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## Relevance of Teachers Educational Profile on the Growth of Best Inclusive Educational Practices for Primary School Teachers: The Case of Buea Sub-Division, South West Region of Cameroon

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**Abstract:** The study was conducted to examine primary school teachers' views on teacher educational profile terms of teaching within inclusive classroom in Cameroon. The study was based on the framework that teacher quality is an important factor in determining gains in learner achievement in inclusive settings, even after accounting for prior learner learning and family background characteristics. The main instrument used for data collection in this study was a teacher questionnaire constructed by the researcher. The researcher also used an observation guide before and after the training as a monitoring instrument. A pre-designed EpiData Version 3.1 (EpiData Association, Odense Denmark, 2008) database which has in-built consistency and validation checks was used to enter the data. Further consistency, data range and validation checks were also performed in SPSS version 21.0 (IBM Inc., 2012) to identify invalid codes. Participants scores were analyzed using SPSS 21.0 (IBM, 2012) for descriptive (frequency of occurrence) and comparative analysis. The major findings obtained for all the components of the study, revealed that there was a slight drop in performance at the first formative evaluation, then a progression characterizing an improvement in performance from the second formative evaluation up to the post-test. Consequently, it was realized that all the teachers who took part in the training improved their skills after the intervention. It was therefore concluded that pedagogical knowledge training had a great influence on development of inclusive practices by ordinary primary school teachers. The major recommendation made based on the finding was that: teacher trainers should take as a matter of responsibility the integration of pedagogical knowledge training for inclusion in teacher training programmes. The study has also shown that when this is done effectively it will result in an improvement in pedagogical skills that will eventually lead to inclusive best practices in our ordinary primary schools. The study concludes that pedagogical skill training has become a popular adjunct treatment for developing pedagogical skills that will lead to inclusive best practices in ordinary schools. Presently, pedagogical knowledge training is best viewed as an experimental intervention. The theoretical structure of pedagogical knowledge is incomplete resulting in problems in definition, measurement, and design. Specifically, further research is necessary to resolve issues regarding for example, duration of training, assessment instruments, packaging of training programmes, and contextual variables.

**Keywords:** Teachers Educational Profile, Best Inclusive Educational Practices and Primary School Teachers

### 1. Introduction

Teachers are considered as protagonist in the process of inclusive education. And, obviously, teacher education plays an important role towards this process. Although the Government of Cameroon has been implementing inclusive education in formal primary education, it is still at a nascent stage of development. Also, the primary level teacher education and training curriculum lack necessary contents related to disabilities and their instructional implications in the classroom (Munir & Islam, 2005). UNESCO (2006) reports that present teacher preparation programs in Cameroon cannot make skilled teacher for inclusive classrooms. Teacher training is one area that has been the focal point of discussion in recent years. This is because the poor quality of education in primary schools is largely attributed to the poor quality of teachers and teaching. Although 95 percent of the primary school teachers in the government primary schools are trained, the teaching continues to remain very weak.

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### 1.1. Background of the Study

Inclusion is defined by Schroth, Moorman and Fullwood (1997) as 'the provision of educational services to students with a full range of abilities and disabilities in the general education classroom with appropriate in-class support'. 'Inclusion' refers to all students being valued, accepted and respected regardless of ethnic and cultural backgrounds, abilities, gender, age, religion, beliefs and behaviours (Forlin, 2004; United Nations Educational Scientific and Cultural Organization, 1994). Inclusion is a human rights or social justice principle which embodies values such as equity and fairness (Ainscow, 2005). In an inclusive school, students are not treated equally but are given equitable support to enable every student to be able to participate physically, socially and academically with their peers. This means that the environment, curriculum, teaching methods, assessment and reporting could all need to be adjusted or differentiated. A student in a wheelchair may need ramps to adapt the physical environment. Teaching may need to cater for a student's learning needs in the same way. A student with learning difficulties may need more assistance with reading or to be able to present knowledge verbally rather than in written form. A student who has difficulty concentrating may need the amount of work to be reduced, to have tasks presented one at a time and to be shown how to self-monitor. Teaching students with disabilities is just one aspect of inclusive schools and communities. Some of the literature on inclusion argues that teachers need training in special education to include students with disabilities (Heward, 2003; Kauffman & Hallahan, 2005; Mock & Kauffman, 2002). Other researchers and academics propose that inclusion in education is simply a matter of good teaching practice (Ainscow, 1999; Giangreco, 1996; Skrtic, 1995; Thousand, Bishop, & Villa, 1997).

In Cameroon, Students with disabilities have been increasingly receiving special education services in general education classrooms. Consequently, special and general education teachers are facing the challenge of providing services in general education classrooms that were historically provided in two different educational settings. Terms like integration, mainstreaming, and, eventually, inclusion have been used to describe this educational movement. Inclusion is the contemporary term that refers to "the practice of educating students with moderate to severe disabilities alongside their chronological age peers without disabilities in general classrooms within their home neighborhood schools" (Alper, 2003, p. 15). The inclusion philosophy is based on the principle of equal opportunity for all people. Accordingly, in a democratic society, students with disabilities should not be denied access to public education based on their disabilities.

The success of inclusion in Cameroon depends on many factors, including the attitudes of educators and the quality of instruction they offer their students (Leyser & Tappendorf, 2001). More specifically, teachers' attitudes about inclusion have been found to be a crucial factor that impacts the implementation of inclusion for children with disabilities (Bender, Vail, & Scott, 1995), For instance, it has been reported that teachers with more positive views of inclusion have more confidence in their abilities and commitment to accommodate students' needs in inclusive settings by adapting appropriate classroom materials and related procedures (Campbell, Gilmore, & Cuskelly, 2003). Moreover, teachers with more negative attitudes were found to have low expectations for individuals with disabilities (Wilczenski, 1993). Put simply, previously held negative attitudes about children, learning, and schooling are likely to interfere with the teachers' support for and effective participation in inclusive settings (Brantlinger, 1996). Given the possibility that pre-service teachers' attitudes towards teaching and learning may impact their conceptions about teaching and learning in general, researchers have examined the nature of teacher attitudes and whether they are changeable or have an enduring effect on educational practices. Wideen et al. concluded that until the impact of more rigorous teacher education programs has been fully investigated, the issue of whether attitudes are modifiable should remain an open question rather than an accepted assumption.

