities and educational needs is still greatly hampered by the rigidity and restrictions entailed in the regular curriculum.

### Need for unifying experience

Because a visual impairment limits the ability to perceive the wholeness of objects and events, teachers should provide opportunities for students to integrate parts into wholes. Developing study units, where connections among academic subjects and real-life experience can be enhanced (e.g. studying the work of community workers in social studies by visiting those workers in their natural workplaces), is an important way to provide unifying experiences. If possible, try to remind the child with visual impairment about a previous action. For example, "The trash can is over by the door you came in, to the right.

## Need for Learning by Doing

Most of the areas of the expanded core curriculum lend themselves very readily to the learning by doing approach. All learners regardless of whether they are visually impaired would benefit from instruction based on these three principles of special methods and using methods such as these is integral to the concept of universal learning design (UDL) that has been mentioned. For students with visual impairments, however, the use of concrete, activity-oriented approach is a necessity and must be an integral part of teacher's plans for differentiation (Marilyn, 2008). Smith, Polloway, Patton & Dowdy (2012) emphasized that teachers teaching students with visual impairments should consider the following:

# **Types of Teaching Methods Specific for the Vi**

#### **Explicit Teaching Method**

Explicit teaching means a step-by-step delivery of a lesson with active participation by all students (Rosenshin, 1987). Explicit teaching is also known as direct teaching, active teaching, or explicit instructions the explicit procedure is effective for teaching a body of knowledge that requires step-by-step reasoning or in teaching specific skills. (Leke T, 2012) It is important for the teacher to clearly explain all visual materials. For example, if the teacher is showing a picture to illustrate a point, they should describe the image. The teacher could say something like "I have put a picture of the Cameroon flag on the board to illustrate the colors. It has three colors, red, yellow and green. It has a star in the middle of the red and the star is yellow. This demonstrates national unity as well as the pride and wealth of the country. The teacher should also get in the habit of dictating what you are writing on the chalkboard or whiteboard. This way, learners who are unable to see the board can still follow along with the material and take notes.

### **Oral Instruction Method**

It is a method of teaching which involves the teacher exposing the subject matter to the students while the students listen attentively and take notes without asking questions Teachers should provide their learners with a hand-out that contains assignment instructions. Visually impaired learners in the class may have difficulty seeing the words and learning what is expected. Instead, the teacher should rather give oral instructions for every assignment and activity.

## The Clapping. Method

In the classroom, learners rely on visual cues to ask questions or get the teacher's attention. It is very traditional for learners to raise their hand if they want to speak during a lesson. Visually impaired learners may not notice when their peers raise their hands. Instead, the teacher should replace visual cues with audio cues. For example, the teacher could have students clap twice if they want to ask a question.

### Tactile Instructional Learning. Method

During teaching in a class with visually- impaired learners, incorporate tactile learning experiences whenever possible. This type of learning is also known as the hands-on instructional method. Instead of talking about rocks and showing images of different types of rocks, the teacher should have physical rocks available in the classroom for the students to touch and handle. This will allow the learners to explore and learn without relying solely on sight.

### Address all Learners by Name.

When teaching in the classroom with visually impaired learners, use names to address classmates so that they will know who is talking, when answering or asking questions. This way the learner who is visually impaired can learn to identify their peers based on the sound of their voice.

# Consider the curriculum.

During teaching visually impaired learners, you may need to modify the curriculum, and the way you teach the curriculum should meet the learners' needs. For example, when teaching art, you will want to rely more on tactile experiences. Try other materials to teach like working with clay, instead of drawing or coloring.

## **Record lesson Method.**

The easiest and cheapest way to improve the learning environment for learners who are visually impaired or blind is to record all lessons. This way learners can listen to the instructions

or lesson multiple times to make sure they completely understand what is expected. You can also have all of your course materials and hand-outs transferred into braille by using braille translation software.

### Audibility Method

The teacher should Seat visually impaired learners close to the front. To give these learners an equal opportunity to succeed in the classroom, seat them near the front of the classroom close to the board. While teaching, stand near the visually impaired learner. This will allow them to hear you better.

#### Lecture Explanatory Method

The teacher would need to give added directional instructions when explaining the lessons or classroom supplies and their locations. For example, if the pencil sharpener is located next to the whiteboard at the front of the classroom, you should provide visually impaired learners with clear directions from their seats. For example, the pencil sharpener is straight in front of your desk and then two steps left of the whiteboard. These added instructions will help a visually impaired learner to navigate the classroom.

As teachers, their main priority is ensuring that all of their learners have an equal opportunity to access learning materials and succeed in their courses. To teach visually impaired learners, modify your teaching strategy, allow for the use of visual aids and assistive technology, and create a safe learning environment. Giving clear instructions during the teaching/learning process depicts the kind of teacher and the type of learning that will be experienced by the learner. As is the case with visually impaired learners, the teacher should adopt the strategies listed above which will help to upgrade the quality of teaching and therefore better academic performance as is seen in the literature. Teachers need to incorporate instructional practices and their different strategies as evolving teachers to handle all learners at a go as it is written in the Sustainable Development Goal (SDG) number 4.This is the education goal whose aim is to ensure inclusive quality education and promote lifelong learning opportunities for all.

School staff needs training, support to take on these new roles and responsibilities pointed out in (Gay, 1976). In other words, an inclusive education program that demands that the school program be flexible enough to accommodate the diversity of abilities and educational needs is still greatly hampered by the rigidity and restrictions entailed in the regular curriculum. A teacher teaching students with visual impairment should face the class when speaking, speak clearly in a normal voice, not loudly, slowly, or with exaggeration, keep hands away from the mouth when speaking, identify yourself by name in case the student does not recognize your voice and indicate verbally when you are entering or leaving the person's presence( Johnson 2001),.

Without new approaches to instruction that connect to the learning needs of students, many will perform poorly and are likely to drop out of studies. (McWhorter et al., 1996) Research evidence from previous studies indicates that a student-centered learning environment seems to produce higher-level learning outcomes more efficiently than a traditional teacher-centered environment (Tynjala, 1998). Hence, bias in the selection of teaching methods by teachers in areas in which they possess exclusive monopoly knowledge should be avoided to improve students' academic performance (Adunola, 2011). Therefore, teachers should create an atmosphere conducive to learning to enhance the development of students' learning experiences. Moreover, teachers should also increase their knowledge of various instructional strategies to keep students engaged and motivated throughout the learning process. Based on the literature from the study, affirms that the teaching method has an impact on the performance of learners with visual impairment. Hence, there is a link between teaching methods and the performance of students with visual impairment.

## INSTRUCTIONAL MATERIALS FOR VISUAL IMPAIRMENT

Instructional materials are those items such as books, other printed matter, video and audio recordings, computer software, and digital content which are used as part of the instructional process. While the format of instructional materials has evolved and will continue to change, the purpose remains the same. Teaching and learning content as well as assessment tasks now our days are inundated with graphic representations that are too much for learners with vision impairment during examinations. Learners can be tired to explore the diagrams which they rarely understand and eventually perform poorly. Some of the diagrams included in assessment tasks have no bearing on the answering of questions and these just increase material for reading when in fact the effort should be to reduce it. Njue, Aura, and Komen (2014) advised that individual differences of the learners should be put into consideration and the teachers should therefore choose materials that maximally benefit individual learners. Effort should be made to avail recorded, brailed, or enlarged teaching and learning resources to promote equal access to education for all learners

### **Braille Textbooks**

Textbooks are those books that are designated as the primary source of instruction for students in a course, or unit of instruction within a course. The textbook definition also includes those materials of textbooks that are an integral part of the textbook. They include but are not limited to, textbooks, trade books, slides, compact discs, computer software, CD-ROMS, and digital content. The Curriculum Council recommends textbooks materials printed in braille or is recorded for learners with vision impairment for adoption by the Board of Education.

# Supplemental Materials

Supplemental materials are those items used to extend and support instruction and address the need of all learners. They include but are not limited to, books, periodicals, pamphlets, visual aids, video recordings, sound recordings, compact discs, computer software, and other digital content and peripherals. Supplemental materials, print or non-print, do not require approval by the Curriculum Council or adoption by the Board of Education. All library media materials are supplemental. The selection and acquisition of new library media materials will be based upon the needs of the learners to put in each school library. Media center as determined by a collection assessment process, the curriculum needs, and the availability of funding. Collection development is the ongoing process of identifying the strengths and weaknesses of library media collections in terms of the needs of the learning community. Instructional Materials must meet the expectations of the learner before it is selected for use in the classroom or subject.

Based on the above-mentioned literature, teaching-learning materials are relevant in the process of learning. These materials have a big role to play in the performances of learners with visual impairment.

# TEACHERS' KNOWLEDGE OF LEARNERS DISABILITY.

Teachers require knowledge of the unique skills that every child brings to the classroom to target instruction towards students' needs, a pedagogical approach with strong empirical support (Connor et al., 2011). To effectively target instruction towards students' unique learning needs, teachers require knowledge of individual students' skills. Perhaps not surprisingly, several programs aim to enhance teachers' KISS as a means to providing more targeted instruction. Probably the most common of these programs are interim assessments (Clune & White, 2008; Olson, 2005; Shepard, 2010). For example, a 2005 Education Week survey of superintendents found that roughly 80 percent of school districts were already using or planning to use interim assessments during the following school year (Olson, 2005). Current lessons should be built on past knowledge to increase fluency and maintain mastery of the content.

The teacher should relate lessons to complex issues and big ideas that provide deeper meaning and give student's better understanding of the content. The structured and systematic approach of explicit instruction emphasizes mastery of the lesson to ensure that students understand what has been taught, become fluent in new material, and can generalize what they learn to novel situations they encounter in the future. Teachers should know about, the medical needs and conditions, the academic strengths/ weakness, their favorite subject(s), reading levels and reading habits, the flexibility of the learners, social interaction in class, Timidity, of learners with visual impairment to better manage them through their difficulties.

