The Influence of Classroom Environment on Students Academic Performance in Secondary Schools within the Bamenda II Municipality, North West Region – Cameroon

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Abstract

Purpose: This paper investigated the influence of classroom environment on the academic performance of students in secondary schools within the Bamenda II Municipality. More specifically, this study investigated the influence of classroom environment on the academic performance of students in secondary schools within the Bamenda II, Mezam Division of the North West Region of Cameroon.

Methodology: One hundred and sixty two (162) students were sampled across three secondary schools to get their opinion on the issue under investigation. A cross-sectional survey research design was used and the sample of the study emerged through a simple random and convenient sampling techniques. A questionnaire was administered on the respondents. The questionnaires were analyzed based on the research hypothesis.

Findings: The findings indicated that the classroom environment has a significant influence on the academic performance of the students.

Recommendation: From the findings, it was recommended that; corporate organizations and individuals should be encouraged by the schools to donate generously in cash and kind for the provision of staff educational development and construction of more classes.

Keywords: Influence, classroom environment, students’ academic performance, secondary schools, Bamenda II Municipality, North West Region – Cameroon.
Introduction

Poor academic performance among students has been of much concern to the government, parents, teachers and even students themselves. The quality of education not only depends on the teachers as reflected in the performance of their duties, but also in the effective coordination of the learning environment (Ajao, 2001). Education is essential for effective development of any country like Cameroon. However, one of the major obstacles to the development of secondary schools is the persistent poor academic performance of students. Based on this, people believe that the standard of education is falling. Poor academic performance as recorded in recent years has been so serious that many students fall short of the requirements necessary for admission into higher institutions of learning. A number of factors can contribute to the students’ poor academic performance which may include: poor study habits and lack of available resource materials, poor school climate, indiscipline, inadequate facilities, teachers’ ineffectiveness, the teaching methods and the type of learning environment available for both the students and the teachers. At times, the blame has been wholly put on the classroom environment and this has created unending misunderstanding between the parents, teachers and school administration. Hence, this study therefore explored the effects of classroom environment on students’ academic performance.

Background

Historically, education in the past (pre-1970s) primarily served the purpose of providing a basic foundation of commonly-held beliefs and understandings to prepare children for a reality that currently existed (i.e. learning a trade/career, going to college, etc) and the classroom learning environment was designed to serve that purpose. Conversely, education since the 19th century has increasingly been focused on providing a basic understanding of universal principles to inspire learners to create a reality that doesn’t yet exist. In other words, instead of pulling learners to established results and known expectations, classroom learning environment serves more to push learners toward yet an unknown future. In the early twentieth centuries, the general expectation for learners was to learn enough to be self-sufficient, well-mannered, informed, and of benefit to the community. This is evident in the smaller scope of subjects taught to learners, as well as the primary focus on the “Three Rs” of education – ‘Reading’, ‘Writing’, and ‘Arithmetic’. Lessons in manners and morality were daily occurrences as well (Haus &., 2009).

Through the 20th century, it has been revealed that not all classroom environment approaches worked for all students. Classroom environment consisted of a teacher having “wittiness”, that is, comprising effective transitioning and challenging lessons. Research shows that during this time, effective environment strategies were linked to students’ behavior and academic achievement (Roskos & Neumann, 2012). Classroom environment in the 21st century has totally changed along with society. Physical punishment and shouting are classroom environment approaches of the history. Nowadays teachers need to be proficient computer apt, caring and positive relation between teacher and students is need of the hour (Marzano, Marzano & Pickering, 2003). Many scholars have presented their ideas as to what they think can work when it comes to classroom environment. The major ideas adjoining classroom environment consists of student engagement, responsibility of students, and student/teacher collaboration.

Educational reformer Horace Mann (Bruce et al 2011) came up with a simple design for the one-room schoolhouse-the “Common School”- that was used widely throughout the continents. As the industrial revolution rolled on, new laws regarding education and child labor meant larger school
enrollment, thus creating a need for a more standardized, utilitarian, and efficient school environment design. Floor space was maximized, with instructors now lecturing from a raised platform to students sitting in fixed desks many rows deep. Bells signaled the beginning and end of learning periods. Again, expectation determined the layout, as much was structured to prepare learners for jobs working in factories (Stuke, 2009).