Indeed, results of studies investigating teacher education and pre-service teachers' attitudes toward inclusion have been inconsistent. Teachers' views of the quality of their pre-service preparation could have an influence on their beliefs about their ability to instruct and manage students with learning and behavioral problems in their classrooms (Brownell & Pajares, 1999). Therefore, it has been suggested that if pre-service teachers complete their teacher education program without having developed positive views toward inclusion, this will negatively affect the level of accommodations provided to students with disabilities into general education classrooms (Tait & Purdie, 2000). However, the available data about teachers' perceptions of preparedness for inclusion indicate that teacher education programs may not have improved in preparing pre-service teachers to teach in inclusive settings

(Scruggs & Mastropieri, 1996). Although pre-service teachers come to teacher education programs with enthusiasm and beliefs in liberal education (Wideen et al., 1998), previous research indicated that, as they progress in teacher education programs, they do not feel adequately prepared to teach students with special needs in general education classrooms.

#### 1.2. Statement of the Problem

The inclusion of students with disabilities in general education classrooms in Cameroon is a fairly new trend. Non - governmental organizations, with cooperation from the various Ministries of Education in Cameroon, (primary, secondary and higher education), worked to fully include some children with disabilities in general education classrooms as part of pilot projects in selected schools. Teacher training institutions in Cameroon have not reformed their programmes using the principles of universal design to ensure that inclusion is an essential element that is addressed throughout the training programme. They have held back progress in training teachers to acquire the useful competencies for inclusive practices. Teachers in Cameroon still express fear, anxiety and reluctance to include learners with special needs in the school system. There is a general feeling that they don't have the time, preparation, resources and skills needed in teaching children with special needs in the general education classrooms. This has contributed to ordinary teachers' lack of competencies in reducing barriers to learning and participation for all learners, not only for those with impairments but those who are categorised as 'having special educational needs'. It is against this backdrop that a study was proposed on the effect of pedagogical knowledge training on the development of inclusive practices for primary school teachers in the South West Region of Cameroon.

### 1.3. Objectives of the Study

The main objective of this study was to investigate the effect of teacher educational profile on the growth of inclusive educational best practices by primary school teachers in the South West Region of Cameroon. Specifically, the study sought to:

Investigate the relationship between teachers' knowledge on structuring learning objectives and the ability to clearly communicate expectations that engages all learners in learning.

Examine the degree to which knowledge of individual learner characteristics can influence the time spent by teachers on learners who are struggling.

#### 2. REVIEW OF RELATED LITERATURE

One of the challenges that emerges frequently in the literature, in relation to achieving systemic change towards inclusion, is the challenge of convincing teachers that they have a responsibility to uphold the education rights of all learners The World Report on Disability (WHO, 2011) emphasises the need for teacher education on inclusion to be about attitudes and values, not just about knowledge and skills. Jordan et al (2009) draw on two decades of research to conclude that effective inclusion is effective for all students; and teachers who believe students with special educational needs are their responsibility are more effective teachers overall. These conclusions from Jordan et al link to the argument made that education standards and inclusion are not mutually exclusive, indeed inclusion can enhance standards.

## 2.1. Pedagogical Knowledge

The pedagogical knowledge of teachers includes all the required cognitive knowledge for creating effective teaching and learning environments. Research suggests that this knowledge can be studied. Identifying the content of this knowledge base, however, is a complex issue. Most studies use the distinction between declarative ('knowing that') and procedural knowledge ('knowing how') from cognitive psychology as a theoretical basis. This approach is relevant as it focuses on understanding how knowledge is related to behavior, or in other words, the quality of teaching performance. The first key study on teacher knowledge (Shulman, 1987) categorised teacher knowledge into 7 categories, among which were the concepts of:

- Pedagogical content knowledge (the knowledge which integrates the content knowledge of a specific subject and the pedagogical knowledge for teaching that particular subject), and
- General pedagogical knowledge (principles and strategies of classroom management and organization that are cross-curricular)

### 2.2. Pedagogical Content Knowledge (Pck)

Many scholars have used PCK (Shulman, 1987) as a main organizing concept in research on teachers' knowledge. Chick, Baker, Pham, and Cheng (2006) emphasise student thinking, the understanding of procedural knowledge, knowledge of resources, aims for learning, classroom technique, purpose of content knowledge, and student understanding of conceptual knowledge as the essential elements of PCK. Pedagogical content knowledge (PCK)is a special knowledge domain that distinguishes teachers from other subject specialists(Shulman, 1987; Carlsen, 1999). As such, PCK has paved the way for understanding the complex relationship between the content of a subject and the teaching of a subject by using specific teaching and evaluation methods. PCK is a synthesis of all knowledge needed for teaching and learning a certain topic (e.g., Grossman, 1990; Nilsson, 2008). For example, Duschl, Schweingruber, and Shouse (2005) linked teachers' PCK to student learning in science, and therefore, PCK is an important part of the knowledge base of a teacher. Several scholars (for example, Gess Newsome, 1999a) include the following areas in PCK: teaching and collaboration strategies; knowledge about student interest, motivation and learning of conceptual and procedural knowledge and skills; knowledge of student thinking, misconceptions, and the cognitive and affective demands of tasks and activities; knowledge about resources available to support teaching and learning; and curriculum knowledge and aims for student learning. For example,

## 2.3. General Pedagogical Knowledge (Gpk)

GPK is a central component of teacher knowledge (König and Blömeke, 2011). According to Shulman (1987), general pedagogical knowledge involves "broad principles and strategies of classroom management and organisation that appear to transcend subject matter", as well as knowledge about learners and learning, assessment, and educational contexts and purposes. Similarly, Grossman and Richert (1988) state that "GPK includes knowledge of theories of learning and general principles of instruction, an understanding of the various philosophies of education, general knowledge about learners, and knowledge of the principles and techniques of classroom management"

Morine Deshimer and Kent's (1999), divided GPK into three main categories as follows: instructional model (teaching method), classroom management, and classroom communication.

**I.** Classroom management is consistent in noting the general principles of teacher behaviour that promote student achievement. Classroom management focuses on three major components:

Content management does not refer to skills peculiar to teaching a particular subject but rather to those skills that cut across subjects and activities (Froyen & Iverson, 1999). Doyle stressed that the core of instructional management is gaining and maintaining student cooperation in learning activities (as cited in Froyen & Iverson, 1999). Content management occurs when teachers manage space, materials, equipment, the movement of people, and lessons that are part of a curriculum or program of study.

According to Iverson and Froyen (1999), conduct management refers to the set of procedural skills that teachers employ in their attempt to address and resolve discipline problems in the classroom. For example, when students are disobedient in the classroom, a teacher uses certain methods to reinforce the students by giving rewards, admiration, blame, etc. If a student has a severe problem, the teacher may contact the student's parents or guardians so as to cooperate in solving the problem.

Covenant management stresses the classroom group as a social system that has its own features that teachers have to take into account when managing interpersonal relationships in the classroom. The three aspects of classroom management as mentioned above are the main protocols for interviewing teachers.