The following are hallmarks of an explicit approach for teachers (Archer&Hughes & Knite, 2012)The teacher selects the learning area to be taught; Teacher sets criteria for success; Teacher informs students of criteria ahead of the lesson, the teacher demonstrates to the learner how to successful use of knowledge/skills through modeling., Teacher evaluates student acquisition, Teacher provides remedial opportunities for acquiring the knowledge/skills, if necessary, Teacher provides closure at the end of the lesson.

A common complaint of an explicit instruction approach is that it does not offer sufficient opportunities for students to build on acquired knowledge/skills in creative and novel ways that help them to assimilate the material. The reality is that all effective instruction, regardless of philosophy, must aid students in generalizing newly taught knowledge/skills in a context that is greater than a single lesson. An explicit model accomplishes the goal of building toward "big ideas" by first emphasizing mastery of foundation skills such as reading and mathematics, and then systematically introducing opportunities to integrate these critical skills in discovery-based lessons to maximize students' experience of success. Instruction that is well-planned moves students from their current level of competency toward explicit criteria for success. Objectives should be clear and the teacher should present these objectives to students for each lesson. The teacher should follow scope and sequencing to teach the range of related skills and the order in which they should be learned. Instructions offer sufficient opportunities for successful acquisition.

The teacher should provide sufficient opportunities for unpunished errors and ample reinforcement for success. (Tanyi, 2006), in an empirical study using teachers found that they lacked professional commitment because they consider the teaching profession as a stepping stone to other professions, last resort, and job security attached to this cohort. Winzer (1989) noted that regular classroom teachers see special education as a distinct entity and believed that special education teachers are imbued with qualities different from their own.

From literature, as is seen in Tanyi,(2016), is in line with this study. In her article titled, Psychological Evaluation of Attitudes of both Primary Teachers and Special Needs Children towards each other in a Regular School. Tanyi,(2016), pointed out that there is an adverse effect on the learning environment, the psycho-social and professional attitudes of both teachers the special needs children in regular schools, and the ability of these regular teachers to meet the psychosocial demands of special needs children in terms of attitude as it is mentioned in the UN Disability Convention in the classroom.

The teacher should allocate enough time to teach a topic. Students need to learn the knowledge/skills to criteria that are verified by teachers or students' peers. From the literature, this study brings out the link between teachers' knowledge of the students with visual impairment and their academic performance.

#### **TEACHERS ASSESSMENT AND EVALUATION OF THE VI**

As cited in Chaffi (2021) in his article titled" Assessing the quality assessment practices on students' effort and achievement, he said assessment of student learning is one of the essential parameters in school activities and that the quality of an assessment has a significant influence on learner's performance in class as well as in national examinations (ISO, 1986; Stiggins, 2001). Assessment involves understanding how it is designed, the type and for which questions, and how the data obtained can help teachers, students, parents, and other stakeholders make decisions about the teaching and learning process. Assessment designers strive to create assessments that show a high degree of fidelity. A student might be engaged in the assessment but still not enjoy the activity of being assessed Evans (2013.

If learners are taught facts but do not have coping skills when they leave school, then teaching and specifically assessment have failed. (Chaffi, 2021)), argued that when learners finish school, the behavior they have learned to emit in that setting may no longer seem

appropriate to them in the real-world setting. He further said if a teacher is about to conduct an assessment, they should follow some useful strategies in expressing learning, like knowledge, reasoning, skills, product, and creativity. For assessment to be effective and of good quality, it should be aligned with the curriculum objective, address learners' competencies through an emphasis on valid and reliable items that will facilitate the examination of learners' abilities to achieve outcomes.

As cited in Chaffi (2021) in his article titled" Assessing the quality assessment practices on students' effort and achievement, that Brown, Bull, and Pendlebury (1997) had confirmed that "assessment defines for students what is important, what counts, how they will spend their time and how they will see themselves as learners. : If you want to change student learning, then change the methods of assessment". Therefore, assessment should be more valid, accurate with consistent results, fair to the teaching and learning process for all learners especially learners with visual impairment.

The effective ongoing assessment referred to in education literature as formative assessment and progress monitoring, is indispensable in promoting teacher and student success. It is frequently listed at the top of interventions for school improvement (Walberg, 1999). Feedback, a core component of formative assessment, is recognized as an essential tool for improving performance in sports, business, and education. Hattie (2009) identified feedback as the single most powerful educational tool available for improving student performance, with a medium to large effect size ranging from 0.66 to 0.94.

Formative assessment consists of a range of formal and informal diagnostic testing procedures, conducted by teachers throughout the learning process, for modifying teaching and adapting activities to improve student attainment. Systemic interventions such as Response to Intervention (RtI) and Data-Based Decision Making, depends heavily on the use of formative assessment (Hattie, 2009; Marzano, Pickering, & Pollock, 2001).

As cited in Tanyi(2016) that in Ghana, the Centre for Research on Improving Quality of Primary Education (CRIAPEG) did a study in 1996 on the assessment of teachers' teaching competency on SPNs. The result revealed that teacher competency can greatly enhance the academic work of such children. According to CRIAPEG, the result shows more than 79% of SPNs pupils performed up to full mastery level in each subtask in reading were due to the teacher's competency (Deku, 2002).

Assessing the performance of learners with VI throughout a lesson offers the teacher an insight into who is succeeding and who is falling behind. Teachers must collect and maintain data gained through both informal and formal assessments (Fuchs & Fuchs, 1986). Formative assessment is most valuable when teachers use evidence-based research and their professional judgment to develop specific remedial interventions. For those falling behind as in the case of learners with visual impairment as seen in the literature above, teachers should provide extra time, give them remedial lessons, pay great attention to their needs and give them immediate feedback as they carry out their teaching

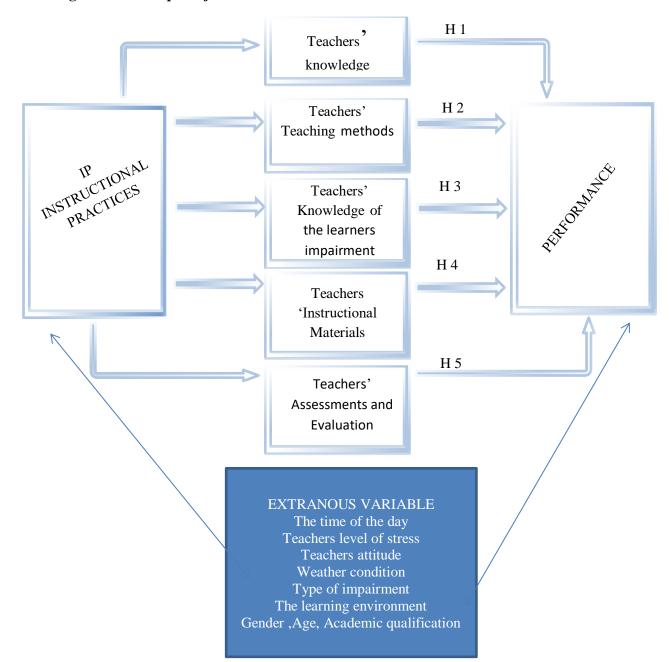


Figure: 4: Conceptual framework

Summarily, the inclusive learning environment should be different from the ordinary learning environment, because an inclusive classroom contains learners with different learning needs and abilities (Simon et al, 2010). For quality learning of learners with visual impairment, some features and conditions should be adhered to. This includes; special services from specialized teachers, teaching, and learning resources, as well as assistive devices like Braille and magnifying glasses, and the use of flexible teaching methods (Webster & Roe, 1998; Simon et al, 2010).

Based on this concept above we can reliably say that if instructional practices are modified or adapted to suit learners with visual impairment, then performance will increase Therefore accepting that there is a relationship between instructional practices and learners academic performance

**Ha**<sub>1</sub>-There is a relationship between the teacher's competencies in the subject matter and the performance of learners with visual impairment.

Ha<sub>2</sub>-There is a relationship between the teacher's knowledge of the learners with visual impairment and their performance

Ha<sub>3</sub>- There is a relationship between teaching methods and the performance of learners with visual impairment

**Ha**<sub>4</sub>- There is a relationship between the use of instructional material and the performance of learners with visual impairments.

**Ha**<sub>5</sub>-There is a relationship between the assessment methods and the performance of learners with visual impairment.

# CHAPTER THREE METHODOLOGY

The purpose of this study is to examine the impact of the teachers' instructional practices on the academic performance of learners with visual impairment in G.B.H.S Bamenda in the North West Region of Cameroon. Research methodology is a tool of data collection that is used to provide accurate and reliable information and evidence of its effectiveness. It plays an important role in the field of academic byways of systematic, logical and, theoretical techniques. The researcher employs the research methods to solve the research problems and to find new facts and theories. That is why, authors such as Walliman (2005), (Saunders, et al,2009) stated that the research means not only gathering data or presenting facts without purpose but purposely collected and systematically interpreted and there can be found intentionally guiding the inquiry. Sekaran & Bougie (2010) defines it as, finding those solutions which have many plans, procedures, and steps. Moreover, Cooper & Schindler (2006) detailed research processes as forming research proposal, design, collecting and analyzing data, finding results and drawing conclusions, research ethic as well.

## **Research Approach and Technique**

In this study, the quantitative method was used. The quantitative research method was used to survey the primary data and information by sending out questionnaires and based on the information taken through secondary data such as literature review. This quantitative study was adapted for qualitative meanings. This research chose a deductive approach which leads to the choice of collected data as it best suits the objective of the study. This study proceeded with the survey of respondents and literature review and all the data was analyzed by the Statistical Product for service solution (SPSS) and given validation. The collected data and gathered information from those methods support to explain the effect of teachers' knowledge (competence) of subject matter on the performance of learners with visual impairment, to what extent does the teacher's knowledge of the learners' impairment affect their academic performance, to what extent does teaching methods influences the academic performance of students with visual impairment, what is the impact of instructional materials on the academic performance of students with visual impairments, to what extent does the academic performance of students with visual impairment in the education sector.

