



Received: 06-07-2022  
Accepted: 16-08-2022

## International Journal of Advanced Multidisciplinary Research and Studies

ISSN: 2583-049X

### Teachers' transformative pedagogy and the impact on pupils' achievement in primary schools within Fako Division, South West Region of Cameroon

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#### Abstract

The study investigated the impact of teachers' transformative pedagogy on pupils' achievement in primary schools within Fako Division, South West Region of Cameroon. The study was guided by two research questions. The questions were transformed to two research hypotheses. The research design used for this study was the explanatory sequential mixed methods design. The purposive and random sampling techniques were used to set a sample population size of 45 head teachers and 242 teachers. The instruments used for data collection were the closed-ended questionnaire designed for teachers and an interview guide designed for head teachers. The content and face validity of the instruments was done through pilot testing of 1 head teacher and 16 teachers from Buea Sub- Division. Reliability test was done with the use of Cronbach's alpha reliability, where the reliability was tested at 0.8. The instruments were therefore reliable for data collection. Data

were analyzed descriptively and inferentially, using the Pearson Product-Moment Correlations coefficient. Hypotheses were tested on 0.5 level of significance. Findings revealed that teaching method has low relationship on pupils' achievement in primary schools within Fako Division and teaching materials have high significant relationship on pupils' achievement in primary schools within Fako Division. Based on the findings, recommendations were made to the educational authorities of the nation to reinforce the training of teachers in Government Teachers Training Colleges (GTTC) and Higher Teachers Training Colleges (HTTCS) to be geared towards empowering them with the skills, teaching methods, strategies, techniques and knowledge to help learners acquire life- long skills, attitudes, self-esteem and knowledge.

**Keywords:** Teachers, Transformative Pedagogic, Pupils' Achievement

#### Introduction

The primary purpose of teaching at any level of education is to bring a fundamental change in the learners (Tebabal & Kahssay, 2011) [23]. According to the World Conference on Education for ALL (EFA, 1990), the ultimate goal of primary education is to equip learners with literacy, numerical and essential life skills. These can be achieved through the help of teachers, for teachers are the backbone of every society. Their role as far as pedagogy of education is concerned, is significant and valuable as they apply varieties of transformative pedagogy in order to decrease the way learners perceive barrier to success and increase their self-efficacy to change (Briggs, 2015) [4].

When educators talk about pedagogy of teaching, they are referring to the way teachers deliver the content of the curriculum to a class. Pedagogy according to Webster (2015) [26], is the method and practice of teaching. It encompasses teaching styles, teaching theory, feedback and assessment. An approach to teaching that encourages learners to grapple with disorienting dilemmas, critically examine their assumption related to the contradictory information, seek out additional perspectives, and ultimately acquires new knowledge, attitudes and skills in order to experience personal and intellectual growth can be referred to as transformative pedagogy (Myers, 2006) [12]. Therefore, in transforming the way pupils learn, the teacher delivers the content by employing appropriate teaching methods, teaching materials and aspects of teachers' behavior.

Teaching method according to Westwood (2008) [27], refers to the principles and methods used by teachers to enable pupils' learning while, teaching materials are materials used by the teacher to facilitate the teaching and learning process in schools (Tambo, 2012) [22]. Appropriate transformative pedagogy should be used in a way that enhances the development of pupils' achievement, which entails academic performance, skills attainment, moral development and many more. Thus, this study investigates the impact of teachers' transformative pedagogy on pupils' achievement in primary schools within Fako Division,

South West Region of Cameroon. Specifically, it would investigate the impact of teaching methods and teaching materials on pupils' achievement.

### Statement of the problem

The Cameroon primary school curriculum outlines seven national core skills to be acquired at the end of the primary level. These skills comprise intellectual, methodological, personal/interpersonal and communication competencies. Pupils are required to acquire logical thinking and a sense of observation, exercise critical judgement, solve problems, implement creative and innovative thinking and exploit information and communication technologies (MINEDUB, 2018) [13]. Pupils are expected to communicate in the two official languages. They are also expected to use basic notions in mathematics, science and technology, practice social and citizenship values. Pupils should demonstrate a spirit of autonomy, a sense of initiative, creativity and entrepreneurship.

As outlined in the curriculum, much is expected from a primary school graduate. From the outlook of the researcher, most primary school leavers today do not meet expectations as they do not really exhibit basic competencies such as communication, reading, writing, explaining concepts, interpreting information presented in tables or diagrams. Pupils do not equally apply knowledge of numbers and objects, measurement, and many more, to solve problems in real life situations. These factors cause learners to develop low self-esteem and lack of curiosity. According to Briggs (2015) [4], transformative pedagogy is teaching that transforms. That is, teaching that changes pupil from passive to active learners, develops skills and attitude in the learners and decreases the way learners perceived barriers to success and increases their self-efficacy to change. It is against this backdrop that the researcher sought to find out the impact of teachers' transformative pedagogy on pupils' achievement in primary schools within Fako Division, South West Region of Cameroon.

### Objectives of the study

1. To find out how teaching methods impact pupils' achievement in primary schools within Fako Division in the South West Region of Cameroon.
2. To find out how teaching materials impact pupils' achievement in primary school within Fako Division, South West Region of Cameroon.

### Research questions

1. How does teaching method impact pupils' achievement in primary schools within Fako Division, Southwest Region of Cameroon?
2. How does teaching material impact pupils' achievement in primary schools within Fako Division, Southwest Region of Cameroon?

### Research hypotheses

**Ha1:** Teaching method has significant impact on pupils' achievement in primary schools within Fako Division, South West Region of Cameroon.

**Ho1:** Teaching method has no significant impact on pupils' achievement in primary schools within Fako Division, Southwest Region of Cameroon.

**Ha2:** Teaching material has significant impact on pupils'

achievement in primary schools within Fako Division, South West Region of Cameroon.

**Ho2:** Teaching material has no significant impact on pupils' achievement in primary schools within Fako Division, South West Region of Cameroon.

### Conceptual review of related literature

This section reviews literature on major concepts which have some significant implication to the study. Concepts reviewed include; transformative pedagogy, teaching methods and teaching materials.