Therefore, a change in approach is no longer optional, but necessary - a change of focus from the teacher to the student. This brings us to where we are today and the unknown of where we may be tomorrow. The concept of student-centered learning environment has so permeated the educational landscape that step into just about any twenty-first century learning environment today and the goal will be (whether in theory or in practice) to give learners more autonomy in their learning. To promote this autonomous learning, educators around the world have recognized the need for flexible learning spaces that meet the varied needs of students. Hence, this means that, there have been a paradigm shift in classroom environment from a teacher centered approach to a learner centered approach especially with the advent of technology (Gosh & Dask, 2017).

Conceptually, according to Narad and Abdullah (2016) academic performance is the knowledge gained that is characterized by marks from a teacher and/or educational goals set by learners and teachers to be achieved over a specific period of time. They added that these goals are measured by using continuous assessment or examinations results. Academic performance of students is a key feature in education and it is considered to be the centre around which the whole educational system revolves. Narad et al., (2016) opined that the academic performance of learners determines the success or failure of any academic institution and it has a direct impact on the socio-economic development of a country in the sense that, students are bound to make informed decisions about their career when they performed well in school (Wats, 2006). Similarly, Behanu (2011) asserted that students’ academic performance serves as bedrock for knowledge acquisition and the development of skills and the most priority of all educators is academic performance of students (Eke, 2009).

High academic performance experiences are satisfying in themselves and can be expected to contribute to school satisfaction. Children who do well in school tend to be more satisfied with school. Good school results can be expected to lead to school satisfaction because they lead to gratifying feeling of being academically competent. Students who are accepted by their peers have been found to be more likely to enjoy school and their classes. It should be noted that, factors contributing to improvement in learners’ academic performance have received much attention from educators and researchers. Shafiq and Behanu (2011) found several factors that contribute to improvement in the academic performance of students such as the classroom environment amongst many others. School, through it classrooms, is the primary setting where individual encounter the acquisition of new skills. It is a setting where the students grow and learn which gives room for growth and development of an individual and a nation. Schools, through the classroom, put emphasis on developing intellectual skills and concepts necessary for civic competence.

Murray (1999) introduced the concept of `environment and he believes that, the classroom environment can be seen as interaction of personal needs. Personal needs include drives, motives, and goals of an individual. Walberg (2004) opined that, the classroom environment refers to the climate or atmosphere of a class as a social group that potentially influences what students learn. Moss and Trickit (2004) assert that the classroom environment is a dynamical social system which
includes not only teachers' behaviour and teacher-student interaction but student-student as well. Fraser (1991) explained the concept of classroom environment as; the total climate, structures, processes, ethos within classrooms which are integral elements affecting student's learning. This means that, the teaching-learning process cannot take place in a vacuum. In formal education settings, it occurs as a result of interaction among members of the classroom. In classroom settings, elements of teaching-learning process include: teacher, students, content, learning process and learning situation. The learning situation or learning environment means the conditions in which learning take place. Each classroom has unique teaching-learning conditions. According to Arend (2007), classes may seem similar from the distance but are different in its procedures and the processes (Rike, 2009).

Fraser (2006) divides the classroom learning environment into various major components which include: physical things, the social interaction among its members, the characteristics of its members and systems, values, cognitive structures etc., hence, a classroom environment can be explained with reference to either physical or social aspects. The social aspects of the classroom environment include teacher's behavior and students' behavior (both verbal and non-verbal communications), teaching and learning methodologies, teachers' classroom management practices, teaching and learning styles, attitudes, personality traits, beliefs, group dynamics, socio-economic status of the students, cultural diversity of the classroom while the physical includes; the teaching materials and the class size.

Ranchelor (1992) is of the view that an effective classroom environment can be described as a place that naturally motivates students to learn. Students and teachers work well in a school culture where academic success and the motivation to learn, is expected, respected and rewarded. Such an atmosphere where students learn to love learning for learning's sake, results in better academic achievement, is a characteristic of an effective school. According to Steve and Richard (2013), when a student first steps into a room they will make a judgment about the type of class they are going to be taking as they will look to see how desks are arranged. They will notice what is hanging on the walls, and the way in which a teacher sets up their class allows them to communicate with their students non-verbally. By adding various learning centers or activity centers, the students will know that this is a classroom that likes to do hands on experiments. It also conveys that, they will not just sit and take notes, but they will act out whatever subject they are learning. The wall art will demonstrate to the student that the teacher cares about their work enough to show it off. Students will also gain an understanding of the social expectations of the teacher in the classroom based on how the desks are organized. Each of these tools can be used in any classroom regardless of the content.