### The research area of study

This study was carried out in Bamenda Municipality and Mezam division in particular. Bamenda is the capital of the North West Region of Cameroon. The town is found in the western high lands of Cameroon and has a population of above 465000 inhabitants (2015), it is the third-largest Cameroonian city after Yaoundé and Douala. It has a total surface area of 5,250 kilometers square, a total of seven sub-divisional councils. It is a cosmopolitan city that is the bedrock of Cameroon politics with a very strong traditional setup and extremely powerful Fons and Fondoms. The population though cosmopolitan has a greater majority of local ethnic groups (Tikar and Nguemba) which include, Mendadakwe, Bandzah, Nsongwa, Chomba, Mankon, Mbatu, and Nkwen who practice subsistence farming.

Due to the hard-working nature of the farmers, the town can boast of rich varieties of food crops and cash crops which include; coffee, potatoes, cabbage, tomatoes, beans, and corn. These food crops are exported to other towns in the Littoral, the southwest regions, and other regions that are not opportune to produce them. The work of art of the local population is worth emulating as it projects the North West nationally and internationally. The colorful designed traditional attire worn by both men and women depicts a culture that has stood the test of time. The town is endowed with touristic potentials owing to its landscape characterized by waterfalls, craters, and traditional places. Bamenda is an Anglophone city. The language mostly used for communication by the population is Cameroonian Pidgin English. Bamenda also has an Airport.

Great changes have been recorded in the town with the advent of the University of Bamenda which hosts the Higher Teachers Training College, the Higher Technical Teachers Training College, Higher Institution of commercial Management, College of Technology, and the Faculties of Health and Sciences. It is the site of several other higher institutes of learning including one of Cameroon's three Catholic Universities.

Bamenda is 366 kilometers North West of the Cameroonian capital, Yaoundé. Bamenda has a tropical savanna climate, bordering on a tropical monsoon climate. It is known for its cool climate and scenic hilly location. The higher elevation is 1,614m. It has extended periods of rainfall during the rainy season and a considerable less rainfall in the dry season. The average temperature is 23F. Major activities in this area include services such as banking, education, and agriculture. There are several learning institutions in the area, ranging from primary to universities.

Bamenda is also a host to numerous small and medium-sized enterprises (SME) such as carpentry, cosmetics, food services, microcredits institutions, and many more. Some examples of these SMEs in Bamenda Municipality include Azire cooperative credit union company, Njieforbi bakery, New century Restaurant, White House Restaurant, Dreamland restaurant, the Abakwa FM Radio/CNTV communication, Radio Evangelium, Radio hot cocoa, Awah, and sons business center.

The information was gotten by sending out and collecting questionnaires. The procedures for collecting and testing appropriate samples were; questionnaire that consists of demographics, teachers' knowledge, specific teaching method, teachers instructional materials, and other comments, were distributed to 81 teachers of GBHS Bamenda, the score was considered an average number of population responses and SPSS was used for analysis and test.

# **Research Design**

Sekeran (2009) defines it as the scheme, outline, or plan used to respond to a research problem. He again defines it as the master plan defining the methods and procedures used to collect and analyze the information needed. Research design is a complete guideline of a study where the direction of a data gathering, uses of instruments, processing and analyzing of the collected data which focuses on the main research questions. Research design guides the researcher with a plan of action and its constraints. Research design facilitates the smooth running of the various research operations, thereby making research efficient as possible in yielding maximal information with minimal expenditure of effort, time, and money (Kothari, 2004).

The research design for this study would be a cross-sectional survey. A cross-sectional study is a type of research design in which data is collected from many different individuals at a single point in time using a Likert-type questionnaire. It usually provides rich details about the variables under investigation. The design was chosen because it enabled the researcher to capture a lot of information in a short period. A cross-sectional survey typically seeks to provide insight into a specific situation and often emphasizes those involve in the perspectives and perceptions. To give a complete snapshot of a case being investigated, it uses direct observation. It is helpful if you don't know much about a phenomenon (Bryman, \2004). Various authors such as Nichols & Childs,( 2009; )Potter, (2003); Smith, (2008) prove the design carries numerical data and valuable assumptions that can be made in this way.

# **Target Population and Sampling in General**

Choosing a suitable and particular target population was a significant part of the survey and the researcher must figure out the group of respondents. In this study, the target population was 102 teachers in the Anglophone section in GBHS Bamenda seen in the table1 According to Sekaran, (2003) population is a group of individuals, objects, or things from which samples are taken for measurement or a whole group of individuals, or elements that have at least one thing in common. Anything that can be counted can be a unit of the population. But if you can't get details from it, and you can't measure it in any way, it's not a population unit that can be used for survey research (Yin, 2003). This research will measure factors like knowledge (competence), skills, instructional materials, teaching methods, and assessment/evaluation of the academic performance of learners with visual impairment, and the purpose of the respondents was revealed in the way they answered the questionnaires.

	Number of t	teachers
Female	Male	Total
18677	22984	41661
2334	2121	4455
176	89	265
63	37	100
	18677 2334 176	FemaleMale18677229842334212117689

# **Table 1: Population Table**

#### Source: MINESEC Statistical yearbook 2018-2019

#### Sampling Size

Sekeran (2009) further describes a sample as a subset of the population and adds that it contains some selected members of the population, i.e. some of the population elements from the sample. It is also defined by Amin (2005) as a segment of the population selected for investigation. The study considered any teacher teaching a student(s) with visual impairment regardless of age and gender. This was done to minimize bias. The sample size of 81 respondents of teachers in Government Bilingual High School (GBHS) Bamenda Municipality was selected for the study as seen in table 1

The sample size was determined from the use of Cochran's correlation formula as edited by Bartlett et al, 2000.

The population of this study was referred to the calculating method of Taro Yamane (Yamane, 1973) and the confidence level is 95%. His formula is mentioned below:

n = N/1 + N(e2)

Where:

n= sample size required

N= population size

e= allowable error (%) if the level of precision is 95% sure about the respondent results (e=0.05).

The sample size calculation method for this research is as follows:

n = 100/1+100(0.05) n=100/1+100 (0.0025) n=100/1+0.25n=100/1.26 n=100/1.26n = 80

That was why the research took 80 respondents as the sample size of the study. Sekaran (2003) suggested that large sample size could be a concern and recommends a sample size ranging from 30 to 500. Likewise, Enon (2002) suggested that at least 30 samples should be available for study. Based on the above literature, the sample size of 8 respondents was selected for inclusion in this study due to time and financial constraints.

# Sampling Techniques

Bless et al.(2006) suggested that sampling is to draw inference from the data collected about the greater population (Kothari,2004) says sampling may be defined as the section of some part of an aggregate or totality on the basis on which a judgment or inference about the aggregate or totality is made. That is to say, it is the process of obtaining information about an entire population by examining only a part of it. In this study, the researcher carried out a study in the area of teacher's instructional practices and the performance of learners with visual impairment in Government Bilingual high school in Bamenda, using a sample of teachers from the institution.

The purposive sampling technique was used to select the required number of teachers for this study. This school was purposively chosen (non -random sampling) because it was the pilot Government secondary school in the Region that includes learners with visual impairments. The purposive sampling technique was used to select the required number of teachers because they were the ones who taught and interacted with VI learners in the classrooms. The most important point to consider here is the sample size which was the representation of the total population. The ideal would have been to study the entire population but for the fact that it was costly and time-consuming, it was, therefore, necessary to bring out the sample with the same characteristics as the entire population.

Convenience sampling includes identifying and choosing individuals or groups of individuals selected from the target population based on their accessibility to the researcher or convenience. This approach was tried by the researcher to question respondents of suitable accessibility and proximity to the researcher (Smeeton, 2003). This approach was used in combination with the Purposive sampling method mainly determined by the design of the target group to obtain specific information from these respondents.

# Instrument of Data Collection

The main tool for data collection is the Likert scale questionnaire. A questionnaire is a method for collecting data from a large sample or number of respondents (Amin, 2005). This Likert scale type questionnaire was developed by Sekeran (2009) with the help of suggested guidelines. The questionnaire was divided into five sections as follows:

Section (A): The questions are set to generate the demographic information about respondents containing gender, age, academic qualification, professional qualification, as well as teaching experience of the respondents.

Section (B): This section gives to respondents to gain answers about teachers' knowledge (competencies) of the subject matter t.

Section(C): This section sets to inquire on the teachers teaching methods for learners with VI

Section (D): This section examines Teachers' knowledge of learners' disability or impairment.

Section (E): This section talks about the materials Teachers use to teach learners with visual impairment in the classrooms.

Section (F): This section brings out the different ways of how Teachers Assess and evaluates learners with visual impairment.

Section (G): And lastly this section talks about the Performance of learners with visual impairment. We used the liked scale questionnaire with options:

strongly agree,

- ➤ agree,
- strongly disagree and
- ➢ Disagree.
- > Undecided
- Always
- > Never
- ➢ Sometimes

In each section, the respondents were given clear instructions on how to complete the item. The items in the questionnaires are framed in a short, precise, and straight-to-the-point manner to reduce the risk of misunderstanding between the researcher and the sample. The statements are organized according to the main themes. As per the indicators, the researcher made use of the Nominal measurement scale since the modalities are less than five. The administration was done in the month of April and May 2021. A total of 100 questionnaires were administered but some teachers did not respond to the questionnaires and therefore, there was a return of 81 making a total loss of 19 questionnaires.

# **Reliability and Validity**

The collected data can be through questionnaires, interviewing, observation and experiments, and primary, secondary, or both. Those data must emphasize and must be examined to prove reliability and validity.