### Transformative Pedagogy / Learning

Briggs (2015) [4] says transformational pedagogy is teaching that transforms. That is, teachings that changes pupil, altering fundamentally the way learners understand themselves and others. The way learners engage in and contribute to their larger world. Transformational teaching goes beyond both passive lecturing and active learning. It is all about employing strategies that promote positive changes in learners' lives. The goal is not simply to impart certain information to learners, but rather to change something about how learners learn and live. If a particular subject or lesson excites a learner, then transformational teaching has occurred. Transformational teaching is all about making lifelong changes. In addition, Cranton (2007) defines transformative pedagogy as learning that induces more far-reaching changes in the learners than other kinds of learning, especially learning experiences which shape the learners and produce a significant impact or paradigm shift which affects the learner's subsequent experience. An approach to teaching that encourages learners to grapple with disorienting dilemmas, critically examine their assumption related to the contradictory information, seek out additional perspectives, and ultimately acquires new knowledge, attitudes and skills in order to experience personal and intellectual growth can be referred to as transformative pedagogy (Myers, 2008).

Briggs (2015) [4] indicates that as far as transformative pedagogy is concerned, teachers employ relevant aspects in order to make learning moving and interesting. Amongst which are; he or she puts the theory into practice, for too many courses focus on concepts and theories and never allow learners to apply what they have learned to a real-life situation. Thus, a teacher offers opportunities for learners to put theory into practice, whether in a local or remote setting, this is a great way to solidify important concepts in learners' minds as well, because they are more likely to remember material with some sort of emotional and/or practical salience.

A teacher always shows care towards learners. For the more a teacher cares about his/her learners, the more respect she will receive from the learners. The first is knowing learners' names, when a teacher knows a learner's name, he/she is saying to the learners that he/she has made an investment in learners, creates a little time and effort on their behalf and that effort breaks out a chunk of the wall that initially stands between teacher and learner. A teacher equally talks openly about pedagogy. That is, he talks with learners about educational practices and policies, it's so important to be open and to show that teachers value learners' input in order to avoid treating learners like their opinions on education do not matter.

A teacher gives feedback that counts. Grading is a time-consuming and not-entirely-pleasant process in which teachers are all too familiar with, but it's extremely important for learners to receive more than a number in return for their hard or lazy work. A teacher tries to move beyond vague or unhelpful comments like "more here" or "unclear," but goes into specifics, and if possible, meet with learners in person or give them voice-recorded feedback. An important part of transformative learning is for individuals to change their frames of reference by critically reflecting on their assumptions and beliefs and consciously making and implementing plans that bring about new ways of defining their worlds. Therefore, in transforming the way pupils learn, the teacher delivers the content by employing appropriate teaching methods, teaching materials and aspects of teachers' behavior (Briggs, 2015)<sup>[4]</sup>.

### Teaching methods

To facilitate the process of knowledge transmission, teachers should apply appropriate teaching methods that best suit specific objectives and level exit outcomes. Moreover, research on teaching and learning constantly endeavor to examine the extent to which different teaching methods enhance growth in pupils' learning (Nanda, 2004). Substantial research on the effectiveness of teaching methods 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 so as to achieve specific outcomes. In order for the methods used for teaching to be effective, Adunola (2011)<sup>[1]</sup> maintains that teachers need to be conversant with numerous teaching strategies that take recognition of the magnitude of complexity of the concepts to be covered by reviewing past lessons before starting a new one.

Adunola (2011)<sup>[1]</sup> indicates that in order to bring desirable changes in learners teaching methods used by educators should be best for the subject matter by involving the learners in planning of different activities, move from simple to complex with examples and accommodate the learner's preferred learning style like role play, assignment work, project etc. Furthermore, Bharadwaj and Pal (2011), sustained that teaching methods 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 teaching methods with learners' needs and preferred learning influence learners' attainments.

Thus, a teacher who is out to transform the way pupils learn, implements creative and innovative teaching methods in order to meet learners' needs and to change the way learners perceive barrier to success. According to Westwood (2008)<sup>[27]</sup> teaching method comprises of the principles and methods used by teachers to enable pupil learning. These methods are determined partly on subject matter to be taught and partly by the nature of the learner.

According to Tambo (2012)<sup>[22]</sup>, teaching method means a standard procedure for presenting subject matter and the organizing teacher-pupils interaction during a lesson. He also states that, teaching methods can be general or specific. There are varieties of teaching methods (such as; pure lecture, role play, demonstration, just to name a few), but as per this study, emphasis is made by teachers on teaching methods that can transform or change the way pupils learn and thus increase pupils' achievement, such methods

include; cooperative teaching method, discussion teaching method and project-based learning method which are all general teaching methods.

According to Ramsden (2003), the selection of teaching method depends upon diversity of elements. The elements of teaching method include age and mental level of learner, learners' previous knowledge, and needs of the learners which are to be thought further in the lesson, the content matter of subject, the objective of lesson, time needed, space provided for teaching, material things, familiarity and skills of the instructor about teaching methods and techniques, philosophies of learning styles, learners home environment and learning goals.

Before selecting a specific type of teaching method, a teacher always keeps in mind the following decisive factors; educational objectives, subject matter, characteristics of the learners, teachers' characteristics, specific condition of the instruction for example time, class size and so on, resources provided for the instructional process, all depending upon what knowledge or skills a teacher wants to execute in learners. It is important to note that, when a teacher takes a decision about his teaching method, they are required to be flexible and show willingness towards the adjustment of their teaching styles according to the learners and the content to be taught. Therefore, learner's success is highly dependent on the effective transformative teaching methods such as; cooperative teaching method, discussion teaching method and project-based learning. These would be discussed as below.

### Cooperative teaching method

According to Polintan (2012)<sup>[18]</sup>, cooperative learning can be defined as collaboration in an instructional setting. That is, cooperative learning is part of a group of teaching/learning techniques where learners interact with each other to acquire and practice the elements of a subject matter and to meet common learning goals. Learners work together in small groups and learn through interaction with each other while the teacher coaches the process. Or among members of small groups that achieves learning outcomes, including ability to remember and utilize what is learned.