**II.** Instructional methods and teaching methods or models are used as synonyms. Joyce and Weil (1996) have defined teaching models as follows:

"A teaching model is a pattern or plan that can be used to shape a curriculum or course, select instructional materials and guide a teacher's actions. Models are designed to attain specific goals. When a teacher identifies a goal, he or she selects a particular strategy designed to attain that goal."

## 2.4. Addressing Classroom Management by Targeting Improvements in Teacher Preparation and Professional Development

The ability of teachers to organize classrooms and manage the behaviour of their students is critical to achieving positive educational outcomes. Although sound behaviour management does not guarantee

effective instruction, it establishes the environmental context that makes good instruction possible. Reciprocally, highly effective instruction reduces, but does not eliminate, classroom behaviour problems (Emmer & Stough, 2001). A significant body of research also attests to the fact that classroom organization and behaviour management competencies significantly influence the persistence of new teachers in teaching careers (Ingersoll & Smith, 2003). New teachers typically express concerns about lacking effective means to handle the significant disruptive behaviour of students (Browers & Tomic, 2000).

Teachers who have problems with behaviour management and classroom discipline are frequently ineffective in the classroom, and they often report high levels of stress and symptoms of burnout (Berliner, 1986; Browers & Tomic, 2000; Espin & Yell, 1994). Disruptive classroom behaviour is a significant reason why teachers leave the profession (Ingersoll & Smith, 2003). Disruptive behaviour is a particular problem in classrooms of children with special educational needs especially those with attention deficit hyperactive disorders and other disadvantaged students (Kellam, Ling, Merisca, Brown, & Ialongo, 1998). Thus, the ability of teachers to prevent or address disruptive behaviour becomes especially important. The inability of teachers to effectively manage classroom behaviour often contributes to the low achievement of at-risk students and to their excessive referrals for special education (Donovan & Cross, 2002; Harrell, Leavell, van Tassel, & McKee 2004). These effects are exacerbated by the current pattern of teacher distribution, which reveals a disproportionate assignment of less qualified and less experienced teachers to classrooms with economically disadvantaged children (Clotfelter, Ladd, & Vigdor, 2005; Clotfelter, Ladd, Vigdor, & Wheeler, 2007; Peske & Haycock, 2006). Thus, many of the least capable teachers begin their careers teaching the most challenging students—with the predictable result being low student achievement.

## 2.5. Structuring Learning Objectives and Providing Feedback

The key to making your students' learning experiences worthwhile is to focus your planning on major instructional goals, phrased in terms of desired student outcomes—the knowledge or skills, attitudes, values, and dispositions that you want to develop in your students. Goals, note content coverage or learning processes, provide the rationale for curriculum and instruction. Imagine that you had to go to a town or city you haven't visited before. You know that cities have a variety of services and attractions, but you don't know exactly what you are supposed to do in this particular city. Should you provide a service for someone, gather information about a particular person or place, or do something else? Without a specific objective, you could spend your time on something that isn't important or that makes it difficult to know whether your time in the city was worth the trip.

Being in a classroom without knowing the direction for learning is similar to taking a purposeless trip to an unfamiliar town. Teachers can structure objectives to ensure that students' journeys with learning are purposeful. When teachers identify and communicate clear learning objectives, they send the message that there is a focus for the learning activities to come. This reassures students that there is a reason for learning and provides teachers with a focal point for planning instruction. Providing feedback specific to learning objectives helps students improve their performance and solidify their understanding. Structuring objectives and providing feedback work together. Teachers need to identify success criteria for learning objectives so students know when they have achieved those objectives (Hattie & Timperley, 2007). Similarly, feedback should be provided for tasks that are related to the learning objectives; this way, students understand the purpose of the work they are asked to do, build a coherent understanding of a content domain, and develop high levels of skill in a specific domain.

## 2.6. The Importance of Structuring Objectives and Providing Feedback

Structuring learning objectives is the process of establishing a direction to guide learning (Pintrich & Schunk, 2002). When teachers communicate objectives for student learning, students can see more easily the connections between what they are doing in class and what they are supposed to learn. They can gauge their starting point in relation to the learning objectives and determine what they need to pay attention to and where they might need help from the teacher or others. This clarity helps decrease anxiety about their ability to succeed. In addition, students build intrinsic motivation when they set personal learning objectives. Providing feedback is an ongoing process in which teachers communicate information to students that helps them better understand what they are to learn, what

high-quality performance looks like, and what changes are necessary to improve their learning (Hattie & Timperley, 2007; Shute, 2008). Feedback provides information that helps learners confirm, refine, or restructure various kinds of knowledge, strategies, and beliefs that are related to the learning objectives (Hattie & Timperley, 2007). When feedback provides explicit guidance that helps students adjust their learning (e.g., "Can you think of another way to approach this task?"), there is a greater impact on achievement, students are more likely to take risks with their learning, and they are more likely to keep trying until they succeed (Brookhart, 2008; Hattie & Timperley, 2007; Shute, 2008).

### 2.7. Engage Students in Setting Personal Learning Objectives

Providing opportunities for students to personalize the learning objectives identified by the teacher can increase their motivation for learning (Brophy, 2004; Morgan, 1985; Page-Voth & Graham, 1999). Students feel a greater sense of control over what they learn when they can identify how the learning is relevant to them. In addition, this practice helps students develop self-regulation (Bransford, Brown, & Cocking, 2000). Students who are skilled at self-regulation are able to consciously set goals for their learning and monitor their understanding and progress as they engage in a task. They also can plan appropriately, identify and use necessary resources, respond appropriately to feedback, and evaluate the effectiveness of their actions. Acquiring these skills helps students become independent lifelong learners. Many students do not have experience with writing their own learning objectives, so it is important for teachers to model the process and provide students with feedback when they are first learning how to set their own learning objectives (White, Hohn, & Tollefson, 1997). Teachers can guide students in the process by:

- Providing them with sentence stems such as "I know that ... but I want to know more about ... " and "I want to know if ... " Younger students can write "I can" or "I will" statements.
- Asking them to complete a K-W-L chart as a way to record what they know (K) about the topic, what they want (W) to know as a result of the unit or lesson, and what they learned (L) as a result of the unit or lesson (Ogle, 1986). Students can complete the L section throughout the unit or lesson. Adding a column labeled "What I Think I Know" reduces stress about being correct and expands students' thinking.
- Checking their learning objectives to ensure they are meaningful and attainable within the given time period and with available resources.

Studies have shown that "contracts" can have positive effects on students' ability to set objectives for their learning (Brophy, 2004; Greenwood, 2002; Kahle & Kelly, 1994; Miller & Kelley, 1994; Tomlinson, 2001). These contracts provide students with control over their learning and provide opportunities for teachers to differentiate instruction to better accommodate students' learning needs (Tomlinson, 1995). They can take the form of a learning plan that provides options for the kinds of activities students do on particular days and at specific times. In addition, they also provide students with guidance about what they need to accomplish, help students organize their time, and provide ongoing opportunities for students to seek or provide their own feedback.