# Validity of the Research Instrument

An instrument's validity refers to the instrument's appropriateness to assess what it wants to measure (Amin, 2005). Validity is the concept of providing the true finding or result in a research study. It implies how accurately the researcher will collect and analyzes the data whereas, the reliability of the research looks into evidence that the researcher researched properly. It is important to make sure the measurement provided from the data collected is valid, that inaccuracy is avoided and questions are not biased. Having a reliable study will provide accurate validity of the research and will ensure correct results likewise precise findings (Coates & Sloan, 2008).

A pilot study was carried out using 10 teachers who teach learners with visual impairments in GBHS Mendong located in the capital city of Yaoundé VI Municipality

Through piloting the content validity of the research instrument for this analysis would determine where the subject responses are tested against the research goals. The material selected and included in the questionnaire must apply to the parameter being studied for a research instrument to be considered valid. The research instruments of this study were pretested with teachers of GBHS Mendong located in the capital city of Yaoundé VI Municipality The reason for picking this school was because it had some learners with VI as compared to the other schools. The researcher performed the pilot test with 10 purposely selected teachers (10%) in GBHS Mendong. These respondents for piloting are teachers who teach learners with visual impairments. Piloting provided a good opportunity for the researcher to identify any weakness in the instruments, and to find out if the anticipated data analysis techniques were appropriate. The findings from the pilot study allowed the researcher to rework the research instruments for improvement in case of inconsistencies: typographic errors, language used, and any ambiguities were removed.

# Internal validity

Credibility or internal validity is a standard that ensures the research is carried out according to the general rules of good practice and providing findings for confirmation. In this context, coherency, accuracy, and authenticity are the basis of credible data. In this study, the construction of the questionnaires while considering the link between the question, objectives, hypothesis, and their indicators were imperative, and the process of verification, questioning, and theorization. The construction of the questionnaire followed this model, for its validity as seen in the neutrality of the items; the language. This was adjusted after piloting

# External validity

This is based on the relationship between the research problem and the population of the study. It aimed to determine if the instrument of measurement corresponded to the population and also the projection of the general results concerning the representatives. This questionnaire went through many stages during its construction.

# Face validity

After the construction of the questionnaire, it was examined by checking items' appropriateness and pointing out errors. All necessary corrections were made and face validity was ensured.

# Content validity

To ensure the content validity of the questionnaires were examined and corrections made in function of the research objectives. After making necessary adjustments to the objectives of the study, the instruments got their content validity.

# **Reliability of the Research Instrument**

Reliability is the consistency of the measurement or that is design to give the same conclusions if used at different times Vogt (2007). Reliability is produced to free the research from random errors and accurate results. According to the authors, such as Thorndike & Hagen (1991), Cooper & Schindler (2003), reliability consists of accuracy, stability, equivalence, and internal consistency. Zikmund (2000) explained that stability is a test-retest process and tests the same respondents at two separate points in time and reproduced the obtained results. The first step in ensuring reliability was to provide the variables under study with clear operational definitions. The study made use of a Likert scale hence suitability for reliability analysis. Likert scale enabled easier analysis as it minimized doubt on the type of response given. Zikmund (2000) explained that stability is a test-retest process and test the same respondents at two separate points in time and reproduced the obtained results. The first step in ensuring reliability was to provide the variables under study with clear operational definitions. Internal consistency was then measured by internal reliability of consistency (Sekeran, 2009) as well as split-half reliability using Cronbach's alpha. If the  $\alpha$  (Cronbach alpha) value is computed to be 0.7 and above, then the instrument is considered satisfactory (Cronbach, 1951 as cited by Sekeran and Bougie, 2010), using results from the pretested questionnaire.

Cooper & Schindler (2003) mentioned that equivalence brings to produces similar results whilst internal consistency measures the extent or items in scale or measurement are reflected or homogenous the same construct.

Cronbach's alpha coefficient was pegged on Mugenda, and Mugenda's rule of thumb (0.8). Cronbach's Alpha Test

$$\& = \frac{k}{k-1} \left[ 1 - \frac{\sum Items \ variances}{Scale \ variance} \right]$$

Where & = Cronbach's Alpha

K= number of items

# Table 2: Test for Reliability

Case Processing Summary			
		Ν	%
Cases	Valid	80	100.0
	Excluded	0	.0
	Total	80	100.0
a. Listwise deletion based on all the procedure.	variables in		

Reliability Statistics	
Cronbach's Alpha	N of Items
.800	42

# Administration of Instrument

The researcher obtained a letter of authorization from the head of the department to carry out the research and permitting the participants to cooperate with the researcher. The researcher then visited the teachers of the set school and introduced herself, presented her permission gotten from the university, and went ahead to self-administer the questionnaire in hard copy form to the teachers and picked them up later after a day or two to increase the response rate.

The researcher upon receiving the questionnaires examined and checked for full completion. However, not all the questionnaires were returned to the researcher; out of the 100 questionnaires that were administered 80 were returned making a return rate of 80%, and from the 20 questionnaires not returned, a non-return rate of 20% adding it up to 100%.

Department	Questionnaire Distributed	Questionnaire Returned	Return %
SCIENCE Teachers	40	31	19
ARTS Teachers	60	49	81
Total	100	80	80

 Table 3: Report on Return Rate of Questionnaires

#### Methods of Data Analysis

It involved drawing inductive inferences from data and distinguishing the interesting phenomenon from the statistical fluctuations present in the data as Amin (2005) proposed. To ensure accuracy, the data collected were checked; this helped ensure that the study's goals were achieved (Sekeran, 2009). This was done by the use of the Statistical Product for Service Solution (SPSS, 21.0). The analysis was done according to the objectives of the study. Descriptive and inferential statistical analysis was found to be the ideal analysis technique and subsequently used to examine the type of instructional practices teachers used in their classrooms and its effect on the performance of the learners with VI. This is because; this kind of analysis allows measurement, testing of hypothesis, confidence interval regression analysis, and description of the relationship between two variables (Amin, 2005).

Descriptive and inferential statistics were used to analyze all the objectives stated in the previous section which was to examine whether there was an effect in the performance of learners with VI if the instructional practices were followed as expected. A regression analysis test was conducted to test the relationship that existed between the predictor's variables. Traditionally a 95% confidence level (alpha=0.05) or 99% confidence level (alpha=0.01) is deemed acceptable. This significance analysis was to determine the "correctness" of rejecting or accepting the null hypothesis and gave the researcher confidence in the findings.

#### **Ethical Issues**

Ethical issues are regarded as an important element in social research where human behavior and its activities are dealt with from different perspectives. Therefore, social researchers take into consideration participants 'ethics in their research projects while respecting their rights and dignity. They avoid harmful activities and operate with honesty and integrity. Important standard guidelines and ethical considerations are kept in mind for this study to execute the data collection procedure smoothly.

To ensure ethical conduct in the study, all respondents have been informed about the study to have the corporate willingness (i.e. informed consent has been given). The information provided by respondents was treated as confidential and for academic purposes only. This enabled the respondent to corporate with minimum risk. Other ethical considerations included; briefing the respondents on the research purpose, its relevance in the research process, and their expectations. Again plagiarism, fabrication of data was avoided, privacy was maintained and anonymity of respondents was ensured.

Since the study is to examine the extent to which instructional practices have on the performance of learners with VI, therefore ethical issues were strictly thought of within the different stakeholders.

Taking into consideration all these ethical conditions, the researcher received a written note from the University of Yaounde 1, Faculty of Science of education permitting the collection of data from the set institution. Honesty and professionalism while collecting, processing data, and presenting the findings were preserved.

# Table 4 Synoptic Table

General	Specific questions	General	Specific	Variables	]	Indicators
question		hypothesis	hypothesis			
What is the effect of teacher's instructional practice on the performance of learners with visual impairment in GBHS Bamenda?	<ol> <li>What is the effect of teacher's competence of subject matter on the performance of learners with visual impairment?</li> <li>To what extent does the teacher's knowledge of the learner impaired affect their academic performance?</li> <li>To what extent do teaching methods influence the academic performance of students with visual impairment?</li> <li>What is the impact of instructional materials on the academic performance of students with visual impairments?</li> <li>To what extent does the assessment method influence the academic performance of students with visual impairments?</li> </ol>	There is a significant relationship between teacher's instructional practices and the performance of students with visual impairment in GBHS Bamenda.	H1 There is an subject matter a visual impairme H2 There is an the learner imp H3 There is an performance of H4 There is an material used a visual impairme H5 There is an and the perfo- impairment. The Null hypot There is no effe subject matter a visual impairme There is no effe student's impair There is no effe the performance There is no effe the performance of There is no sign	effect on the teacher's knowledge of airment with academic performance effect on teaching methods and the 'students with visual impairment in effect on the use of instructional nd the performance of students with ents. effect on assessment methods used ormance of students with visual hesis ect on the teacher's knowledge of the and the performance of learners with ent. fect on teacher's knowledge of the rment and their performance 'ect on teacher's knowledge of the rment and their performance 'fect on teacher's with visual impairment effect on the use of instructional d in the classrooms and the 'students with visual impairments. nificant link between the assessment ind the performance of students with	Independent variable: Instructional practices. -Dependent variable: Performance, visual impairment	-teacher's competencies in the subject matter -the teacher's knowledge of the students impairment -teacher teaching methods - instructional material - assessment methods -academic performance

# **CHAPTER 4**

# PRESENTATION, ANALYSES, AND INTERPRETATION OF RESEARCH FINDINGS

# **INTRODUCTION**

The purpose of this study is to examine the impact of teachers' instructional practices on the academic performance of learners with visual impairment in GBHS Bamenda in the five key areas addressed by the research objectives of the study. These were: To examine the impact of teacher's competence of subject matter on the academic performance of students with visual impairment, To determine how knowledgeable teachers are concerning learners impaired on their academic performance, To examine the extent to which teaching methods influence the academic performance of learners with visual impairment, To evaluate the influence of instructional materials on the academic performance of learners with visual impairment, To determine the extent to which assessment method influences the academic performance of learners with visual impairment. Each of these variables had indicators that facilitate the measurement of the constructs. The findings obtained will be integrated with the literature to form a comprehensive understanding of the results that had been obtained. The results will be depicted using descriptive and inferential statistics.