Cooperative learning involves pupils working together in small groups to accomplish shared goals, any course material or assignment can be adapted to this type of learning, and groups can vary from 2-6 people with discussions lasting from a few minutes up to an entire period. Cooperative learning, encourage learners of mixed abilities to work together by promoting small group or whole class activities, through verbally expressing their ideas and responding to others. Here, learners would develop their self-confidence as well as enhance their communication and critical thinking skills which are vital throughout life. Solving mathematical puzzles, conducting scientific experiment and acting out short drama sketches are just a few examples of how cooperative learning can be incorporated in to classroom lessons. This would help increase pupils' achievement.

Braundy (2015) provides the following guide lines in using cooperative learning. These include; divide the learners in to subgroups of four to six, make sure the learners are sitting next to each other to facilitate interaction. Clearly state the problem or issue the pupils are supposed to address, write it on the chalk board, provide handouts if possible or use overhead project to ensure that the learners understand what

is to be done. Have the group select a spoke person to keep track of the progress of the group, have the participants deal with the issue for designated period of time while you move around from group to group assisting as necessary and evaluate the group effectively.

### Discussion teaching method

Tchombe (2009) demonstrates that the discussion method is a highly efficient teaching method that is used, not only to help pupils develop problem solving skills, and to share experience and opinions, but also to attain subject matter mastery. The teacher by this method engages with groups of pupils in a cooperative examination and compares views. By this method, issues are illuminated and pupils understand better as the teachers engage the learners to interact also with each other. In addition, discussion involves two-way communication between participants, this can be seen in the classroom situation where the teacher and the pupils all participate in discussion, and the teacher spends some time listening while the pupils spend some time talking.

Tchombe (2009) adds that in areas in which pupils already have some knowledge or experience, discussion may be used to develop the main points to be covered in a lesson. In discussing some issues, different points of view may arise, the discussion may help to clarify the different points of view and may assist each pupil define his or her own opinion, used in this way, motivation may be more effective in motivating pupils than teachers, as pupils see that some importance is attached to their contribution.

The discussion method has an element of reciprocal influence. This implies that pupils learn not only from the teacher but also from their peers. Discussion method also engages other modalities, these include; speaking, listening, observation and non-verbal process. Speaking about one's ideas, listening during each communication, fosters both cognitive and affective perspective.

Discussion as a teaching method has varied functions; it can be used to achieve different curriculum objectives, for example, pupils can be asked to read a text, the teacher can conduct a discussion on the text by examining the concept, the main theme, the relationship of the knowledge to other knowledge, use of materials and evaluation of the presentation. The teacher questions to find out how much the learners have understood, the questions will also make demands on the learner's ability to analyze, apply, synthesize and evaluate, these are the higher-level cognitive objectives.

Tambo (2003) reports that discussion is a situation in which teachers and pupils talk or pupils and other pupils talk with one another and share ideas or opinion. The purpose is to improve pupils thinking and communication skills, to improve pupils' involvement in the lesson, encourage tolerance for others view as well as fairness and open mindedness. Discussion method can be used in teaching all subjects in the curriculum, it is perhaps the most dynamic method of teaching, teachers should do their best to master the mechanisms or the techniques involved in using discussion teaching method in order to increase pupils' achievement.

### Project-based learning

Project-Based Learning (PBL) is the third transformative teaching method. Jones (2013) [10] defines project-based learning as a model for classroom activity that shift away

from classroom practices of short, isolated teacher -centered lessons and instead emphasizes learning activities that are long term, interdisciplinary, student-pupils centered and integrated with real world issues and practices.

According to O'Brien (2020) [14], PBL is an instructional methodology that encourages learners to learn and apply knowledge and skills through an engaging experience. PBL presents opportunities for deeper learning in-context and for the development of important skills tied to schools and career readiness. O'Brien (2020) [14] adds that there are three characteristics of meaningful project-based learning activities that lead to deeper learner understanding, these include;

PBL focuses on engaging learners with real-world problems. This is an interdisciplinary approach because real-world challenges are rarely solved using information or skills from a single subject area, projects require learners to engage in inquiry, solution building, and product construction to help address the real-world issue or challenge presented. As learners do the work, they often use content knowledge and skills from multiple academic domains to successfully complete the project.

Project based learning requires the application of knowledge and skills, not just recall or recognition. Unlike rote learning that assesses a single fact, PBL is more complex and can be used to assess how learners apply a variety of academic content in new contexts. As learners engage in the work of a project, they follow a process that begins with inquiry, inquiry leads to deeper learning, not just related to academic content, but also related to the use of content in real world applications. Inquiry processes can help lead to the development of solutions that address the problem/challenge of the project and the creation of products to communicate solutions to an audience based upon the application of content and skills (O'Brien, 2020) [14]. In PBL, the role of the teacher shifts from content-deliverer to facilitator/ project manager, learners work more independently through the PBL process, with the teacher providing support only when needed. Learners are encouraged to make their own decisions about how best to do their work and demonstrate their understanding. The PBL process fosters learner independence, ownership of his/her work, and the development of 21st century/workplace skills. Many reasons are accountable for a teacher to incorporate PBL in the curriculum among which are; PBL is a multidisciplinary pedagogical method that provides meaningful learning opportunities. That is PBL encourages learners to make meaningful connections across content areas, rather than thinking about each subject area in isolation.

### Teaching materials

Teachers need transformative resources/materials in order to have a successful classroom. Instructional materials are the tools used in educational lessons, which includes active learning and assessment. Basically, any resource a teacher uses to help him teach his learners is an instructional material. Instructional materials may aid a learner in concretizing a learning experience so as to make learning more exciting, interesting and interactive (Tambo, 2012) [22]. Also, instructional material encompasses all the materials and physical means an instructor might use to implement instruction and facilitate pupil's achievement of instructional objectives. Teachers are the best instructional

materials, because they are the ones who manage the classroom.

Ogundele (1987), as cited in Umaru and Kolo (2011) points out that good teaching aids must have the following characteristics, this is because, the importance of any instructional materials lies in its ability to: Appeal to the senses (sound and sight), attract and hold attention and focus attention on essential elements to be learned at the proper time. In order to achieve the above objectives, any material to be used as teaching aids must satisfy the following characteristics such as;

*Flexibility:* in schools, the teacher has been taught different ways of teaching hence, while in the classroom a teacher will attempt to teach his/her lesson using a variety of methods and materials. He/she should therefore, select or construct teaching aids that can be instantly modified to suit change in the approaches to construction.