This indicates that classroom environment helps in motivating students and has an effect on their thought processes, how he/she perceive himself/herself and what are his/her thoughts about present environment and situations. 'Self' is influenced by how other persons behave to him/her especially with whom he/she is in close contact. In a classroom, the teacher's role is much important to enhance the morale, self-concept, self-confidence of a learner because he/she may be tool of inspiration or torture. He/she can humiliate or humor, hurt or heal a student in a class. A person with a positive self-concept will try to respond to a task invest the time and energy necessary to accomplish it.
DiGiulio (2002) sees positive classroom environment as the result of four factors: how teachers regard their students (spiritual dimension), how they set up the classroom environment (physical dimension), how skillfully they teach content (instructional dimension), and how well they address student behavior (managerial dimension). In positive classrooms, student participation and collaboration are encouraged in a safe environment that has been created. A positive classroom environment can be encouraged by being consistent with expectations, using students' names, providing choices when possible, and having an overall trust in students. Educators have daily opportunities to help students grow confidence and feel good about themselves. Despite all the negativity that may be around them within their households. Through such actions as boosting their self-esteem through praise, helping them work through any feelings of alienation, depression, and anger, and helping them realize and honor their intrinsic worth as human beings. These actions may result in better behavior in the long line jeopardy of the students (Lucero & Rodrick, 2016).

Environment of any component in teaching learning process may have varied purposes, but there should be a single primary reason of doing so. That is enhancing the students’ learning. Thus, effective classroom environment should also be initiated with a common purpose to enhance the level of learning among the students, at any level. Lakes and Smith (2002) have recognized the significance of effective classroom environment as the first tool to improve learning effectiveness. These scholars have suggested that, classroom environment should be considered as an integrated function of characteristics development in teachers, behavioral environment across the school community, managing school environment for effective teaching-learning, organizing and managing resources for effective learning, and designing effective lessons for effective student learning whereby they could show up their optimal participation and process engagement. Hence, in today’s society, schools are being held accountable for every aspect of student achievement. Effective classroom environment is playing a vital role in strengthening instructional process and makes learning more productive, effective and successful. Without effective classroom environment, teaching learning process has no fruitful results (Ladd & Pelletier, 2008).

In the context of this study, the concept of classroom environment is often seen by some teachers as something abstract in the sense that many see it as a concept that ends only in physical structures. Smith (1998) for example identified that the Cameroon classroom environments still has much to be desired as they are characterized by variety in the size, quality of buildings and maintenance culture. Some schools even share classrooms and laboratories, which are too small for current classes of forty and above students. Also, some schools have teaching rooms which are too small because they were not built to specifications and moreover, most classrooms are poorly maintained. Learning in such environment hamper the teaching and learning process and eventually affect students’ performance in examination. This is even in reflection on the critical look at Cameroon’s Poverty Reduction Strategy Paper (PRSP) (2010), which indicates that in 2010 for example, the rate of access to secondary school stood at 95 percent, which is close to the target of 100 percent access to the first year of secondary school. However, the completion rate is still low (56 percent), which means that of every 100 new entrants into secondary school, only 56 students reach upper sixth (the sustainable literacy threshold).

It should be noted that, educational quality is measured by academic results, learning conditions and also the student-teacher ratio (Tunnel, 2001). In the context of the study, most teachers and even pupils see academic performance only in terms of marks or grade of the pupils which means that, they evaluate focusing only on the cognitive domain of the learner while ignoring other
domains. According to data reflected in PRSP quality indicators show deterioration in performance in the GCE marking the end-of-secondary schooling and the conditions under which students study. The success rate at the GCE examination, was 72 percent in 2010 with a repetition rate of over 25 percent. The pupil-teacher ratio in secondary education has stood at 90 from the school year 2009/2010 (PRSP, 2010). More than half of the teaching staff is under qualified, because of shortcomings in either initial or continuous professional development.