# **Descriptive Statistics**

Descriptive statistics are used to describe the data in a manner that is simple to understand. In this study, the mean, variance, frequency, and standard deviations will be employed. The data will be presented in the form of tables, graphs and will be interpreted and discussed in the following sections.

# Socio-Demography Factor

The socio-demographic factor consists of 7 items which are: gender, age, classes taught, subject taught, academic qualification, professional qualification, and teaching experiences. The table below summarizes our findings.

SN	ITEM	MODALITIES	PERCENTAGES
PA	Subject Nature	Arts	63
		Sciences	37
P1	Gender	Male	33.3
		Female	66.7
P2	Age Range	< 20 years	0
		20-35 years	27.2
		36-45 years	39.5
		46-55 years	28.4
		>55 years	4.9
P3	Academic qualification	Advanced Level	13.6
		First Degree	69.1
		Master	17.1
		PhD	0
P4	Professional Qualification	HND	1.2
		DIPES I	42
		DIPES II	56.2
P5	Teaching experience	< 5 years	9.9
		6-10	37
		11-15	21
		16-20	4.9
		>21 years	27.2

# Table 5: Socio-Demography Factor

# Gender

Our study sample is predominantly females. The distribution shows that 27 of the 81 respondents were male giving a percentage of 33.3% and 54 of the 81 respondents were female with 66.7% of the sample. This reflects the national distribution of gender in Secondary education in Cameroon indicating our sample was bias. Also, we shall eventually verify if gender influences the expected outcome in our study.

#### Age

Age represents an indispensable factor in determining the maturity and experience of the respondent. The age factor here is to consider the kind of skills and competency which a teacher may have.

From the table above, almost 39.5 % of respondents are between the range of 36 - 45 years and 28.4 between 46 - 55 years. We can conclude the majority of teachers (67.9%) are mature, experienced, and responsible to be inclusive in their teachings. It is observed that no respondent was below 20 years who participated in the study.27.2% are between 20- 35 years of age.39.5% are of age between 36-45 years then 28.4% are between 46-55 years of age and finally, only 4.9% are above 55 who took part in the study.

#### Academic and Professional qualification

Preparing teachers begins with the selection of those who are to enter the training which stems from the country's need to attract a large number of teachers to expand access to education quickly and reduces the class size (Fonkeng, unpublished). This was used as one of the indicators of instructional practice under the modality of teachers' competency to teach learners with vision impairment.

From the table above, the academic qualification distribution is classified into 4 groups. It is observed that the majority of the teachers (69.1%) are teaching with a Bachelors's certificate and 17.3% are teaching with a Master's degree certificate. Thus 86.4 % have at least a first degree.

This 86.4% of respondents with at least first degree as academic quality ties with the requirements for admission into 56.8% respondents with DIPESS II, and reveals the 29.6% are likely some of the 42% of teachers with DIPES I who have further their students and had a first degree. It reveals our respondents have the necessary pedagogic content known to teach.

# Teaching experience

Work output and productivity to a greater extent depend on appropriate experience. Thus it was necessary to establish the experience of the respondents about effective teaching.

Looking at their longevity or experiences, 9.9% of the respondents have served for less than 5 years. Between 6-10 years we have respondent scored 37%. Between 11-15 years we have respondent scored 21%. Between 16-20 years we have respondent scored 4.9% and those

teachers with 21 and above level of experience were only 27.2%. This doesn't tie with the definition which says the more the experience the better work done in the case of instructional practices as shown from the statistics obtained; teachers need to put up a positive attitude towards the inclusion of learners with VI in their classrooms.

# Subject and classes taught

In summary, the statistics gotten from the tables, the school is made up of teachers who are between 36-45 years of age, with a bachelor's degree, and have a DIPES 11 with 6-10 years of teaching experience. According to (Mphale1 & Mhlauli1, 2014) the lack of skills /teaching experience of most of the teachers teaching learners could be one of the contributing factors to the learners' poor academic performance in examinations and tests.

# VERIFICATION OF RESEARCH QUESTIONS/HYPOTHESES AND DESCRIPTIVE, INFERENTIAL STATISTICS

# *Research Question 1:* What is the effect of teacher's competence of subject matter on the performance of learners with visual impairment?

To answer this first sub-research question, we, first of all, carried out a descriptive analysis of our Independent Variable (**teacher's knowledge of subject matter**) and thereafter, correlated our findings with that of our Dependent Variable (**performance of learners with visual impairment**).

# Table 6 : Teachers' knowledge of the subject matter

It reveals the findings on teachers' knowledge of the subject matter to teach learners with visual impairment in an inclusive classroom.

S/N	TEST ITEMS	% AGREED	% DISAGREE
			OR
			UNDECIDED
1	I consider myself knowledgeable with experience	34.6	65.4
	gotten from seminars to teach learners with visual		
	impairment.		
2	I am trained with skills to teach learners with	38.2	61.8
	visual impairment in my class.		
3	I often adapt my teaching to meet the needs of	66.7	33.3
	learners with visual impairment in my class.		
4	It is good to use brail to teach Learners with	37	63
	visual impairment in the classroom.		
5	I am focus when explaining to learners with	29	71
	visual impairment.		
	Mean percentage (1+2+3+4+5)	41.1	58.9

About one-third of respondents (60to 70%) self-declared they are incompetent to teach learners with visual activities from response to test items 1 and 2 because of inadequate training. They however recognize the need for inclusive techniques in teaching as more than two-thirds of respondents disagreed with test items 4 and 5 on the table above. Agreement with Test items 4 and 5 must-have likely confirms or justifies their self-declared incompetence to teach visually impaired.

The lack of skills of most of the teachers teaching learners could be one of the contributing factors to the learners' poor academic performance in examinations and tests as is seen in (Mphale1, & Mhlauli1, 2014). The use of special needs teachers by the school administration and other learning support workers would bring some needed additional resources to augment teachers' efforts in the classrooms.

In this section, each of the hypotheses of the study is re-stated and the variables are identified. The statistics needed to test each hypothesis are stated and the results of the data analysis are presented and interpreted. Each hypothesis is tested at the alpha level of 0.05

# **Hypothesis One**

H1-Teacher's knowledge of the subject matter affects the performance of learners with visual impairment.

H0: -The teacher's knowledge of the subject matter does not affect the performance of learners with visual impairment.

# Table 7: model summary of hypothesis one

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.30ª	.09	004	3.51935

# **Model Summary**

a. Predictors: (Constant), teachers knowledge to teach learners with visual impairment

From the table above, R-value is .30,  $R^2$  is .09 and the adjusted  $R^2$  is -004 and the standard error is 3.51935. R is the square root of R squared. It shows the correlation between the observed and the predicted values of the dependent value. R square is the proportion of the variance in the dependent variable which can be predicted from the independent variable. R squared shows the coefficient of determination. Adjusted R squared = ((1-Rsq)(N-1)/(N-k-1)) . R-value here 0.95 shows a high degree of correlation. The R squared is 0.9 which gives us a 9% variance

# Table 8: an ANOVA table of hypothesis one

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.879	1	8.879	.717	.040 <sup>b</sup>
	Residual	978.479	79	12.386		
	Total	987.358	80			

# ANOVA

#### a. Dependent Variable: academic performance

b. Predictors: (Constant), teachers competencies to teach learners with visual impairment

From the Anova table above, our significance value is .040 which is less than Alpha 0.05, for an F(1.16)=.717 which gives us P=.040. Hence we can say that the regression model statistically and significantly predicts the dependent or outcome variable which is academic performance.

# Table 9 : A coefficients table of hypothesis one

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	т	Sig.
1	(Constant)	9.211	1.453		6.341	.000
	Teachers competencies to teach learners with visual impairment	.085	.100	.095	.847	.040

#### Coefficients

a. Dependent Variable: academic performance

From the tables above, we noticed that based on the t value 6.341 the Beta (B) is .085 and the significant level of .040 which is less than the Alpha level of 0.05.

Therefore (n-1) 80– 1=79 degree of freedom, predictors (independent variables) 5-1=4. Thus the residual degree of freedom will be 79-4= 75. Comparing the critical value of 0.05 with the significance value of 0.040, we discover that this value is less than the critical value. We thus

reject the null hypothesis which states that the teacher's knowledge of the subject matter does not affect the performance of learners with visual impairment and conclude that we accept the research hypothesis which states that the teacher's knowledge of the subject matter affects the performance of learners with visual impairment.

# **ANALYSIS OF VARIABLES OF RESEARCH QUESTION 2**

*Research Question 2:* To what extent does teaching methods to influence the academic performance of students with visual impairment?

The second task was to find out whether learners with visual impairment were comfortable in inclusive classrooms. The table presents findings on methods used in teaching learners with visual impairments.

 Table 10 : Teacher's knowledge of the learners' impairment affects their academic performance.