*Color:* since pupils are attracted by bright colors, these should be used in the preparation of teaching also however, and too much brightness should be avoided since it may distract learners' intention from the objectives of the lesson and the instructional materials.

*Simplicity:* teaching aids must be simple and present only a far idea at a time, this is because, learners cannot comprehend complex ideas presented to them at a short-time. If pictures are used, they should illustrate only a very far words or actions. If more detailed pictures are used, learner will not know that they are to notice.

*Visibility:* all the smallest detailed to be used in a teaching material should be large enough to be seen by every learner in the class. So, material should be placed conspicuously in front of the class to present a clear view to every learner. There are a great variety of instructional materials around that can be used to make teaching or learning vivid and more interesting, but as per this study, emphasis is laid on teaching materials such as; real object, video, community resources that can transform the way pupils learn and help increase their self-efficacy to change. The teaching materials as per this study include; real objects, video and community resources (Umaru & Kolo, 2011).

### ***Real things or real objects***

Real object refers to authentic objects from real life that a teacher uses in the classroom to teach a specific concept. Real objects can incorporate what's already in your classroom, such as a desk, chair, bags and many more, or it can be something the teacher has brought from outside class, like a collection of colorful brochures, a stuffed animal, tickets, just to name a few. Real objects reinforce language skills and appeal to both visual and kinesthetic learners of all age. Most teachers used real objects to demonstrate the meaning of vocabulary words, think of the difference between teaching pupils the words for fruit versus showing them the real thing (fruits), (Tambo, 2012) [22].

The use of real things in teaching helps in making learning not only natural but also enjoyable and help learners to identify objects in reality, it equally helps to improve pupils' understanding of other culture and real-life situation in classroom instruction, also, it fosters a more creative and active teaching-learning environment. Real things can be classified in to three categories such as; unmodified real things, modified real things and specimen (Tambo, 2012) [22]. Unmodified real thing are things just as they are. That is, things that have not been altered in any way by the teacher,

except that he or she may have removed them from their original real-life surrounding into a classroom environment. Unmodified real things have all their parts completed and intact and therefore are alive and can operate or work. They are easily recognized for what they are because they have not undergone any transformation. Example of unmodified real things are; a frog, a rat, an insect, a bicycle or a flower. Modified real things as the name implies are things that have been modified in some way to make them more suitable for class use, subtraction of parts or enlargement. Example includes; a car, engine can be separated and re-arranged to help learners understand its structure, parts of the human skeleton can be painted for emphasis. Specimen real things are objects that are representative of a group or class of similar objects. There are two main types; living and non-living specimens. Living specimen consist of plants and animals. Non-living specimens include; rock sample, art work and fabric samples (Tambo, 2012) [22].

### ***Community resources***

Every community irrespective of its size or where it is located is a learning laboratory, and therefore an influential instructional medium. Its people, its animal and plant life, its places and products are all resources for teaching and learning (Tambo, 2012) [22]. Tambo holds that, exploration and use of community resources is highly recommended for all schools especially those that are lacking in modern technology media such as slides, television and computer and many more.

Tambo (2012) [22] states that the use of community resources can improve teaching and learning in many ways such as; community resources encourage learning by exploration, they are a means by which the work of the school can be related to the work of the community, the use of community resources increases the learner's motivation. Community resources equally provide change and variety of monotony that is inherent in restricting pupils to the classroom walls. They improve the effectiveness of instructional materials by providing experience that reinforces their impact.

Tambo (2012) [22] equally holds that community resources can be classified in to two categories; resource persons and resource places. In order to use the community as learning laboratory, teachers need to possess extensive information about its agencies, people, places of interest and services. Resource people are one of every community's richest resource for teaching and learning. Almost every person is a specialist in one field or the other. All the school needs to do is to identify people's expertise and then examine whether it can use such expertise to improve the instructional program. Sometimes, resource persons are invited into the school to interact with pupils at other time, it may be necessary for the pupils to meet them at their homes or work places to observe or interview them. This will thus help develop pupil's achievement.

Resource places include laboratories, workshops, libraries, gardens, zoos, aquaria, museums, audio-visual centers, printing houses, government offices, monuments, parks, industries, ports and geographical features (lakes, mountains, rivers etc.). A very common approach to using resource places is the field trip, commonly called an excursion, field trip are of about three main kinds; mini, midi and maxi trips. If a class is moved to some area within the school compound, it would be a mini trip. Those trips that take your class in to the immediate community, that is, to places within a

walking distance to school are called midi trip. Those that require transportation at least one full day can be leveled maxi trip. Field trips should be related to the lesson; all these would act effectively in the development of pupils' achievement.

### **Video**

According to Smith and Regan (2005)<sup>[20]</sup>, video is an audiovisual medium, although it can depict text, the medium's primary strength lies in its ability to display images, in notion and color, alone with sound, it can appear to compress time or expand time to support learners' attention. Video has a wide range of potential educational application (Butcher, 2003)<sup>[5]</sup>. Butcher says video is a good medium for providing learners with opportunities to view that which they could not usually experience. It can be used to show text and graphics, to show a lecture of presentation. A person can be shown talking about a subject and this presentation could either be broadcast live, pre-recorded, or combine live and pre-recorded material would thus transform the way learners learn and receive the lesson.

Video can also show what is being explained, as it happens in the real world. It can be particularly useful educationally for movement or procedures. It is a good medium for actualization, visualization and storytelling. Also, the video which is more than a text book, a blackboard, audiotape or a computer, depicts real life situations, real life people and real language. The video is also an entertaining medium. Children are experienced television viewers though most of their viewing is passive and meant for relaxation and entertainment. By making use of this very important element in the class, passive viewers can be turn into active ones by tickling their interest and providing them with stimulating task that generates responses and encourage participation. The implication for this study is that, when a video is used as a pedagogical tool in a lesson, it provides experience given that the material is used constructively with a wide variety of learner-centered activities (Butcher, 2003)<sup>[5]</sup>.