#### 2.8. Bridging the Gap

Systems-level and classroom-level variables such as these facilitate the creation and maintenance of inclusive education. Systemic support, collaboration, effective classroom practices, and a universal design approach can make inclusive education work so that students with disabilities have the same access to the general education curriculum and to classmates as any other student and the same opportunity for academic, social, and emotional success. Inclusive education is a general education initiative, not another add-on school reform unrelated to other general education initiatives. It incorporates demonstrated general education best practices, and it redefines educators' and students' roles and responsibilities as creative and collaborative partners. The strategies described here can bridge the gap between what schools are doing well and what they can do better to make inclusion part and parcel of a general education program

In order to support the conceptual base of this study, the study outlines two models, one manuals and a toolkit that are found to be most pertinent in the context of developing programmes to support regular teachers to include children with disabilities. These tools include:

- Culturally Appropriate Policy and Practice (Alur et al., (2005 a,b,c), This manual is useful to this study because each section is ready to use in a training situation with activities, overheads and examples. It is a very useful resource for formulating a training manual that can suit the context of this study.
- Index for Inclusion: Booth et al (2000): The 'Index for Inclusion' is relevant to the present study because it is a set of materials to guide schools through a process of inclusive school development. It is about building supportive communities and fostering high achievement for all staff and students. It is based upon the social model of disability, because this study is also focused on identifying barriers to teacher education and finding solutions to those who are excluded from mainstream education.
- Embracing Diversity: Toolkit for Creating Inclusive Learning-Friendly Environments (UNESCO Bangkok 2004): This toolkit is particularly useful to this study because it introduces a new approach for teachers who wish to change from a teacher- centred approach to a child- centred approach.
- Leonard Cheshire Disability (2012) Training Manual on Inclusive Education: This training guide is relevant to this study because it has been developed with the intention of increasing the teachers' competency in inclusive practices to enable them facilitate learning of all children, including those with special needs, in the mainstream schools. It provides opportunity for teachers experienced in special needs education, as trainer of trainers (TOTS) to explore participatory methodologies in training other classroom teachers and ensuring that the same methods are used at classroom level. The trainer of trainer strategy enforces cooperative spirit amongst teachers thereby, demystifying the assumed pedagogical difficulties for managing learners with disabilities in mainstream classrooms. It has been developed following contextual realities in Africa. So it can be adapted and use in training ordinary teachers in inclusive best practices in the Cameroon school system.

#### 3. THEORETICAL REVIEW

#### 3.1. Bloom's (1956) Taxonomy of Learning Objectives

Bloom's taxonomy is a set of three hierarchical models used to classify educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in cognitive, affective and psychomotor (sensory) domains. The cognitive domain list has been the primary focus of most traditional education and is frequently used to structure curriculum learning objectives, assessments and activities.

The taxonomy of learning objectives was named after Benjamin Bloom, who chaired the committee of educators that devised the taxonomy. He also edited the first volume of the standard text, Taxonomy of Educational Objectives: The Classification of Educational Goals.

#### 3.2. The Cognitive Domain (Knowledge-Based)

There are six levels in the cognitive domain. These levels are: remembering, understanding, applying, analyzing, synthesizing, and evaluating.

## 3.2.1. Remembering

Exhibit memory of learned materials by recalling facts, terms, basic concepts, and answers

- Knowledge of specifics terminology, specific facts
- Knowledge of ways and means of dealing with specifics conventions, trends and sequences, classifications and categories, criteria, methodology
- Knowledge of the universals and abstractions in a field principles and generalizations, theories and structures

#### 3.2.2. Understanding

Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating the main ideas

- Translation
- Interpretation
- Extrapolation

#### 3.2.3. Applying

Using acquired knowledge. Solve problems in new situations by applying acquired knowledge, facts, techniques and rules. Learners should be able to use information to solve problems, identify connections and relationships and how they apply. It is important for learners to be able to use prior knowledge in new situations. For example, a learner can be able to apply a method used to their own lives.

#### 3.2.4. Analyzing

Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations

- Analysis of Elements
- Analysis of Relationships
- Analysis of Organizational Principles

### 3.2.5. Synthesizing

Builds a structure or pattern from diverse elements; it also refers the act of putting parts together to form a whole. Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions

- Production of a Unique Communication
- Production of a Plan, Or Proposed Set of Operations
- Derivation of a Set of Abstract Relations

### 3.2.6. Evaluating

Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria

- Judgments in Terms of Internal Evidence
- Judgments in Terms of External Criteria

The highest level of the cognitive domain is evaluating which requires critical thinking.

## 3.3. The Affective Domain (Emotive-Based)

Skills in the affective domain describe the way people react emotionally and their ability to feel other living things' pain or joy. Affective objectives typically target the awareness and growth in attitudes, emotion, and feelings.

There are five levels in the affective domain moving through the lowest order processes to the highest:

#### 3.3.1. Receiving

The lowest level; the learner passively pays attention. Without this level no learning can occur. Receiving is about the learner's memory and recognition as well.

#### 3.3.2. Responding

The learner actively participates in the learning process, not only attends to a stimulus; the student also reacts in some way.

#### 3.3.3. *Valuing*

The learner attaches a value to an object, phenomenon, or piece of information. The learner associates a value or some values to the knowledge they acquired.

### 3.3.4. Organizing

The learner can put together different values, information, and ideas and accommodate them within his/her own schema; comparing, relating and elaborating on what has been learned.

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#### 3.3.5. Characterizing

The learner at this level tries to build abstract knowledge. Benjamin Bloom created this taxonomy for categorizing level of abstraction of questions that commonly occur in educational settings. The taxonomy provides a useful structure in which to categorize test questions, since teachers will characteristically ask questions within particular levels, and if you can determine the levels of questions that will appear on your exams, you will be able to study using appropriate strategies.

#### **3.4.** The Psychomotor Domain (Action-Based)

Skills in the psychomotor domain describe the ability to physically manipulate a tool or instrument like a hand or a hammer. Psychomotor objectives usually focus on change and/or development in behavior and/or skills. Bloom and his colleagues never created subcategories for skills in the psychomotor domain, but since then other educators have created their own psychomotor taxonomies. Simpson (1972) proposed the following levels:

## 3.5. Perception

The ability to use sensory cues to guide motor activity. This ranges from sensory stimulation, through cue selection, to translation. Examples: Detects non-verbal communication cues. Estimate where a ball will land after it is thrown and then moving to the correct location to catch the ball. Adjusts heat of stove to correct temperature by smell and taste of food. Adjusts the height of the forks on a forklift by comparing where the forks are in relation to the pallet.