S/N	TEST ITEMS	Alway	At	Neve
		S	Times	R
TM1	I use names when addressing learners with visual	19.2	38.8	42
	impairment during teaching.			
TM2	I don't gesticulate but I verbalize/dictate when writing	11.1	33.3	55.6
	on the chalkboard so the learner can have access to the			
	information and follow along.			
TM3	I mix visually impaired learners with non-visual	24.7	17.3	58
	impaired learners together during Group work.			
TM4	I use active, hands-on learning to facilitate learning	12.1	55.6	32.3
	during a demonstration lesson in my classrooms			
TM5	I am audible when explaining/ instructions during a	12.3	30.9	56.8
	teaching in my class classrooms			
TM6	I vary my teaching methods/strategies depending on	8.6	42	49.4
	the type of lesson.			
TM7	I record lessons for learners with visual impairment.	11.1	40.1	48.7
	Mean Percentage	14.3	36.8	48.9
	(TM1+TM2+TM3+TM4+TM5+TM6+TM7)			

Most of the teachers' self-declared response to the teaching methods to learners with visual impairment is **inadequate** the mean expected percentage score is only 48.9%. This is indicated by the fact that only12.1% use active, hands-on learning to facilitate learning during a demonstration lesson in my classrooms (TM4) The teacher-centered teaching methods that do not accommodate all learners, (Habulezi, Molao, Mphuting & Kebotlositswe, 2016), are counterproductive and detrimental to learners 'performances. Teachers are assets, rich resources of information and support.

Therefore, they need to be responsive, creative, accommodative, and inclusive in their routine facilitation of classroom activities for the benefit of all learners. In the case of learners with vision impairment, pre or post-lesson sessions would be appropriate to compensate for the missing incidental information acquisition and to promote parity in classroom participation. Landberg, Kruger, and Swart (2016) advise that teachers should encourage critical thinking, argumentation, reflection, and action on the part of learners in the learning situation. Holbrook and Koenig (2010) agreed that in the absence of vision, it was important to give learners sensory training to the remaining senses like the senses of touch and hearing so that they might be used as sources of information. Teachers are expected to read and described what they wrote on the chalkboard. This will complement the missing incidental learning other learners with sight enjoy.

# Hypothesis two

**H1:** Teachers' teaching methods affect the academic performance of students with visual impairment

**H0:** Teachers' teaching methods do not affect the academic performance of students with visual impairment.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.30ª	.09	003	3.51909

# Table 11: model summary of hypothesis two Model Summary

# Table 12 : an ANOVA table of hypothesis Two

# ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.025	1	9.025	.729	.039 <sup>b</sup>
	Residual	978.333	79	12.384		
	Total	987.358	80			

a. Predictors: (Constant), teachers' teaching methods to learners with visual impairment

From the table above, R-value is .30,  $R^2$  is .09 and the adjusted  $R^2$  is -003 and the standard error is 3.51909. R is the square root of R squared. It shows the correlation between the observed and the predicted values of the dependent value. R square is the proportion of the variance in the dependent variable which can be predicted from the independent variable. R squared shows the coefficient of determination. Adjusted R squared = ((1-Rsq)(N-1)/(N-k-1)) . R-value here 0.30 shows a high degree of correlation. The R squared is .09 which gives us a 9% variance

# a. Dependent Variable: academic performance

b. Predictors: (Constant), teachers teaching methods to learners with visual impairment

From the Anova table above, our significance value is .039 which is less than Alpha 0.05, our P-value is F(1.16)=.729 which gives us P=.039. Hence our P-value is F(1.16)=.729 which gives us P=.039. Hence we can say that the regression model statistically and significantly predicts the dependent or outcome variable which is academic performance.

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	т	Sig.
1	(Constant)	8.889	1.807		4.920	.000
	Teacher's teaching methods to learners with visual impairment	.118	.138	.096	.854	.396

# Table 13: A coefficients table of hypothesis two Coefficients

a. Dependent Variable: academic performance

From the tables above, we noticed that based on the t value .854 the Beta (B) is .118 and the significant level of .039 which is less than the Alpha level of 0.05

Therefore,  $(n-1) \ 80-1=79$ , degree of freedom. Comparing this value of 0.039 with the critical value of 0.05, we discover that this value is less than the critical value. We thus reject the null hypothesis that states that teachers' teaching methods do not affect the academic performance of students with visual impairment and concludes that we accept the research hypothesis which states that teachers' teaching methods affect the academic performance of students with visual impairment.

# ANALYSIS OF VARIABLES OF RESEARCH QUESTION3

*Research Question 3:* To what extent does the teacher's knowledge of the learners' impairment affect their academic performance?

The question sought to find out whether teachers know about the medical needs/conditions of learners with visual impairment to support them in their learning. Table 4.10 presents findings on teachers' knowledge on learners' disability learning for learners with VI.

S/N	TEST ITEMS	%	%
		AGREE	DISAGREE
ТК	A teacher must know about the medical	21	79
1	needs/conditions of learners with visual impairment.		
ТК	It's not the teacher's business to know about the	23.5	76.5
2	academic strengths /weaknesses of learners with		
	visual impairment.		
ТК	A teacher must know the favorite /disliked subjects	25.9	74.1
3	of learners with visual impairment.		
ТН	The teacher should know about the flexibility or	26.7	73.3
4	timidity of their visually impaired students		
ТК	The teacher should not care about learners reading	78.8	22.2
5	habits/reading level.		
ТК	The teacher needs not to be interested in their social	64.4	34.6
6	interactions in the classroom.		

Table 14: Teacher's knowledge of the learners' impairment

From the results gotten from the respondents TK1, 79% are attesting to the fact that a teacher does not need to know about the medical needs/conditions of learners with visual impairment. Knowing your learner 'condition will better help them towards achieving their goals. We have also seen from result TK5 that teachers will love and are willing to help the learners with their reading habit /reading level to improve their performances. From literature, it is said that" Teachers require knowledge of the unique skills that every child brings to the classroom to target instruction towards students' needs, a pedagogical approach with strong empirical support (Connor, Morrison, Fishman, Schatschneider & Underwood, 2007; Connor et al., 2011)". The results obtained, conform to what is written literature.

But a small number (23.46%) of teachers have their attitude towards the teaching of learners with vision impairment. They think that the Government should create special schools for those with disabilities and train their teachers too. Some of their teaching sessions are devoid of a sense of care, responsiveness, adaptation, cohesiveness, and synergy that binds

people together (Landberg, Kruger & Swart, 2016); hence, the learners' poor academic showing in their subjects.

# Hypothesis three

H1: Teacher's knowledge of the learners' impairment affects their academic performance

**Ho:** The teacher's knowledge of the learners' impairment does not affect their academic performance.

# Table 15: model summary of hypothesis three

Model Summar	y
--------------	---

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.298ª	.093	.030	3.45914

a. Predictors: (Constant), teachers knowledge

From the table above, R-value is .298,  $R^2$  is .093 and the adjusted  $R^2$  is .030 and the standard error is 3.45914. R is the square root of R squared. It shows the correlation between the observed and the predicted values of the dependent value. R square is the proportion of the variance in the dependent variable which can be predicted from the independent variable. R squared shows the coefficient of determination. Adjusted R squared = ((1-Rsq)(N-1)/(N-k-1)) The R squared which is .093 accounts for 9.3% of the variance in the dependent variable.

# Table 16: an ANOVA table of hypothesis three

# ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	42.069	1	42.069	3.516	.034 <sup>b</sup>
	Residual	945.289	79	11.966		
	Total	987.358	80			

a. Dependent Variable: academic performance

b. Predictors: (Constant), teachers knowledge

From the Anova table above, our significance value is .034 which is less than Alpha 0.05, our P-value is F(1.16)=.3.516 which gives us P=.0.034. Hence we can say that the regression model statistically and significantly predicts the dependent or outcome variable which is academic performance.

#### Table 17: A coefficients table for hypothesis three.

	Coefficients								
		Unstandardize	Standardized Coefficients						
Model		В	Std. Error	Beta	Т	Sig.			
1	(Constant)	6.738	1.988		3.389	.001			
	Teachers knowledge	.205	.109	.206	1.875	.034			

a. Dependent Variable: academic performance

From the tables above, we noticed that based on the t value 1.875 at the Beta (B) which is .205 implying for every one unit change in the predictor variable the outcome variable changes by 0.205 at the significant level of .034 which is less than the Alpha level of 0.05. Therefore  $(n-1) \ 80-1=79$  degree of freedom. Comparing this value of 0.034 with the critical value of 0.05, we discover that this value is less than the critical value. We thus reject the null hypothesis which states that teacher's knowledge of the learners' impairment has no effect on their academic performance and concludes that we accept the research hypothesis which states that teacher's knowledge of the learners' impairment affects their academic performance.

# ANALYSIS OF VARIABLES OF RESEARCH QUESTION4

*Research Question 4* What is the impact of instructional materials on the academic performance of students with visual impairments?

The question sought to find out whether all learners with visual impairment in GBHS Bamenda were provided with enough learning materials to support them in their learning.

S/N	TEST ITEMS	Always	At	Never
			times	
IM1	I use various audio devices to record instructions/assignments and test for learners with	13.6	37	49.4
IM2	visual impairment. I use didactic material like brail, the felt tip pen, braille textbooks to prepare, facilitate lessons for learners with	9.9	37	53.1
IM3	visual impairment. I allow learners with visual impairment to manipulate materials in class during the	23.5	27.2	49.4
IM4	teaching/learning/instruction process I make sure learners touch and feel visual aids/materials to use during a demonstration lesson or process. (tactile	42	21	37
IM5	learning experiences) I mostly draw or represent the material to use for a demonstration on the chalkboard.	27.2	44.4	38.4
	MEAN PERCENTAGE (IM1+IM2+IM3+IM4+IM5)	21.22	33.32	45.46

 Table 18: Instructional materials for learners with visual impairments.