According to Smith and Regan (2005)<sup>[20]</sup>, video presents the dynamics of communication between people using language which can be seen and heard. It makes the links between the learner's visual and auditory experience and conveys stories, social event, facts and opinion with the aids of pictures. This way, language is portrayed in its social context and situation where learners can see who the speakers are, what they are doing and how they are dressed. While video is often criticized for being ephemeral and fleeting, this can also be viewed as its strength. A good story can be presented without interruption, gripping viewers and enabling them to see processes played out over time, when used as computer, it can be interrupted and reviewed at will. It can be viewed continuously, presenting a set sequence of events in an appealing and entertaining manner, it can equally be used to capture and reflect on pupil performance. For example, teacher can learn by seeing themselves in the classrooms while pupils might improve their presentation skills by seeing how they come across.

Moses and Croll (1991) as cited in Smith and Regan (2005)<sup>[20]</sup> says educators and broadcasters agreed that videos make innovative styles of teaching and learning possible and shared pupil/teacher viewing potentially can change the power dynamics between teacher and pupil. In an age where we are expected to receive process and discriminate between messages at very high levels, video resources need to be

challenge what learners know and potentially can know. Educationally video strength is the attractiveness of its content, not its complexity, this is important for the developing and using video resources in classroom

According to Bajah (1982), as cited in Umaru and Kolo (2011), the followings were some of the reasons for using instructional materials. That is teachers use teaching materials for the following reasons; a good instructional material can supplement spoken or written words; it can bring teaching to life in a way which word cannot. Words can describe people, places and objects but a picture immediately brings reality. A teaching aid can equally simplify and clarify what is complex and difficult to express in words. Instructional materials have motivational value to develop the interest of the learners. Instructional materials can also promote retention as we can understand from the Chinese proverb that says what I hear I forget; what I see I remember; what I do I understand.

Teaching materials save time, and energy. What a teacher will explain in ten minutes, will be possible in less time with the use of instructional materials? Aids implied to help in teaching, not to be substitutes for teaching the subject, nor for teachers. Rather it should be used to supplement oral explanation and descriptions. In addition, primary education involves a lot of simple tests and activities while the learners must involve in, so as acquiring the necessary skills and experiences. This can only be enhanced with the aid of instructional materials. Instructional materials include self-supporting materials which are used by the teacher to present a complete body of instruction. They make a lesson to become more explicit and interesting, teaching aids are prime importance of both slow and fast learners. Ogundele (1987) considered teaching aids as an essential part of teaching methods which helps the teacher to express its subject concept to the learners thus promoting learners' achievement.

Instructional materials are normally used during instruction to enhance proper or effective learning and to encourage retention; they reduce the workload of the teacher in the classroom, reinforce and add clarity to learning. In addition, instructional materials aid teachers' competence and effectiveness of instruction and class control that makes the learning environment more attractive, appreciable, conducive, bearable and realistic. The learners' attention is better controlled and sustained. Ogundele (1987)

Ibrahim (2000)<sup>[9]</sup> states that instructional materials assist teachers in the achievement of stated objectives and also help the teachers to make lesson explicit to the learners. Fakomogbon (2000) also indicates that instructional materials possess the quality of influencing the emotional, motivational and structural position of the learners, it aids the achievement of any one of the following in the teaching learning process: Attention and motivation; orderliness in the classroom; lesson presentation; recall and remembering; guidance, active participation and response; feedback, assessment of performance and evaluation.

Oladipo (2011)<sup>[15]</sup> asserts that instructional materials are important tools for enriching, visualizing, simplifying, transmitting and accelerating the teaching and learning processes, thus enhance learners' achievements. He further said that, effective instruction with instructional materials in the classroom requires careful planning by the teacher. This implies that teachers should take time to apply special knowledge and skill with respect to selecting, producing and

using different kinds of instructional materials.

Teachers take in to consideration vital suggestions when using teaching materials such as; they ensure that the material is accurate and acceptable to the learners, review such materials before using them in the class, arrange the materials in such a way that the learners will see it from the place they are sitting, use the materials in the appropriate time in the lesson and after that remove them, do not use only one type of teaching aid to the exclusion of others, ensure there is change and variety and lastly, always remember that learners are different in age/maturity, interest and experience. It is always an advantage to combine the aids to meet the need of various learners. The class needs showed determination of the types of aids to be used. Do not cause confusion by presenting too much information Umaru and Kolo (2011), as cited in (Ajayi, *et al.*, 1999). They further observed that instructional materials are versatile tools that are used in different ways for effective teaching and learning. These aids convey facts and ideas in all forms of communication. They offer quite an easy way of presenting information this thus help in the transformation of learners.

### **Pupils' achievement**

According to Cater (2003)<sup>[6]</sup>, pupils' achievements measure the amount of academic content a child learns in a determined amount of time. It is also the extent to which pupils have attained their short or long- term educational goals or objectives in life. Achievement here entails academic performance, skills attainment, moral achievement and many more.

Effective teachers are the most important factor contributing to pupils' achievement. Although curricula, reduced class size, district funding, family and community involvement all contribute to school improvement and pupil's achievement, the most influential factor is the teacher. Choosing effective teachers is critically important for schools trying to improve their performance. It is noted that learners who were placed with highly effective teachers for three years in a row significantly outperformed comparable learners on a mathematics assessment (96th versus 44th percentile). In addition, teacher quality has a lasting effect on pupil's learning. Data from Dallas reveals that a learner who has an outstanding teacher for just one year will remain ahead of her peers for at least the next few years. Unfortunately, the opposite is true as well, if a learner has an ineffective teacher, the negative effect on her achievement may not be fully remediated for up to three years.

A study of third-grade teachers in an urban Virginia school district found that learners of teachers ranked in the top quartile of effectiveness score approximately 30 to 40 scale-score points higher than expected on the Virginia Standards of Learning Assessment in English and mathematics, while learners of teachers in the bottom quartile scored about 24 to 32 points lower than expected on these tests. It is clear that the common denominator in school improvement and pupil's achievement is the teacher. Therefore, it is critical that schools be able to identify effective teachers during the hiring process.