This is compounded by a weak education supervision system characterized by lack of training for supervisors, too few supervisors, and little mobility for supervisors because of logistic constraints among others. There is also a general lack of morale among the teachers owing to discrepancies in their status since some are civil servants and are paid more, while others are on contract and are paid much less and poor working conditions (PRSP, 2010). In addition, teachers and students alike suffer from a shortage of recommended textbooks with the exception of French and Mathematics where the situation permits, textbook possession rate for other subjects is only three students in out of every 10. As for the teachers, the shortage of teaching texts is even more glaring; only one in 10 teachers have the science guide (PRSP, 2010). The PRSP report concludes that, “The foregoing analysis suggests that education conditions for the population as a whole are a cause of concern.

As a vision of secondary education in Cameroon, the Ministry of Secondary Education (2004) had distinguished three main components of the competence to be taught: subject competence (knowledge), transversal competence (know-how resulting from all the subjects in a child’s learning) and life competence (savoir-être resulting from the development of the right attitudes, behaviour, for real life situations. As a method, competence base approach prescribes from the onset, the teacher must agree with the learner on the relevance of the skills to be taught and students’ full participation in the teaching learning process. Being aware of the learners needs, the teacher develops behavioural activities based on tasks. He/she does not push the learners but moves at their pace, watching that the learners are able to transfer the skills acquired to many other life situations. Therefore, the learner is at the center of his learning and the teacher only facilitates learning. Materials consist of sample texts and assessment tasks that provide examples of texts and tasks that relate to the competence (Richards & Rogers, 2009). For example, Mahamat (2011) studied the implementation of competency based approach in some schools in Kousseri, Far North Region, Cameroon and he realized that the approach is not being implemented effectively due to its novelty in the educational system and the teachers’ apathy about the new visions and competences. His student-respondents comment that most competences in their learning are irrelevant for their socioeconomic insertion.

Contrary, most teachers continue to sole depend on the explanation method; they display poor mastery of the approach due to the large class-sizes which often impede the individualization of instruction and evaluation seriously, and the lack of adequate didactic materials. Ornstein and Hunkins (2009) are of the opinion that, teachers are one of the key players in curriculum implementation. Section 37 of Law No 98/004 of 14 April 1998 states that, the teacher shall be the principal implementer of the quality of education. Given the mentioned roles of teachers (implementer of curriculum and guarantor of quality education), it would seem that teachers have the task to implement the curriculum bearing in mind the above-mentioned general objectives for teaching as well as ensuring that students acquire quality education. Seemingly too, the quality of
education acquire by students would depend to an extent the type of quality relationships the teacher will creates with the students.

Class Size and Students’ Academic Performance

Class size is typically defined as the number of students for whom a teacher is primarily responsible during a school year or the total number of students within the class room space. The teacher may teach in a self-contained classroom or provide instruction in one subject (Lewitt & Baker, 2001). Achilles (2003) gave the following example of class size: “average class-size is the sum of all students regular in each teacher’s class divided by the actual number of regular teachers in those specific classes. If the four second grade rooms have 14, 16, 18, 18 (n = 66) the average grade two-class size is 16”. “Class size is generally best defined in the traditional elementary school grades, where a single teacher is responsible for a self-contained classroom, and the definition gets progressively more problematical as the instructional program becomes more complex” (Hanushek, 2002). Although there is a slight discrepancy among the actual numbers, pupil-teacher ratio is significantly lower than average class size.

Class size is a term that refers to the number of students in a given course or classroom, specifically either the number of students being taught by individual teachers in a course or the average number of students being taught by teachers in a school environment. Class size is an important factor in classroom design and drives a host of costly facility-related issues that are part and parcel of the school building’s planning, design, construction, cost, maintenance, and operation. Given that education is labor intensive, class size is a big factor in determining the number of teachers needed and, hence, how much education will cost. While social scientists are engaged in an intense debate over the effects of class size on educational outcomes, there is widespread popular belief that smaller classes are better (Fusam & Husa, 2008).