Most of the teachers' self-declared responses to the use of teaching tools/instructional materials to learners with visual impairment are very low. The mean expected percentage score is only 21.22%. This is indicated by the fact that only 9.9% always use didactic material like brail, the felt tip pen, braille textbooks to prepare, facilitate lessons for learners with visual impairment. (IM2). Also, only 21% of teachers make sure learners touch and feel visual aids/materials during a demonstration lesson some of the diagrams included in assessment tasks have no bearing on the answering of questions and these just increase material for reading when in fact the effort should be to reduce it. Njue, Aura, and Komen (2014) advised that individual differences of the learners should be put into consideration and the teachers should therefore choose materials that maximally benefit individual learners. Effort should be made to avail recorded, brailed, or enlarged teaching and learning resources to promote equal access to education for all learners

# Hypothesis four

**H1:** Teachers' instructional materials affect the academic performance of students with visual impairments.

**H0:** Teachers' instructional materials do not affect the academic performance of students with visual impairments.

# Table 19: model summary of hypothesis fourModel Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216ª	.047	.035	3.45193

a. Predictors: (Constant), teachers' instructional material

From the table above, R-value is .216,  $R^2$  is .047 and the adjusted  $R^2$  is .035 and the standard error is 3.45193. R is the square root of R squared. R square is the proportion of the variance in the dependent variable which can be predicted from the independent variable. R squared shows the coefficient of determination. Adjusted R squared = ((1-Rsq)(N-1)/(N-k-1)) . R-value here 0.216 shows that there is a low positive degree of correlation. The R squared is 0.035 which gives us a 3.5% variance in the dependent variable explained by the independent variable.

# Table 20: an ANOVA table of hypothesis four

# ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	46.008	1	46.008	3.861	.043 <sup>b</sup>
	Residual	941.350	79	11.916		
	Total	987.358	80			

a. Dependent Variable: academic performance

b. Predictors: (Constant), teachers instructional material

From the Anova table above, our significance value is .043 which is less than Alpha 0.05, our P-value is F(1.16)= 3.861 which gives us P=0.43. Hence we can say that the regression model statistically and significantly predicts the dependent or outcome variable which is academic performance.

# Table 21: A coefficients table of hypothesis four

# Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	т	Sig.
1	(Constant)	6.819	1.860		3.666	.000
	Teachers instructional material	.336	.171	.216	1.965	.043

a. Dependent Variable: academic performance

From the tables above, we noticed that based on the t value 1.965 at the Beta (B) which is .336 implying for every one unit change in the predictor variable the outcome variable changes by 0.336 at the significance level of 0.043 which is less than the Alpha level of 0.05

Therefore (n-1) 80– 1=79 degree of freedom. Comparing this value of 0.043 with the critical value of 0.05, we discover that this value is less than the critical value. We thus reject the null hypothesis that states that teachers' instructional materials have no effect on the academic performance of students with visual impairments and accept the research hypothesis which states that teachers' instructional materials affect the academic performance of students with visual impairments.

# **ANALYSIS OF VARIABLES OF RESEARCH QUESTION 5**

*Research Question 5* To what extent does the assessment method influence the academic performance of students with visual impairment?

The questions in this key area aimed at establishing the extent to which teachers adapt the teaching/learning resources and examinations to suit the needs of learners with visual impairments. The table presents finding on the adaptation of teaching/learning resources and exams to suit the needs of students with VI.

S/N	TEST ITEMS	Alway	At	Never
		S	Times	
AE1	I give oral instructions and read assignments for	16	37.2	58.8
	learners with visual impairment			
AE2	I hand in test/examination questions for brailing before	21	39.5	39.5
	the examination day			
AE3	I give visually impaired learners additional time to	13.6.	40.7	45.7
	complete their work.			
AE4	I record tests, examinations, assignments for learners	23.9	25.5	50.6
	with visual impairment.			
AE5	I read test questions for learners to respond in case the	24.3	37	38.3
	exam is not transcribed into brail.			
	MEAN PERCENTAGE	19.76	35.98	44.26
	(AE1+AE2+AE3+AE4+AE5)	19./0	33.98	44.20

Table 22: Assessment and evaluation method

Most of the teachers' self-declared response that during **Assessment and Evaluation** to learners with visual impairment they do not give oral instructions and read assignments for learners with visual impairment as seen in AE1 with 58.8% do not record tests, examination, assignments for learners with visual impairment as seen AE4 50.6%. This is proving that they don't recognize the fact that there exists diversity in the classroom. The mean percentage score is 19.76%. Hattie (2009) identified feedback as the single most powerful educational tool available for improving student performance. One of the concessions in the education of learners with vision impairment is providing aides or other special arrangements to undertake to teach, learning, or assessment tasks (Fraser & Maguvhe, 2008; Capps, Kingsley, Kuo & Roecker, 2014).

The findings do agree with the literature that provision should be made to increase support because some learners may require one on one teaching. Classroom support helps to increase learner participation and academic achievement.

# Hypothesis five

**H1:** Teachers' assessment and evaluation methods used affect the academic performance of students with visual impairment.

**H0:** Teachers' assessment and evaluation methods used do not affect the academic performance of students with visual impairment.

# Table 23: model summary of hypothesis five

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.295ª	.087	.075	3.37845	

**Model Summary** 

a. Predictors: (Constant), teachers assessment and evaluation method

From the table above, R-value is .295,  $R^2$  is .087 and the adjusted  $R^2$  is .075 and the standard error is 3.37845. R is the square root of R squared. R square is the proportion of the variance in the dependent variable which can be predicted from the independent variable. R squared shows the coefficient of determination. Adjusted R squared = ((1-Rsq)(N-1)/(N-k-1)) . R-value here 0.295 shows a moderate positive degree of correlation. The R squared is .087 which gives us 8.7% variance in the dependent variable that is significantly explained by the predictor variable.

# Table 24: an ANOVA table of hypothesis five

#### ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	85.659	1	85.659	7.505	.008 <sup>b</sup>
	Residual	901.699	79	11.414		
	Total	987.358	80			

a. Dependent Variable: academic performance

b. Predictors: (Constant), teachers assessment and evaluation method

From the Anova table above, our significance value is .008 which is less than Alpha 0.05, our P-value is F(1.16)=7.505 which gives us P=.0.008 Hence we can say that the regression model statistically and significantly predicts the dependent or outcome variable which is academic performance.

#### Table 25 : A coefficients table of hypothesis five

#### Coefficients

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	т	Sig.
1	(Constant)	6.534	1.459		4.480	.000
	Teachers assessment and evaluation method	.428	.156	.295	2.739	.008

#### a. Dependent Variable: academic performance

From the tables above, the researcher noticed that based on the t value 2.739 the Beta (B) is .428 and the significant level of 0.008 which is less than the Alpha level of 0.05

Therefore (n-1) 80– 1=79 degree of freedom. Comparing this value 0.008 with the critical value of 0.05, we discover that this value is less than the critical value. We thus reject the null hypothesis that states that teachers' assessment and evaluation methods used do not affect the academic performance of students with visual impairment accept the research hypothesis which states that teachers' assessment and evaluation methods used affect the academic performance of students with visual impairment.

To summarize this chapter, the researcher found out that teachers' knowledge which is the first hypothesis is slightly significant at 040 which is less than Alpha 0.05, for an F(1.16)=.717 which gives us a 9% variance on the dependent or outcome variable which is academic performance. This significant value is low because only one school was used for the study. For hypothesis two the researcher found out that teachers methods have a value of .854 the Beta (B) is .118 and the significant level of .039 which is less than the Alpha level of 0.05 and is moderately significant for an F(1.16)=.717 which gives us 9% variance on the dependent or outcome variable which is academic performance. From the Anova table above our significance value is for the third hypothesis is .034 which is less than Alpha 0.05, our P-value is F(1.16)=.3.516 which gives us P=.0.034. This value is also moderately significant and from the descriptive statistics, teachers are agreeing to the fact that they need to be trained on how to manage learners with varying needs in their various classrooms. Looking at the ANOVA table for the fourth hypothesis, R-value here 0.216 shows that there is a low positive degree of correlation. The R squared is 0.035 which gives us 3.5% variance in the dependent variable explained by the independent variable, the t value of 1.965 at the Beta (B) which is .336 implying for every one unit change in the predictor variable the outcome variable changes by 0.336 at the significance level of 0.043 which is less than the Alpha level of 0.05. Comparing this value of 0.043 with the critical value of 0.05, we discover that this value is less than the critical value affirming that teachers' instructional materials have a positive effect on the performance of learners with visual impairment.

Lastly but not least, for the fifth hypothesis Teachers' assessment and evaluation methods used does affect the academic performance of students with visual impairment, the researcher noticed that based on the t value 2.739 the Beta (B) is .428 and the significant level of 0.008 which is less than the Alpha level of 0.05 this shows that it is highly significant. Therefore instructional practices for learners with visual impairment should be handled with care in other to improve their academic performance.

# CHAPTER FIVE SUMMARY, RECOMMENDATION, LIMITATION, SUGGESTIONS AND CONCLUSION

# Introduction

The purpose of this study is to examine the impact of teachers' instructional practices on the academic performance of learners with visual impairment in GBHS Bamenda in the five key areas addressed by the research objectives of the study. These were: To examine the impact of teacher's competence of subject matter on the academic performance of students with visual impairment, To determine how knowledgeable teachers are concerning learners impaired on their academic performance, To examine the extent to which teaching methods influence the academic performance of learners with visual impairment, To evaluate the influence of instructional materials on the academic performance of learners with visual impairment, To determine the extent to which assessment method influences the academic performance of learners with visual impairment. Each of these variables had indicators that facilitate the measurement of the constructs. This chapter involves the evaluation of the research hypothesis or research questions by the research objectives and implications from the findings of the study and general conclusions. Recommendations to the different stakeholders, suggestions for further research, and the limitations of the study will be discussed here.

For the teacher to have knowledge in the subject matter and teach effectively, he/she must have specific relevant qualifications and are trained in the area. They however recognize the need for inclusive techniques in teaching as more than two-thirds of respondents agreed with H1. Agreement with Test items 3 to 5 must-have likely confirms or justifies their self-declared incompetence to teach visually impaired. From the regression analysis, the R-value shows a high degree of correlation with a variance of 9% which is significant at.040 which is less than 0.05 in the alpha value. Hence we can conclude that the regression model statistically and significantly predicts the dependent or the outcome variable which is academic performance.