Educators at the College of William and Mary describe a way to use the characteristics of effective teaching to evaluate teacher candidates. Effective teachers exhibit certain skills and qualifications. These include verbal ability, coursework in pedagogy, knowledge of special-needs

learners, teacher certification, and content knowledge of the specific subjects to be taught, personal traits such as a positive and caring attitude, fairness and respect for learners, enthusiasm, dedication and reflective teaching contribute to these teachers' effectiveness in the classroom.

Just as important are classroom organization and classroom management skills, instructional planning, allocating time for academics, keeping learners engaged, using appropriate instructional strategies, correctly sequencing instruction, questioning strategies, monitoring learning and differentiating learning for individual learners are all important characteristics of an effective teacher. Educators at the College of William and Mary have developed a chart of these characteristics that they use to help select teachers. This chart suggests what to look for in an applicant's portfolio, what questions to ask in an interview to measure each skill, and what to listen for in the applicant's response.

### **Theoretical framework**

This is based on theories postulated by scholars and some psychologists in relation to teachers' transformative pedagogy and pupils' achievement. According to Amin (2005)<sup>[2]</sup>, a theory consists of assumptions and propositions that present a systematic view of a phenomenon. Two theories have been found relevant for this study.

#### **Vygotsky's social constructivism theory of learning (1928)**

The school of constructivism holds that knowledge develops depending on how learners actively participate in problem solving and thinking. The individual as such formulates new knowledge by changing old perceptions. According to Vygotsky (1928), this implies a child potentially develop through problem solving under adults' guidance or collaboration with more knowledgeable peers. As such a learner moves from a lower level of reasoning to a higher one through clues, modelling, explanations, discussions, joint participation, just to name a few. For this to occur there must be a socio-cultural milieu within the learner or individual child operates or interacts. This outlook permitted Vygotsky to come out with three main characteristics of his theory which include; the child in activity in the cultural context (zone of proximal development), the socio-cultural origin of mental functioning and the socio-cultural methodology. Because of the value Vygotsky attached to the importance of predicting a child's future capabilities he formulated the concept of ZPD.

The theory is related to this study in that, it outlines certain aspects of learning such as collaboration, active participation in problem solving and thinking, as well as the interaction between teacher and learner which are all strategies used by a teacher that promote positive changes in learners' lives. In addition, the theory is relevant to this study in the following ways; it would help the teacher to develop learning communities as well as community of learners' classroom. Also, it would equally help the teacher to develop effective teaching methods such as collaborative / cooperative learning and group work. It also helps the teacher to develop instruction that supports social learning.

#### **Piaget's theory of Child Cognitive Development (1936)**

A famous Swiss psychologist, Jean Piaget carried out experiment on the thoughts of children. He referred to children as "Little Scientists" in their attempts to make sense

of their own world; children have their own logic and ways of knowing which follow the predictable pattern of development as they mature biologically and interacts with their environment. To him, children use “schemata” or schema to actively construct their world. Schema is a mental picture or a framework that exists in an individual’s mind to organize concept and theories that people use to acquire information. According to Piaget, a schema is a mental picture of what the child sees, hear for example, the schema of a normal face is a nose, two eyes and one mouth. If a child sees a face, he or she feels uncomfortable because he or she has recognized a new schema and then he compares it to the old schema (face). This leads to adaptation that is adjustment of previous knowledge. To Piaget, real learning comes from experience that arouses children’s curiosity and gives them the chances to work out their own solutions.

Piaget cognitive constructivism focuses therefore on development, whereby the mechanism of accommodation, assimilation and equilibrium are the key to the development process that is based on adaptation (2008). It is through these processes that individual construct new knowledge from their experiences, hence, cognitive theories are seen as constructivism, where learning is a process by which the learner actively constructs or build new knowledge and ideas based upon current and past knowledge or experiences. According to Piaget, cognitive advancement occurs in learners when there is harmony in what has been learnt with the existing knowledge which signifies equilibration. This equilibration according to Piaget involves two processes; assimilation and accommodation.

The theory is related to this study in that it talks about the developmental age of children which is an important criterion a teacher would use to select the appropriate teaching materials as well as teaching methods that would help to achieve learners’ needs. It seems the knowledge of Piaget’s stages help the teacher understand the cognitive development of the child as the teacher plans stage-

appropriate activities to keep learners alive. It would as well help the teacher to select the appropriate teaching materials and teaching methods as per the stages of the learner. This will also help the teacher to motivate the learners, for children need to be motivated intrinsically by the teacher that is, providing children with concrete materials to touch, manipulate and use. It equally helps teachers to understand that learning should be child-centered, that is the learners should be actively involved in the teaching and learning process.

**Research methodology**

**Research design**

The research design used in this study was explanatory sequential mixed methods design. According to of Creswell (2014), the explanatory sequential mixed methods approach is a design in mixed methods that appeals to individual with strong quantitative background or field relatively new to qualitative approaches. It involves a two-phase project in which the researcher collects quantitative data in the first phase, analyses the results, and then uses the results to plan or build on the second qualitative phase. The quantitative results typically inform the types of participants to be purposefully selected for the quantitative phase and the types of questions that would be asked of the participants. The overall intent of this design was to have the qualitative data help explain in more detail the initial quantitative results. A typical procedure might involve collecting data in the first phase, analyzing the data and then following up with qualitative interview to help explain the survey responses.

**Population of the study**

The population for this study comprises all primary school teachers (2472) and head teachers (430) in Fako division ranging from public, lay- private, and confessional schools.

**Table 1:** Distribution of the Population

Sub Division in Fako	Numbers of Primary Schools				Numbers of Teachers			
	Public Primary School	Lay- Private Primary School	Confessional Primary School	Total	Public Primary School	Lay- Private Primary School	Confessional Primary School	Total
Buea	34	69	24	127	288	488	178	954
Limbe I, II, III	32	47	27	106	221	179	84	484
Muyuka	25	32	30	87	155	190	164	509
Tiko	32	36	27	95	201	128	124	453
West Coast	09	03	03	15	38	19	15	72
Total	132	187	111	430	903	1004	565	2472

Source: School Map from Divisional Delegation of Basic Education Fako (2019/20)

**Table 2:** Sample Size

Sub-divisions	Public Primary School	Lay-Private Primary School	Confessional Primary School	Total Number of School	Total number of teachers
Tiko	5	5	5	15	85
Buea	5	5	5	15	85
Limbe	5	5	5	15	72
Total	15	15	15	45	242

**Data analysis and findings**

The study set out to investigate the impact of teachers’ transformative pedagogy on pupils’ achievements in primary schools within Fako Division, South west Region of Cameroon.