#### 3.6. Set

Readiness to act. It includes mental, physical, and emotional sets. These three sets are dispositions that predetermine a person's response to different situations (sometimes called mindsets). Examples: Knows and acts upon a sequence of steps in a manufacturing process. Recognize one's abilities and limitations. Shows desire to learn a new process (motivation). This subdivision of Psychomotor is closely related with the "Responding to phenomena" subdivision of the Affective domain.

## 3.7. Guided Response

The early stages in learning a complex skill that includes imitation and trial and error. Adequacy of performance is achieved by practicing. Examples: Performs a mathematical equation as demonstrated. Follows instructions to build a model. Responds to hand-signals of instructor while learning to operate a forklift.

#### 3.8. Mechanism

This is the intermediate stage in learning a complex skill. Learned responses have become habitual and the movements can be performed with some confidence and proficiency. Examples: Use a personal computer. Repair a leaking tap. Drive a car.

#### 3.9. Complex Overt Response

The skillful performance of motor acts that involve complex movement patterns. Proficiency is indicated by a quick, accurate, and highly coordinated performance, requiring a minimum of energy. This category includes performing without hesitation, and automatic performance. For example, players will often utter sounds of satisfaction or expletives as soon as they hit a tennis ball or throw a football, because they can tell by the feel of the act what the result will produce. Examples: Maneuvers a car into a tight parallel parking spot. Operates a computer quickly and accurately. Displays competence while playing the piano.

## 3.10. Adaptation

Skills are well developed and the individual can modify movement patterns to fit special requirements. Examples: Responds effectively to unexpected experiences. Modifies instruction to meet the needs of the learners. Perform a task with a machine that it was not originally intended for that purpose (machine is not damaged and there is no danger in performing the new task).

## 3.11. Origination

Creating new movement patterns to fit a particular situation or specific problem. Learning outcomes emphasize creativity based upon highly developed skills. Examples: Constructs a new set or pattern of movements organized around a novel concept or theory. Develops a new and comprehensive training program. Creates a new gymnastic routine.

### 3.12. Jerome Bruner's (1966) Theory of Instruction

Jerome Bruner an American psychologist has made interesting contributions to the ideas on the course of intellectual development. Similar to the ideas of Jean Piaget, Bruner also developed his own ideas on learning. Whereas Piaget emphasizes changes in cognitive structures as children move from stage to stage, Bruner emphasizes additional cognitive structures which children acquire as they move from the enactive mode to the iconic mode to the symbolic mode (Oladele, 1989). According to Bruner, intellectual development depends upon a systematic and contingent interaction between a teacher and a learner. His theory of instruction looks at learning from an instructional point of view. This theory does not describe what happens when a learner learns but it prescribes what should be done if the learner has to learn successfully. Bruner brought forward four principles of instructional learning. The four principles are explained below:

## 3.13. Principle of Motivation

Bruner argued that in order for successful learning to take place a teacher has to motivate the learners. From the time of preparation of a lesson the teacher should think of how to motivate the learners. A learner who is motivated is bound to learn more than the one who is not motivated. Bruner advocated intrinsic motivation because it sustains learning for a longer period than extrinsic motivation. However, he insisted that it is good to provide extrinsic motivation at the beginning of the teaching/learning process then followed by intrinsic motivation. When a teacher first motivates a learner the learner will eventually develop an inner desire to learn.

## 3.14. Principle of Structure

According to Bruner, it is very important for learners to understand the structure of a subject. He insisted that any subject can be taught to any individual provided the structure (organisation of the material) is well laid out. He argued that the structure of any subject can be looked at from three characteristics:

- Mode of presentation, that is, techniques used by a teacher in presenting a subject;
- Economy of presentation, that is, how precise a teacher is when presenting his material;
- Power of presentation. This is the simplicity of presenting the subject.

#### 3.15. Principle of Sequence

Bruner emphasized that the orderly manner in which information is presented can facilitate learning and comprehension. If information is presented in a disorderly manner, it will be difficult for the learners to understand.

### 3.16. Principle of Reinforcement

Here Bruner meant feedback. It is very important for teachers to provide positive feedback to students and the feedback should be given on time. Bruner emphasized four characteristics of effective instruction which emerged from his Theoretical construct

- Personalized: instruction should relate to learners' predisposition, and facilitate interest toward learning,
- Content Structure: content should be structured so it can be most easily grasped by the learner
- Sequencing: sequencing is an important aspect for presentation of material
- Reinforcement: rewards and punishment should be selected and paced appropriately.

#### 3.17. Intellectual Development

In order for effective learning to take place, Bruner postulated three stages of intellectual development. The first stage he termed "Enactive", when a person learns about the world through actions on physical objects and the outcomes of these actions. The second stage was called "Iconic" where learning can be obtained through using models and pictures. The final stage was "Symbolic" in which the learner develops the capacity to think in abstract terms. Based on this three-stage notion, Bruner recommended using a combination of concrete, pictorial then symbolic activities will lead to more effective learning.

For Bruner learning is a very active process in which the student is directly involved in the manipulation of the content in the three modes of representation. To be successful in learning new content, the learners must be actively engaged in the process; not sitting quietly and listening to a teacher explain something.

The purpose of instruction for Bruner is to create an environment in which a person can discover new knowledge for him or herself. Instruction exists to guide and support new learners as they interact with their environment to construct new knowledge for themselves. The purpose of instruction is not to tell the student that which they ought to learn but rather to create an interesting and stimulating environment in which students can discover this knowledge with the teacher's support.

## 3.18. Relevance of Bruner's Theory to this Study

Bruner's learning theory has direct implications on the teaching practices. Here are some of these implications:

Instruction must be appropriate to the level of the learners. For example, being aware of the learners' learning modes (enactive, iconic, and symbolic) will help you plan and prepare appropriate materials for instruction according to the difficulty that matches learners' level. The teachers must revisit material to enhance knowledge. Building on pre-taught ideas to grasp the full formal concept is of paramount importance according to Bruner. Feel free to re-introduce vocabulary, grammar points, and other topics now and then in order to push the students to a deeper comprehension and longer retention.

It helps teachers to present material in a sequence giving the learners the opportunity to: acquire and construct knowledge, transform and transfer his learning. Students should be involved in using their prior experiences and structures to learn new knowledge.

Teachers should assist learners in building their knowledge. This assistance should fade away as it becomes unnecessary. Teachers should provide feedback that is directed towards intrinsic motivation. Grades and competition are not helpful in the learning process. Bruner states that learners must "experience success and failure not as reward and punishment, but as information".