Teachers recognized the need to be knowledgeable of the learners" impairment to better help them out individually in their diversity. From the results gotten from the respondents TK2, only 50.62% are strongly agreeing 17.3 % giving a total of 67.9% who are accepting the fact that a teacher must know about the medical conditions/ academic / weaknesses of learners with visual impairment to better help them towards achieving their goals. From the regression analysis, the R-value 0.30 shows a high degree of correlation with a variance of 9% which is significant at .039 which is less than 0.05 in the alpha value. Hence we can conclude that the regression model statistically and significantly predicts the dependent or the outcome variable which is academic performance.

Most of the teachers" self-declared response to the teaching methods to learners with visual impairment is **inadequate** the mean expected percentage score is only 37.1%. This is indicated by the fact that only 32.1% always use active, hands-on learning to facilitate learning during a demonstration lesson in my classrooms

To them, more didactic materials should be provided and used for the benefit of the learners with VI confirming with **RH3.** From the regression analysis, the R 0.298 and adjusted R square is 0.030 value shows a high degree of correlation with a variance of 9.3% with a significance of 0.034 which is less than 0.05 the alpha value. Hence we can conclude that the regression model statistically and significantly predicts the dependent or the outcome variable which is academic performance.

Most of the teachers" self-declared response to the use of teaching tools/instructional materials to learners with visual impairment are very low. The mean expected percentage score is only 23.24%. This is indicated by the fact that only 9.9% always use didactic material like brail, the felt tip pen, braille textbooks to prepare, facilitate lessons for learners with visual impairment. (IM2). Also, only 42% of teachers make sure learners touch and feel visual aids/materials during a demonstration lesson as shown in the figure below (IM4). More didactic materials should be provided and used for the benefit of the learners with VI confirming with **RH4**. From the regression analysis, the R-value 0,216 shows a low positive degree of correlation with a variance of 3.5% at a significance of .043 which is less than 0.05 in the alpha value. Hence we can say that the regression model statistically and significantly predicts the dependent or the outcome variable which is academic performance.

Most of the teachers" self-declared response that during Assessment and Evaluation to learners with visual impairment they do not record test, examination, assignments for learners with visual impairment. This is proving that they don"t recognize the fact that there exists diversity in the classroom. The mean expected percentage score is only 39.5%. However 56.8% of teachers give oral instructions and read assignments for learners with visual

impairment during classes and if they are educated, they will do the same for the other indicators, and it will affect performance. Provision should be made to increase support because some learners may require one on one teaching. Classroom support helps to increase learner participation and academic achievement confirming **RH5**. From the regression analysis, the R-value 0.295 shows a moderately positive degree of correlation with a variance of 8.7% with a significance of .008 which is less than 0.05 in the alpha value. Hence we can conclude that the regression model statistically and significantly predicts the dependent or the outcome variable which is academic performance.

#### **PROFESSIONAL IMPLICATIONS**

#### To the Teachers

The implications for theory and practice which grow out of this study are characterized below. As a teacher, you may find your role initially overwhelming, and virtually any classroom will require you to be consistent, attentive, reliable considerate knowledgeable to handle disabilities in the classroom as to become a skilful teacher

There is a need to increase awareness of the importance of adjusting instructional practices to address the difficulties learners with diversities may meet in the process of mastering a skill.

There is a need to pay attention during the conception, planning, implementation, and evaluation during lesson note preparation.

There is a need to increase awareness on continued research for improvement in any changing context

There is a need for teachers will reflect on teaching by continually examine and criticize their assumptions, inferences, instructional practices and regularly adjust their beliefs and strategies in the face of new evidence.

The need to learn more about specific strategies, techniques, teaching methods to teach particular subjects with the presence of particular learners in the classroom

The need to learn to know about the subject matter to be flexible in the approach of instructions and help develop enthusiasm in the learners during teaching.

There is a need for a strong relationship between teachers and the learners with visual impairment or disability.

#### To The School Authorities

There is a need to increase awareness on the importance of providing special measures to accommodate learners with impairment in addition to just admitting them.

Engage more actively in a dialogue between learners with disabilities and their families to better understand their problems.

# To The Education Authorities

Recognize the need to adjust the curriculum to meet the needs of learners with impairment

There is a need for comprehensive and intensive programs of in-service training with an emphasis on new approaches in content, sequence, and methodology.

#### To the Department of Curriculum Development and Evaluation

There is a need for the Department to recognize the important role of curriculum development and evaluation professionals in addressing the needs of learners with impairment by designing curricula that respond to diversity in the classroom.

There is a need for the schools and the Department of education to carry out careful studies to improve on the professional education courses and the content courses designed for learners with disabilities.

#### To the society

There is a need for increased awareness on comprehension of disability and visual impairment in society.

There is a need for a strong relationship between the community and the learners with visual impairment or disability for better integration.

There is an increasing need to support the education of learners with visual impairment by seeing them as one of you but with diversity.

To be effective in teaching without discrimination, the teacher must be an expert in subjective as well as content-based pedagogical knowledge, have mastery of instructional practices, create a productive and joyful learning environment, arouse learners interest during lessons, generating a compliant classroom environment for learners with adversities, bearing a strong ethical mind-set, dedication in the profession and intensive caring for all learners. In a sentence, a positive mind-set, positive attitude, the recognition of diversity, high expectations, and punctuality are all needed to be a quality teacher.

#### RECOMMENDATIONS

The following recommendations drawn from this study have been grouped according to the objectives of the study and also concerning the roles of each stakeholder in the teaching and learning process.

# Teachers' knowledge of the subject matter in teaching learners with VI;

Teacher training schools need to review their curricula to ensure that the focus is not only on the content of the subject matter but I emphasizing how this content could be delivered to learners with visual impairment. This will ensure that teachers graduating from teacher training institutions in addition to knowing the subject matter will also be equipped with strategies on how this subject matter could be transmitted to learners with various impairments including those with VI.

For teachers already in the field, the ministry through her decentralized structures could organize subject matter refresher courses with the emphasis on how these subject matter contents could be delivered to learners with various forms of impairments especially those with VI objectives of this study.

#### Teachers' knowledge of the learners' impairment;

Special courses on understanding disabilities and the various impairments should be introduced into teacher training programs. This will ensure that upon graduation each teacher has an idea of disability, the specificities of the various impairments, how these specificities can affect the teaching and learning process, and what types of adaptations they need to address the needs of learners with various impairments.

For teachers already in the field, various fora (pedagogic conferences, sectorial meetings, staff meetings, etc.) that bring teachers and school administrations could be used to give lectures on disabilities and how the various impairments affect the teaching and learning process.

Learners with VI could also be encouraged to talk about their needs and specificities to school authorities and teachers. School administrators and teachers school have discussions with learners with VI to better understand their needs from their perspectives

# Teaching methods;

The recommendation for teacher training institutions as stated above concerning the subject matter content and knowledge of the learner's impairment will be very vital to develop strategies in better adapting teaching methods for learners with VI.

It is also important to regularly evaluate the methods used to ascertain their relevance and make needed adjustments.

#### Tools/Instructional material;

The administrators of the schools should work with the parent teachers' associations and other development stakeholders to ensure that the schools are equipped with adaptable supportive devices and materials to improve the participation of learners with visual impairment in the teaching and learning process. This could be as a special resource center for learners with disabilities or the school libraries could be reinforced with material for the education of learners with VI that teachers and students could access and use.

Parents should also be encouraged to provide these special materials for their children that can also be used by the teachers to better assist them in properly understand the lessons

## Assessment/evaluation methods

The examination boards should reassess their evaluation methods to ensure that both the setting and marking of the examination are inclusive of the needs of learners with VI.

School authorities and teachers should ensure that before an exam is set there should be a good analysis of the classroom to understand the students' composition and needs and a review of the questions to ensure that these questions are accessible to all learners on an equal basis.

# SUGGESTIONS FOR FURTHER RESEARCH

The following topics have been recommended for further research by other researchers who would like to venture into inclusive education:

Employment opportunities for learners with VI after completion of their studies.

Challenges encountered by teachers with visual impairment teaching in secondary schools in Cameroon.

Learning difficulties faced by learners with VI in inclusive secondary school in Cameroon.

Problems encountered by science teachers teaching learners with VI in inclusive secondary schools in Cameroon.

Teachers" instructional practices and the performance of learners with hearing impairment in Cameroon.

# LIMITATION OF THE STUDY

The results of the study may not be generalized to the large population because the data was collected from a sample and within the Cameroon context.

➤ The latest data concerning the theme understudy was difficult to get because the administration will not and updated administrative websites about current information are not found, so making it difficult for the researcher.

Access to the respondent was very difficult because of time, the crises in the North West region of Cameroon, and financial constraints.

The researcher wishes to acknowledge that there may be some inadequacies concerning the collection and analysis of data since the researcher is still in the learning process and intends to do better subsequently.

# CONCLUSION

The study set out to examine the impact of the teachers" instructional practices on the academic performance of learners with visual impairment in GBHS Bamenda in the North West of Cameroon. Learners with visual impairment, in particular, are characterized by a limitation or absence of vision. For their effective participation in the teaching and learning process alongside their sighted peers, instructional practices need to address their specific needs. One of the major roles of the stakeholders is to enhance quality education through quality instructional practices and performance for all. Improving instructional practices for learners with visual impairment has been a major concern for the education family in Cameroon especially due to their poor performances and lack of professional ethics of teachers in integrating them amongst peer groups in the classroom, society, and community. Special Education training for teachers teaching in inclusive schools UNESCO (2001) asserts that upgrading teacher's skills is a developmental process that goes beyond workshops and other in-service training activities. Teachers need time to develop confidence and coping strategies and do this in the context of continuous support in the classrooms.

In this study, the major finding was that visually impaired learners do not receive support services from the vision support teachers nor interventional measures to help them overcome their visual limitations especially during assessment and evaluation.

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# APPENDIX