**Decision level:** Mean,  $\bar{x} = \frac{4+3+2+1}{4} = 2.5$

Respondents accepted or agreed with the opinion expressed in the item if the mean score is 2.5 and above. Otherwise, they rejected or disagreed.

The table below shows the analyses for the impact of teaching methods on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon.

**Table 3:** Teaching Methods and Pupils’ Achievement

S. No	Teaching methods	$\bar{X}$	S	Decision
1	Teaching pupils in cooperative groups than individually increases their retention of knowledge.	3.79	.49	A
2	Peer interaction helps children obtain a deeper understanding of the lesson	3.82	.40	A
3	Cooperative learning increases the learning of slow learners and thus promotes hard work.	3.83	.40	A
4	Project based learning develops problem- solving skills in learners	3.72	.50	A
5	Project learning situates learning in a real-life situation	3.80	.40	A
6	Project based learning renders learning practical	3.79	.48	A
7	Discussion method improves pupils thinking and communication skills	3.84	.38	A
8	Discussion method helps learners to understand better as teachers engage learners to interact with one another	3.79	.43	A
9	Discussion method improves pupils’ involvement in the lesson	3.83	.39	A
	MRS	3.801	.43	A

MRS = Mean response score  $\bar{x}$  = Mean score S = Standard deviation

The analyses from the table above, the respondents agreed that teaching pupils in cooperative groups than individually increases their retention of knowledge; peer interaction helps children obtain a deeper understanding of the lesson; cooperative learning increases the learning of slow learners and thus promotes hard work; Project based learning develops problem- solving skills in learners, situates learning in a real life situation, and renders learning

practical; discussion method improves pupils thinking and communication skills, helps learners to understand better as teachers engage learners to interact with one another, and improves pupils’ involvement in the lesson. Conclusively, teaching methods have an impact on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon ( $\bar{x} = 3.801 \pm 0.43$ ).

**Interview of Head Teachers on teaching methods**

**Table 4:** Interview of Head Teachers on Teaching Methods

S. No	Theme	Response	Explanation
1	Having transformative/effective teachers in your school	Yes	They are mostly trained teachers, above 50%
2	Use of transformative teaching methods	Yes	Pure lecture, flipped teaching, illustration, demonstration, project method, drill, recitation, team work, and question method.
3	Pupils’ understand lessons	Yes	The way pupils respond to questions, through pupils’ performance, but not all learners because some are slow.
4	Teaching methods affecting pupils’ achievement	Yes	It improves academic performance, help pupils to understand better, develop thinking skills and interaction.
	Total Responses	45	

Interview of head teachers also revealed that teaching methods have an impact on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon.

**Table 5:** Summary of Computed Value for Pearson Product-Moment Correlation Coefficient for the Relationship between Teaching Methods and Pupils’ Achievement (N=240)

Variable	$\sum X$	$\sum X^2$	$\sum Y$	$\sum Y^2$	$\sum XY$	$\Gamma_{xy}$	p-value
Teaching Methods (X)	8210	283063	255541	.090	0.000		
Pupils’ Achievement (Y)	7470	234378					

p\*\* < 0.05; df = 238; critical  $\Gamma_{xy} = 0.104$ ; (N= 240)

**Verification of hypothesis one**

Data analyses on the table above shows that, at alpha ( $\alpha$ ) level of significance 0.05 with degree of freedom 238, the computed correlation coefficient value  $\Gamma_{xy}$  -computed is 0.090 which is lower compared to the critical value of 0.210 ( $\Gamma_{xy}$ -critical), we do not reject the null hypothesis and conclude that teaching method has low relationship on pupils’ achievement in primary schools within Fako Division, Southwest Region of Cameroon. This implies that teachers have to vary their teaching methods during lessons so that the achievement of their pupils should improve in primary schools within Fako Division, South West Region of Cameroon.

**Table 6:** Teaching Materials and Pupils’ Achievement

S. No	Teaching materials	$\bar{X}$	S	Decision
1	The use of real things/objects in teaching helps in making learning not only natural but also enjoyable.	3.90	.30	A
2	Real things help to improve learners’ understanding of other culture and real-life situations	3.81	.39	A
3	Real objects help to facilitate the teaching and learning process, thus making learning experiences more memorable for the learners	3.90	.29	A
4	Community resources make learning enjoyable and interesting, thus increases learners’ motivation	3.71	.47	A
5	Community resources encourage learning by exploration	3.51	.51	A
6	Community resources provide change and variety of monotony that is inherent in restricting pupils to the classroom walls.	3.48	.61	A
7	Using video in teaching helps to transform passive learners in to active learners	3.75	.43	A
8	Video depicts real life situations, real life people and real language	3.65	.54	A
9	Video helps to stimulate activities, engage the learners and encourage active participation in the classroom.	3.74	.47	A
	MRS	3.718	.454	A

MRS = Mean response score,  $\bar{x}$  = Mean score, S = Standard deviation

The table above shows the analyses for the impact of teaching materials on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon.

From the analyses in the table above, the respondents opined that the use of real things/objects in teaching helps in making learning not only natural but also enjoyable; real things help to improve learners’ understanding of other culture and real-life situations, facilitate the teaching and learning process, thus making learning experiences more memorable for the learners. Community resources make learning enjoyable and interesting, thus increases learners’

motivation; they encourage learning by exploration, and provide change and variety of monotony that is inherent in restricting pupils to the classroom walls. Using video in teaching helps to transform passive learners in to active learners; Video depicts real life situations, real life people and real language, helps to stimulate activities, engage the learners and encourage active participation in the classroom. Conclusively, teaching materials have an impact on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon ( $\bar{x} = 3.718 \pm 0.454$ ).