Regardless of the definition one uses, class size has been difficult to measure due to the dynamic nature of classrooms (adults and students move in and out of classrooms), a variety of classroom models (pull outs, resource rooms, aides, specialists), and a lack of precise measurements of what occurs in schools and classrooms (pupil-teacher ratios, pupil-professional ratios, class size based on the number of students assigned to a given teacher) (Reichardt, 2000). The lack of a common agreement as to what constitutes a small class or even an ideal class has made it difficult to compare research studies. Any ratio is, at best, a crude indicator of how much teacher attention any student receives. It is believed that, as the total number of students in a class decreases, the teacher will be able to provide more appropriate, personal instruction for every student. Probably everyone who has ever taught a class has experienced a situation where some students are more engaged in what goes on in the class than others. The engaged students are more attentive, excited, involved, and eager to participate. From the perspective of the instructor, it would seem that there would be a strong positive correlation between students’ participation and students’ achievement.

The influence of class size on the quality of output in secondary schools revealed that schools having an average class size of 35 and below obtained better results in the secondary school certificate examination than schools having more than 35 students per class (Adeyemi, 2008). Class size had a negative coefficient with students’ academic examination performance (Oguntoye, 2011). Earthman (2002) revealed that comfortable classroom temperature and smaller classes enhance teachers’ effectiveness and provide opportunities for students to receive individual attention, ask more questions, participate fully in discussion, reduce discipline problems and
perform better than students in schools with larger classes. There is a gap in the quality of students in crowded classrooms, using inadequate and absolute equipment, disillusioned teachers. These combined deficiencies perhaps affect the student’s academic performance (Fafunwa, 2010). Large class size is not conducive for serious academic work (Adeyela, 2000). Similarly, an alarming class size of 100 or more students in the secondary schools leave the teacher overworked and therefore unable to exercise patience and a positive attitude (Egede, 2005). They are also reluctant to offer extra time to build and help the intellectually ill students.

Classroom size has a great impact on the teaching-learning process. The more reasonable the class size, the easier it is for teacher-learner interaction which stands as an essential element in the process of language teaching. Generally, teachers are fully aware of the importance of direct interaction for learning. Hence, a large class size may have a negative impact on the teaching-learning process since the teacher cannot provide feedback for a large number of students or he may not have enough time to assess their work as they are doing their exercises. According to Goah (2009), small class size leads to proper engagement of the learners, increases their participation and attentiveness, and keeps them alert. Smaller class size allows educators to focus more on the students in their teaching and results in better understanding and helps the teachers to adjust their methods to meet individual students’ needs. At another level, it is found that large class size makes monitoring of students’ very difficult and thus encourages students’ disruptive behaviour (Bascia, 2003).

When the classroom condition is not favourable this could also affect effective teaching and learning. Classroom management may be impossible in a large class, where students are over populated the teacher finds it difficult to correct and control the students. It could even lead to students fighting and hurting themselves in the class. Generally, overcrowding in classrooms has always been pointed as factors responsible for decline in quality of education in (Olagbemiro, 2010). Learning outcome in such situation seems to be negative and it is evident in their poor academic performance. Fraser (2006) asserted that conducive and improved classroom environment enhanced teachers’ effectiveness and provide opportunities for students to receive more individual attention, ask more questions, participate more fully in discussions, reduce discipline problems and better learning outcomes.

Also, large class sizes harm students learning in the sense that overcrowded classes’ leads to rowdiness in a school environment. In large classrooms, teachers try to ensure that all questions are answered. Some students will have many questions on the topic, and the teacher has limited time to answer the questions before class is over. Many students end up confused because their questions go unanswered. On the other hand, smaller classrooms offer a more specialized learning experience. A teacher will have more time to individually instruct and answer questions from 15 students compared to 25 students. Students may feel more comfortable in a classroom where the teacher is there to help them, instead of to help the class.

**Urie Bronfenbrenner, Ecological Systems Theory (2005)**

Urie Bronfenbrenner (2005) encourages researchers to study the changing relations between children and the environment in which they live. Bronfenbrenner’s theory deals with the ecology of child development or the environmental systems that affect the way children develop. He believes that the interactions between a child and its environment are the main focus of human development. Bronfenbrenner proposed five major types of environmental systems and has
increasingly given attention to the microsystem as an important environmental system which impacts greatly on children’s development. According to the ecological theory, if the relationships in the immediate micro system break down, the child will not have the tools to explore other parts of his environment.

The Five Types of Environmental Systems

Bronfenbrenner’s five different environments are summarized in figure one below.