#### 4. RESEARCH DESIGN

The experimental design was adopted. In the experimental method, the standard procedure is to manipulate one variable and then measure its effects on another. There are two general categories of the experimental design, that is, the true experimental design and the quasi experimental design. The category adopted for this study was the quasi-experimental design and the type of quasi-experimental design used was the Pre-Post Test Design with Non-Randomized Experimental and Control Groups.

Quasi-experimental designs use comparison groups than randomly assigned control groups as the baseline against which net programme impacts can be measured. In a quasi-experimental design, the researcher substitutes statistical "controls" for the absence of physical control of the experimental situation. The three most common sources for such comparison groups are: (1) eligible non-participants in the same community, (2) individuals similar to the participants from an existing data base that contains the outcome measures of interest, and (3) individuals in a matched comparison site who would have been eligible for the programme if it were in that site. Evaluations using these kinds of comparison groups can effectively test for the effects of programme participation on outcomes under certain conditions. New analytical approaches can be used to control statistically for the effects of potential differences between treatment and comparison groups. These approaches require data on the outcomes of interest and their potential determinants for a period prior to programme implementation. If the data is available, models of pre-programme differences between the two groups can be estimated and tested and the results can be used to interpret post programme differences between the treatment and the comparison group populations (Heckman, Hotz)

Table 1. The Pre-Post Test Design with Non-Randomized Experimental and Control Groups

Group (Independent)	Pre-test	Experimental	Mid Test		Post-Test (Formative Evaluation)
G1	Q1	X	Q2	Q3	Q4
G2	Q1				Q4

Table 1 above is explained as follows:

- 1. X represents the independent variable, which was referred to as the experimental variable. The experimental variable has been put into a master plan of activities relating to each variable. Each sub-section of the master plan reflects training skill activities relating to a variable and a hypothesis.
- 2. Q1, Q2, Q3 and Q4 represent the dependent variable before and after the manipulation of the independent variable X. In this study it represents the pre-test, first formative evaluation, second formative evaluation and post-test respectively, administered before and after the experimental treatment.
- 3. G1 and G2 represent the experimental and control groups respectively.

#### 5. POPULATION OF THE STUDY

The population of this study was made up of three hundred and eighty nine (389) Ordinary Primary Schools and two thousand eight hundred and eighty one (2881) ordinary primary school teachers (Regional Delegation of Basic Education, Statistic Year Booklet, 2014-2015) in Fako Division of the South West Region of Cameroon. Therefore, the target (research) population consisted of one hundred and twenty eight (128) ordinary primary schools and one thousand and fifty one (1051) ordinary primary school teachers (Regional Delegation of Basic Education, Statistic Year Booklet, 2014-2015) in Buea Sub-Division. Meanwhile, the accessible (sampled) population involved all teachers in Government Practicing Primary School Buea Town (20) and Kingston Memorial Bilingual Nursery and Primary School Buea (20).

## 5.1. Sample and Sampling Procedure

This section of methodology describes the strategies that were used in selecting the representative elements from the accessible population, that is, the respondents, and the participating schools. Fraenkel and Wallen (2000) define a sample in a research study as any group on which information is obtained. They go further to say that the larger group to which one hopes to apply the results of a study is the population. The sample of this study consisted of two ordinary primary schools and forty (40) ordinary primary school teachers selected from Government Practicing Primary School Buea Town (20) and Kingston Memorial Bilingual Nursery and Primary School Buea (20).

**Table2.** Showing Sample of the Study

Name of School	Number of Teachers in Experimental Group	Number of Teachers in Control Group	
Government Practicing School, Buea Town	10	10	
Kingston Memorial Bilingual Nursery and	10	10	
Primary School			
Total	20	20	

Table3. Experimental Group

School	Number of Male	Number of Female	Total
GPPS Buea Town	03	07	10
KMBNPS Buea	02	08	10
Total	05	15	20

*Interpretation of Table 3* 

Table 3 above indicates the number of teachers by sex assigned to the experimental group per school. In Government Practising Primary School (GPPS) Buea Town, three (03) male teachers and seven (07) female teachers were assigned to the experimental group giving a total number of ten (10) teachers. Meanwhile in Kingston Bilingual Memorial School (KMBNPS) Buea two (02) male teachers and eight (08) female teachers were also assigned to the experimental group giving a total number of ten (10). Therefore, the total number of teachers in the two schools assigned to the experimental group was twenty (20).

Table4. Control Group

School	Number of Males	Number of Females
GPPS Buea Town	01	09
KBMNPS Buea	02	08
Total	03	17

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Interpretation of Table 4

Table 4 above indicates the number of teachers by sex assigned to the experimental group per school. In Government Practising Primary School (GPPS) Buea Town, one (01) male teacher and nine (09) female teachers were assigned to the control group giving a total number of ten (10) teachers. Meanwhile in Kingston Bilingual Memorial School (KMBNPS) Buea two (02) male teachers and eight (08) female teachers were also assigned to the control group giving a total number of ten (10). Therefore, the total number of teachers in the two schools assigned to the control group was twenty (20). As indicted by tables 3 and 4 above, out of the forty teachers who took part in the study, twenty were assigned to the experimental group (intervention group) meanwhile the other twenty were assigned to the control group. Ten teachers in each school assigned to the experimental group took part in the training programme. These numbers of teachers were selected to take part in the training because of the researcher's conviction that more than ten teachers can be too disruptive to control, and thus become counterproductive. Small groups also give teachers a chance to observe others, practice with colleagues and receive feedback. It is on the basis of this that ten participants were selected from each school for training.

#### 6. SUMMARY OF FINDINGS

Research hypothesis One: There is no relationship between teachers' knowledge on structuring learning objectives and the ability to clearly communicate expectations that engages all learners in learning.