**Interview of Head Teachers on teaching materials**

**Table 7:** Interview of Head Teachers on Teaching Materials

S. No	Theme	Response	Explanation
1	Teachers’ use teaching materials	Yes	Real objects but not used all the time because of cost, charts, textbooks, sketch, and pictures.
2	Teaching materials reflect real life situation	Yes	But not often
3	Pupils participate actively in class	Yes	Through responses given by pupils during teaching, and active participation in class.
4	Teaching materials affect pupils’ achievement	Yes	They facilitate understanding, increase academic performance, inspires learning, identify objects, and develop skills in learners.
	Total Responses	45	

Interview of head teachers also showed that teaching materials have an impact on pupils’ achievement in primary schools within Fako Division, South West Region of Cameroon.

**Table 8:** Summary of Computed Value for Pearson Product-Moment Correlation Coefficient for the Relationship between Teaching Materials and Pupils’ Achievement (N=240)

Variable	$\sum X$	$\sum X^2$			
	$\sum Y$	$\sum Y^2$	$\sum XY$	$\Gamma_{xy}$	p-value
Teaching materials (X)	8030	271501	250544	.278**	0.000
Pupils’ Achievement (Y)	7470	234378			

p\*\* < 0.05; df = 238; critical  $\Gamma_{xy} = 0.104$ ; (N= 240)

**Verification of hypothesis two**

Data analyses on the table above shows that, at alpha ( $\alpha$ ) level of significance 0.05 with degree of freedom 238, the computed correlation coefficient value  $\Gamma_{xy}$  -computed is 0.278\*\* which is higher compared to the critical value of 0.210 ( $\Gamma_{xy}$ -critical), we reject the null hypothesis and conclude that teaching materials have high and significant impact on pupils’ achievement in primary schools within Fako Division, Southwest Region of Cameroon. This implies that when teachers use a variety of teaching materials during lessons, the achievement of their pupils would improve in primary schools within Fako Division in the South West Region of Cameroon.

**Summary of findings**

The following are the major findings of the study. Teaching method has low relationship but not significant impact on pupils’ achievement in primary schools within Fako Division, Southwest Region of Cameroon. Teaching materials have high and significant impact on pupils’ achievement in primary schools within Fako Division, Southwest Region of Cameroon.

**Conclusion**

The study was to investigate Teachers’ Transformative

Pedagogy and the impact on Pupils’ Achievement in Primary School within Fako Division, South West Region of Cameroon. This study was guided by two research objectives based on the effects of teaching methods and teaching materials on pupils’ achievement in primary school. There were three research questions which were transformed in to three research hypotheses. A sample of 242 teachers and 45 head teachers were used for data collection, using a questionnaire and an interview guide. The data were analyzed using Pearson Product-Moment Correlation and data from the interview guide was simply recorded and written. The findings showed that, teaching methods have a low relationship but not significant impact on pupils’ achievement. Teaching materials have high and significant impact on pupils’ achievement and lastly teachers’ behaviour have high and significant impact on pupils’ achievement in primary schools within Fako Division, Southwest Region of Cameroon.

**Recommendations**

Teaching pupils to become effective achievers or thinkers is increasingly recognized as an immediate goal of education. If pupils are to function successfully in highly technical society, then they must be equipped with life-long learning and skills necessary to acquire and process information in an ever- changing world. Following the vision of Cameroon of becoming an emerging nation by 2035, teachers need to build up citizens who think critically, creatively and analytically, with self-esteem so as to meet up with the changes of the changing world. The results obtained from the findings and data analyzed attest that there is much to be said on the impact of teachers’ transformative pedagogy on pupils’ achievement in primary schools. More effort should be laid on transformative pedagogy in primary schools as it can influence to a greater extent to which a pupil can be successful or fail in the final year examination especially at the Cameroon Government Entrance and the First School Leaving Examinations. Therefore, the researcher’s recommendations are based on the three objectives as per

the study.

Teachers should constantly make progress in their professional development and skills building especially in teaching methods. Teachers need to be constantly conscious and aware that they need to improve on their skill and improve on teaching methods. Teachers could equally endeavor to improve themselves in their profession by upgrading themselves through in-service training seminars, seminars and workshops to learn more on teaching methods that can transform or change the way pupils learn. Teachers should also upgrade their skill and competences through further studies in education by acquiring higher professional training and the acquisition of higher degrees like bachelor, masters and doctorate in nursery and primary education or in any field under education. This would help teachers learn more on teaching methods and to know who, when and how to apply these teaching methods. Teachers should encourage pupils' cooperation and emphasize the idea of the class as a unit or team. The educational authorities of the nation have to reinforce the training of teachers in Government Teachers Training Colleges (GTTC) and Higher Teachers Training Colleges (HTTCS) to be geared towards empowering teachers with skills, teaching methods, strategies, techniques and knowledge about pupils' achievement so as to help learners develop their life-long skills, attitudes, self-esteem just to name a few. Teachers already in the field should be giving more opportunities for in-service and continued training to update them with the new approaches in teaching. The seminars that are being held once a year should be increased to at least twice a year. Resource persons from the faculty of education in the University of Buea should be invited to train teachers on innovative teaching methods that can transform the way pupils learn.

There is need for teachers to be resourceful in instructional materials selection and utilization. This is to reduce the cost of production and maintenance of instructional materials, especially the improvised ones. Thus, regular training and re-training of teachers is hereby recommended. There is also need for the development of positive attitudes by teachers towards the use of teaching materials for their pupils. This would encourage the development of their proficiency. Teachers should try hands on the production of simple aids so that pupils can see what they are talking about in the lesson. School heads should supervise their teachers more closely to ensure that the available instructional materials are effectively utilized. Educational authorities of the nation should establish resource centers to enable teachers borrow teaching aids which may not be in the schools. The government should organize workshops, seminars and conferences for teachers to enable them up-date their knowledge on new developments on the different teaching materials and on the use of instructional materials. Also, the government and non-governmental agencies should assist in the provision of instructional materials for effective teaching and learning in primary schools. Teachers should motivate and encourage active participation in class work by adopting instructional materials interaction. Workshop on the use of and updates of instructional materials should be organized on regular basis for teachers since knowledge gain is a continuous process and knowledge grows in itself.

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