Figure 1: Bronfenbrenner’s ecological systems theory of human development


The Microsystem

Bronfenbrenner distinguishes five levels of children’s environment. The lowest and most important of Bronfenbrenner’s levels, the microsystem, is the small, immediate environment in which the child lives. Children’s microsystems will include any immediate relationships or organizations they interact with, such as their immediate family or care givers, their peers in school, etc. How these groups interact with the child will have an effect on how the child grows; the more encouraging and nurturing these relationships and places are, the better the child will be able to grow. Furthermore, how the child acts or reacts to these people in the microsystem will affect how they treat her in return. Each child’s special generic and biologically influenced personality traits, what is known as temperament, end up affecting how others treat them. The microsystem deals partly to the setting for a child’s behaviour and partly to the activities, participants, and roles in that setting. For instance, one micro system might include a backyard in which a 7-year-old girl is throwing a ball with her 9-year-old brother. The microsystem has a specific setting (the backyard) with specific participants (two siblings) in specific roles (playing ball). For Bronfenbrenner, the child is not a passive recipient of experiences in these settings, but is someone who reciprocally interacts with others and helps to construct the settings.
The Mesosystem

The next level of Bronfenbrenner’s ethological theory is the mesosystem which involves linkages between Microsystems. It describes how the different parts of the child’s microsystem work together for the sake of the child. It is defined by the connections among micro systems. In other words, the mesosystem reflects the relations among the various settings in which children spend their time. For many children, the mesosystem includes the links between homes, school or child care center, neighbourhood, church, athletic teams or other extra-curricular activities. All these subsystems play a vital role in the child’s development. For example, if a child’s care givers take an active role in a child’s school, such as going for Parent Teacher meetings (P. T. A.) and watching the child play, this will help ensure the child’s overall growth. In contrast, if the child’s care takers disagree how to best raise the child and give the child conflicting lessons when they see him or her, this will hinder the child’s growth in different channels.

The Exosystem

The third level of Bronfenbrenner’s theory, the exosystem; includes settings that children do not enter but that affect them indirectly such as the parents’ work places, extended family members, etc. For example, if a child’s parent gets laid off from work that may have negative effects on the child if her parents are unable to pay rent or her school fees. On the other hand, if her parent receives a promotion and a raise of salary at work, this may have a positive effect on the child because the parents will be able to provide his/her needs. Exosystem influences also include those of television, radio, and other mass media. Few children contribute directly to the content of mass media programs, but all children are affected by the programmes that they watch or hear.

The Macrosystem

According to him, the most global level of the environment is the macrosystem. It is the largest and most remote set of people and things to a child but which still has a great influence over the child. It refers to the consistencies in the systems at lower levels across an entire society or culture and includes freedom permitted by the national government, cultural values, customs, traditions, wars, etc. For example, schools are similar in their structure and operation throughout Cameroon, but Cameroon schools are different from those in other countries. The similarities in social institutions like schools partly define the macrosystem. In addition, Bronfenbrenner affirms that the macro system includes the values and beliefs that accompany and maintain the similarities in social institutions. In Cameroon, values and beliefs differ among people who differ in social class and ethnicity. They also differ among people who live in cities and rural areas. People in each of these groups can be viewed as living in somewhat different macro system.

The Chronosystem

The final level of Bronfenbrenner’s model deals with variations not in space or extent but in time. The chronosystem refers to the patterns of stability and change in children’s environment over time. As children grow older, they typically move from preschool to elementary schools and so on. Many children also experience changes in the home environment when their mother has a new baby or an older sibling leaves home. Such life transitions must be considered in the ecological model because children can be affected not only by their current environment but also by a change in environments.
Bronfenbrenner’s theory has recently been renamed “the Bioecological systems theory” to emphasize that a child’s own biology is a primary environment fueling her development. The interaction between factors in the child’s maturing biology, his immediate family/community environment, and the societal landscape fuels and steers his development. Changes or conflicts in any one layer will ripple throughout other layers. To study a child’s development then, people must look not only at the child and his immediate environment, but also at the interaction of the larger environment as well. This theory is significant to the study in that it contextualizes human development and shows a variety of influences on the development of children in different ethnocultural settings.

Bronfenbrenner does not only state that children are greatly influenced by their environments, but he also assumes that children play an active rather than a passive role in their own development. In short, Bronfenbrenner asserts that both nature and nurture have significant effects on development. More than any other theorist, Bronfenbrenner’s (2005) argument is in favour of cultural specificity in development. His theory considers the differences between geographically separated cultures like those of Cameroon and India, and those among ethnic groups in one country. He expects the aspects of a culture that define a macro system to influence the characteristics of other ecological systems. Therefore, he believes researchers should take as their highest goal the understanding of children’s development in specific social and cultural contexts.