Comparing progression between pre-test and post-test for Knowledge on structuring lesson objectives to respond to diversity

**Table39.** Comparing progression between pre-test and post-test for Knowledge on structuring lesson objectives to respond to diversity

	Cumulativ					
Structuring lesson objectives to respond to diversity		Experimenta	Control group (N=20)	χ2-test		
	Pre-test to first formative	First formative to second formative	Second formative evaluation Vs post test	Pre-test Vs post test	Pre-test Vs post test	
I use learning contracts. Grouping activities, independent studies, questioning, interest groups and centers to differentiate instruction that appeal to various learning style or preferences	7(35.0%)	9(45.0%)	17(85.0%)	19(95.0%)	6(30.0%)	χ2=18.093 P<0.001
I give pupils different choices, and create alternative activities	9(45.0%)	5(25.0%)	16(80.0%)	19(95.0%)	6(30.0%)	χ2=18.760 P<0.001
I use multiple ways of representing content (visual and oral strategies)	8(40.0%)	6(30.0%)	18(90.0%)	20(100.0%)	8(40.0%)	χ2=17.143 P<0.001
Pupils use multiple means to express content (writing, illustrating, and speaking)	11(55.0%)	4(20.0%)	16(80.0%)	18(90.0%)	6(30.0%)	χ2=15.333 P<0.001
I use flexible means of engaging my pupils learn (modeling and role playing)	5(25.0%)	4(20.0%)	17(85.0%)	18(90.0%)	6(30.0%)	χ2=15.164 P<0.001

I provide opportunities for pupils to work in small groups and in pairs	6(30.0%)	8(40.0%)	16(80.0%)	18(90.0%)	7(35.0%)	χ2=15.040 P<0.001
I provide supports or scaffolds to pupils as they are learning new material	7(35.0%)	7(35.0%)	16(80.0%)	19(95.0%)	7(35.0%)	χ2=15.902 P<0.001
I employ active learning strategies such as they "think, pair, share" to promote recall and understanding of new learning	9(45.0%)	4(20.0%)	16(80.0%)	19(95.0%)	5(25.0%)	χ2=21.500 P<0.001
MRS	62(38.8%)	47(29.4%)	132(82.5%)	150(93.8%)	51(31.9%)	χ2=18.03 P<0.001

In the experimental group, for the component knowledge on structuring lesson objectives to respond to diversity, in aggregate, a progression of 93.8% ( $n_{responses}$ : 150) was obtained while this progression rate was significantly lower (P<0.001) in the control group 31.9% ( $n_{responses}$ =51). Pre-test:  $\chi$ 2=13.33; df=1; P=0.000 Post-test;  $\chi$ 2=19.60; df=1; P=0.000 Progression:  $\chi$ 2=18.03; df=1; P=0.000. As far as knowledge on structuring lesson objectives to respond to diversity was concerned, at pre-test, many teachers in control group did not have the knowledge with a proportion of 48.6% as compared to 100% in the experimental group ( $\chi$ 2-test: P<0.05). At post-test, the trend was significantly reversed with 14.5% of teachers not having knowledge in the experimental group as compared to 86.9% in the control group ( $\chi$ 2-test: P<0.05). Progression was significantly higher in the experimental group with a proportion of 95% as compared to 30% in the control group ( $\chi$ 2-test: P<0.05).

# Research hypothesis two: Teacher's knowledge of individual learner characteristics does not influence the time spent by on learners who are struggling.

Knowledge on individual learners' characteristics

## Comparing progression between pre-test and post-test for Knowledge on individual learner characteristics.

**Table49.** Comparing progression between pre-test and post-test for Knowledge on individual learners' characteristics

	Cumulative progression (in percentage of those with positive change in score)					
Knowledge on individual	Experimen	tal group (N	Control group (N=20)	χ2-test		
learner characteristics	Pre-test to first formative	First formative to second formative	Second formative evaluation Vs post test	Pre-test Vs post test	Pre-test Vs post test	, ,
I take into consideration the learners' interest when drawing up my lesson plans	9(45.0%)	4(20.0%)	18(90.0%)	18(90.0%)	6(30.0%)	χ2=17.2 00 P<0.001
When delivering instructions I expose learners to different classroom activities	8(40.0%)	6(30.0%)	17(85.0%)	19(95.0%)	7(35.0%)	χ2=16.2 05 P<0.001
I use learner's aptitude (special ability in learning) in determining their rate of learning and acquisition of knowledge	11(55.0%)	6(30.0%)	16(80.0%)	20(100.0%)	10(50.0%)	χ2=13.3 33 P<0.001
To considers the learners different styles, I use strategies like drawing pictures or cartoons of concepts, questioning pupils	5(25.0%)	6(30.0%)	18(90.0%)	19(95.0%)	5(25.0%)	χ2=20.9 67 P<0.001

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about the material and asking for oral summaries of material.						
I use different ways in motivating pupils during classroom activities	7(35.0%)	7(35.0%)	17(85.0%)	19(95.0%)	7(35.0%)	χ2=16.5 38 P<0.001
I consider learners' personality (extroverted and introverted) when designing learning outcomes	5(25.0%)	5(25.0%)	16(80.0%)	19(95.0%)	6(30.0%)	χ2=18.4 27 P<0.001
I take into consideration the learning needs of children with exceptionalities	7(35.0%)	6(30.0%)	18(90.0%)	19(95.0%)	7(35.0%)	χ2=16.3 38 P<0.001
I use ability groupings (for example, separating lowest level reading group from the most advanced group) to handle diversity in my classroom	6(30.0%)	5(25.0%)	17(85.0%)	18(90.0%)	7(35.0%)	χ2=14.1 26 P<0.001
MRS	58(36.3%)	45(28.1%)	137(85.6%)	151(94.4%)	55(34.4%)	χ2=15.8 2 P<0.001

In the experimental group, for the component knowledge on individual learner characteristics, in aggregate, a progression of 94.4% ( $n_{responses}$ : 151) was obtained while this progression rate was significantly lower (P<0.001) in the control group 34.4% ( $n_{responses}$ =55).

Pre-test:  $\chi 2=9.18$ ; df=1; P=0.002 Post-test;  $\chi 2=22.56$ ; df=1; P=0.000 Progression:  $\chi 2=15.00$ ; df=1; P=0.000 As far as knowledge of individual learner characteristic's was concerned, at pre-test, a slightly significant number of teachers in the control group did not have the knowledge with a proportion of 52.8% as compared to 100% in the experimental group ( $\chi 2$ -test: P<0.05). At post-test, the trend was significantly reversed with 10.1% teachers not having knowledge in the experimental group as compared to 86.9% in the control group ( $\chi 2$ -test: P<0.05). Progression was significantly higher in the experimental group with a proportion of 90% as compared to 30% in the control group ( $\chi 2$ -test: P<0.05).

#### 7. DISCUSSIONS OF FINDINGS

Research hypothesis one: There is no relationship between teachers' knowledge on structuring learning objectives and the ability to clearly communicate expectations that engages all learners in learning.

The result of the first hypothesis showed that there was a significant correlation between teachers' knowledge on structuring learning objectives and their ability to clearly communicate expectations that engage all learners in learning. The null hypothesis was therefore rejected and the alternative accepted.

Eight different indicators were used with four evaluations carried out to test the component "teachers' knowledge on structuring learning objectives" and to highlight the significance of this hypothesis. From all indicated results there was a noticeable progression between the pre-test and the post test. The positive progression noticed was because the skills taught to the teachers during training were well assimilated. This results are in line with studies related to structuring objectives that emphasizes the importance of supporting students as they self-select learning targets, self-monitor their progress, and self-assess their development (Glaser & Brunstein, 2007; Mooney, Ryan, Uhing, Reid, & Epstein, 2005). For example, in the Glaser and Brunstein study (2007), 4th grade students who received instruction in writing strategies and self-regulation strategies (e.g., goal setting, self-assessment, and strategy monitoring) were better able to use their knowledge when planning and revising a story, and they wrote stories that were more complete and of higher quality than the stories of controlled students and students who received only strategy instruction. In addition, they retained the level of performance they reached at the post-test over time, and when asked to recall parts of an orally presented story, the strategy plus self-regulation students scored higher on the written recall measure than did students in the other two groups.

Recent research indicates that the timing of feedback depends to some extent on the nature of the task and on whether students are high performing or low performing (Shute, 2008). When students are engrossed in figuring out a difficult task, feedback should be delayed; however, when students can use feedback to complete a task, immediacy helps. Providing immediate feedback can encourage students to practice, and it helps them make connections between what they do and the results they achieve. Delaying feedback may encourage development of cognitive and metacognitive processing for high-performing students, yet it may cause frustration for struggling and less-motivated students (Clariana & Koul, 2006; Shute, 2008).

## Research Hypothesis Two: Teacher's knowledge of individual learner characteristics does not influence the time spent on learners who are struggling.

The second hypothesis showed that there was a significant correlation between teachers' knowledge of individual learner characteristics and time spent on learners who are struggling. The null hypothesis was therefore rejected and the alternative accepted. To determine the significance of this hypothesis and to test the component of teachers' knowledge of individual learner characteristics, eight different indicators were used with four evaluations carried out. Results showed a noticeable progression between the pre-test and the post test levels. Teachers in the experimental group who received the training indicated that they had knowledge of individual learner characteristics in their classrooms. These results are supported by the views of Dunn, & Dunn (1992). They argue that learning may be affected by sociological factors. Accordingly, teachers need to be aware of the students' learning styles under various conditions. Variations that enhance, or inhibit, learning may include learning alone, in pairs, in small groups, as part of a team, with either an authoritative or a collegial adult, and wanting variety as opposed to patterns and routines.

Using the Learning Style Model, teachers can test and identify students' learning styles accurately (Beaty, 1986). For instance, it is difficult to determine whether a student's hyperactivity is due to a need for mobility, an informal seating arrangement, kinesthetic resources, or breaks, or to nonconformity or a lack of discipline (Shaughnessy, 1998). The Learning Style Model is a reliable and valid instrument and the only comprehensive one that can diagnose the many learning style traits that influence individuals (Shaughnessy, 1998).

Martin & Potter, (1998) are of the opinion that when students especially those with exceptionalities understand their learning style, they no longer need to feel different because they require total quiet to study or need to be mobile during class. Students can learn almost any subject matter when they are taught with methods and approaches responsive to their learning style strengths; these same students fail when they are taught in an instructional style dissonant with their strengths (Dunn, 1990). The progression coefficient noticed between the pre-test and the post-test was also confirmed by a high efficiency or performance coefficient when teachers were followed up for a month by the researcher. After the follow-up it was discovered that teachers in the experimental group spent adequate time on struggling learners. This implied that they had acquired the skill during training.

This progression is supported theoretically by Embracing Diversity: Toolkit for Creating Inclusive Learning-Friendly Environments (UNESCO Bangkok 2004). Booklet 4 of the Toolkit dealing with "Creating Inclusive Learning-Friendly Classrooms" which describes how to create an inclusive classroom and why becoming inclusive and learning-friendly is so important to children's achievement. It explains how to deal with the wide range of different children attending one class, and how to make learning meaningful for all. Avramidis, Buylis, & Burden, (2000) argues that when teachers gain extensive professional knowledge needed to implement inclusive programmes they may succumb to it. Similarly, LeyRoy and Simpson (1996) reported that as teachers experience with students, particularly those with special needs intensify, their confidence to teach them is likely to grow which invariably alter their negative attitudes.

## 8. RECOMMENDATIONS

The researcher has argued in this research that ordinary school teachers may need more explicit and intensive instruction in smaller group settings in order conceptualized inclusive education and practice it in school settings. Therefore, teacher trainers should take as a matter of responsibility the integration of pedagogical knowledge training for inclusion in teacher training programmes. The study has also shown that when this is done effectively it will result in an improvement in pedagogical skills that will eventually lead to inclusive best practices in our ordinary school. It is against this background that the recommendations below are made.

- Basic education authorities could send a strong administrative message to the staff that they work collaboratively to affect positive changes in their daily practices.
- School administrators could create and nurture a culture in which pedagogical knowledge training for inclusive practices would be an important and ongoing component of the curriculum that benefits all teacher trainees.
- When preparing school programmes teachers could take into consideration the learning characteristics of children with special educational needs. Consideration could also be made on the fact that pedagogical knowledge training take much time, efforts, and practice to be effective.
- Systematic assessment before starting any training programme could also be made by teacher trainers. This will help in adjusting pedagogical instructions to meet the needs of all teachers in ordinary schools. Assessment data will help in determining the nature of performance deficits so that the right intervention techniques can be utilized.
- There is no one intervention technique to train a particular pedagogical knowledge. Different training techniques could be used by teacher trainers when conducting pedagogical knowledge training programmes and these techniques should vary based on the teachers' pattern of deficits.

#### 9. CONCLUSION

Pedagogical Skill training has become a popular adjunct treatment for developing pedagogical skills that will lead to inclusive best practices in ordinary schools. Presently, pedagogical knowledge training is best viewed as an experimental intervention. The theoretical structure of pedagogical knowledge is incomplete resulting in problems in definition, measurement, and design. Specifically, further research is necessary to resolve issues regarding for example, duration of training, assessment instruments, packaging of training programmes, and contextual variables. The results of this study indicated that if ordinary school teachers who took part in the training were not trained in pedagogical knowledge this deficit will continuously leads to academic, social and emotional problems that will have negative effects on children with special educational needs in ordinary schools. From the study it was then concluded that the use of pedagogical knowledge training or instructions by teacher trainers could result in improved in-service teachers' abilities to establish routines that free up time for small groups and individual instructions, set high expectations for all learners in ordinary classrooms, clearly communicate expectations that engage all learners in learning, spend adequate time on learners who are struggling and develop collaborative ways of working by teachers. The researcher is of the opinion that pedagogical skill training which can improve pedagogical skills for inclusive practices should not be 'razed' or 'remodeled,' but instead 'rebuilt' as part of the component of the initial training of both pre-service and in-service teachers. Until the rebuilding process is complete, pedagogical knowledge training is best viewed as an intervention that has received limited empirical support but, nevertheless holds promise for improving the pedagogical skills for best practices in inclusive education.

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