As far as the present study is concerned, it is obvious that the background from which children emanate have very important roles to play in their education. Children from stable classroom environment backgrounds like those whose teachers have positive relationships often assist the children with school work are most likely to develop a positive attitude towards school, do well in their academics and also view life from a positive perspective than children who emerge from unstable classroom environment. As such, teachers have the paramount responsibility to assist their children in whichever way they can to help them reach their goals and aspirations.

Statement of Problem

The issue of academic performance still remains a major problem in Cameroon’s educational system. This poses a problem not only to school personnel or families but to the entire nation. Cameroon hopes to emerge by the year 2035 and the bold long-term development vision for Cameroon by 2035 reads; “Cameroon: An emerging and democratic country united in diversity”. To attain these objectives, Cameroon through its schools must train and have the necessary man-power requirements or human capital which is the primary function of the educational system. It is therefore, imperative that children should be motivated to stay in school so that; the workforce should be strengthened if Cameroon should realize the vision of emergence by 2035. This entails training young minds at the tender ages so that these values will be transmitted. Failure in school may lead to school dropout, juvenile delinquency and academic wastage may come as a result of children in ability to learn effectively in school. The researcher personally witnessed at times how children barely struggle to cope in school and some even get absent from classes. These are all glaring examples that most of these students are not motivated to learn. On the other hand, some of them, just lack the interest to study despite the fact that they have the ability to do so hence, these has kept the researcher pondering what school factors could be responsible for this. It is from this backdrop that the research work sought to find out school environment and their impacts on students’ academic performance in the Bamenda II municipality.
**General Research Objective**
To find out the influence of classroom environment on students’ academic performance in secondary schools within the Bamenda II Municipality.

**Specific Research Objective**
To find examine the influence of class-size on students’ academic performance in secondary schools within the Bamenda II Municipality.

**General Research Question**
To what extent does classroom environment influence of classroom environment on students’ academic performance in secondary schools within the Bamenda II Municipality

**Specific Research Question**
How does class size affect student’s academic performance?

**Specific Research Hypothesis**

**H0:** Class size has no significant influence on students’ academic performance

**H1:** Class size has significant influence on students’ academic performance.

**Methodology**
The research method was quantitative and a cross sectional survey design was adopted for the study. This design demands for the examination of a problem using data got from a representative sample at a particular time through the use of survey instrument such as questionnaires.

The area of the study was Mezam Division of the North West Region of Cameroon. The North West region of Cameroon is one of the ten regions in Cameroon. The North West region is the third most populated and is generally one of the most visited regions of the country because of the warm and friendly nature of the people and has one of the major metropolitan city, Bamenda.

Geographically, the region sprawl from the North-Western plateau and Western Highlands of Cameroon, bordered to the South West by the South West Region, to the South by the West Region, to the East by the Adamawa Region and to the North by the Federal Republic of Nigeria and situated 366km North-West of the administrative capital of Cameroon, Yaounde, and about 450 km of Cameroon’s economic capital, Douala.

Mezam Division hosts so many secondary schools and many are still being opened with increasing number of students’ enrollment especially due the fact that the division has a population made up of mostly the young. The increasing enrollment sometimes make some of these schools to be overcrowded with poor interpersonal relationships, some of these secondary schools at times are poorly constructed with few classrooms small class size, without safety measures, after being constructed lack infrastructural renovation and lacks qualified teachers and the resultant effect of all these aspects in these schools on the students are sometimes detrimental to students’ wellbeing especially their psychological wellbeing.

Mezam Division is an academic citadel with major towns like Bambili, Bambui and Bamenda which harbours many government, lay private and confessional schools that range from primary, secondary and higher institutions. The literacy rate is on the rise with some 60-75% of the youths
having access to education. Some of the activities of the people include; trading, farming, and with few people working in the public and private sector. The town harbours several numbers of secondary schools and families from different cultural and ethnic backgrounds. These families vary in their socio-economic status, family structure, family size and most importantly the value they attach to education. While some parents are willing to sacrifice everything to see to it that their children are well educated, others due to some life’s challenges find it difficult to see their children through school. The family plays a very important role in the life of children and in determining the success or failure of these children in school.

Most adolescents in this division strive for their independence since agriculture and trading are the most likelihood of this area as such, the adolescent engage themselves in these activities in other to meet up with the demands of life that could enable pay their school fees and get their school needs on their own, they also carry out different functions on their own by engaging themselves in different activities by doing odd jobs which enables them to exploit their environment with little assistance from their parents and the also try as much as possible to differentiate the task they take from that of their parents which play a great influence on their behaviour and hence often time, this might lead to conflicts with parents thereby developing antisocial behaviour.

What is also fascinating about this division is the later afternoons, evenings, nights and most weekends. Normally these are periods when students ought to relax but because of the presence of night clubs, snack bars they are not able to rest, do assignments and group tasks in preparation for the next day or week. However, they are seen during such hours, mostly females put on their best dresses especially the most indecent ones. Most of them are transparent, tight fitting, expose body parts and in most cases look like inner wears and under wears and parade the streets. During such nocturnal parades, they carry along with them big handbags, wear very high shoes, hold latest android phones and hair styles common only with music and movie stars particularly those from the western world. For the boys, they put on trousers just below their buttocks and expose intentionally their under wears, some put on inner wears as shirts to expose their chests and muscular build up. Most boys wear ear rings, female hairstyles and multiple jewels on their necks and wrists, an act which is seen only with stars on stage during concerts.

The population of this study consisted of all the students in the schools of Bamenda II municipality which is made up both private, confessional and government schools. The targeted population of the study was made up of both form 5 students which is made up of 1,207 students. Table 1 shows the distribution of the total number of form 5 and upper sixth students in all the secondary schools in the Bamenda II municipality. Which represents the targeted population. The table indicates that, 1,207 students were targeted who were form 5.
Table 1: Distribution of population of the study

<table>
<thead>
<tr>
<th>No</th>
<th>Total population of the school</th>
<th>Classes</th>
<th>Number of students</th>
<th>Population</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>Progressive Comprehensive College</td>
<td>Form 5 and uppersith</td>
<td>65</td>
<td>85</td>
<td>150</td>
</tr>
<tr>
<td>2</td>
<td>Government Bilingual High School Down Town</td>
<td>Form 5 and uppersith</td>
<td>30</td>
<td>43</td>
<td>73</td>
</tr>
<tr>
<td>3</td>
<td>St. Federick Comprehensive High School</td>
<td>Form 5 and uppersith</td>
<td>65</td>
<td>85</td>
<td>150</td>
</tr>
<tr>
<td>4</td>
<td>Secret Heart College Mankon</td>
<td>Form 5 and uppersith</td>
<td>89</td>
<td></td>
<td>89</td>
</tr>
<tr>
<td>5</td>
<td>Government Bilingual High School Bamenda</td>
<td>Form 5 and uppersith</td>
<td>35</td>
<td>49</td>
<td>84</td>
</tr>
<tr>
<td>6</td>
<td>P.S.S Mankon</td>
<td>Form 5 and uppersith</td>
<td>43</td>
<td>50</td>
<td>93</td>
</tr>
<tr>
<td>7</td>
<td>G.B.H.S Nitob</td>
<td>Form 5 and uppersith</td>
<td>37</td>
<td>50</td>
<td>87</td>
</tr>
<tr>
<td>8</td>
<td>Our Lady Of Lourdes</td>
<td>Form 5 and uppersith</td>
<td>60</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td>9</td>
<td>GBHS Abangoh</td>
<td>Form 5 and uppersith</td>
<td>25</td>
<td>43</td>
<td>68</td>
</tr>
<tr>
<td>10</td>
<td>GTHS Nancho</td>
<td>Form 5 and uppersith</td>
<td>52</td>
<td>46</td>
<td>98</td>
</tr>
<tr>
<td>11</td>
<td>St. Joseph Comprehensive College</td>
<td>Form 5 and uppersith</td>
<td>31</td>
<td>43</td>
<td>74</td>
</tr>
<tr>
<td>12</td>
<td>CCC Mankon</td>
<td>Form 5 and uppersith</td>
<td>55</td>
<td>67</td>
<td>122</td>
</tr>
<tr>
<td>13</td>
<td>G.S.S Ngomhgam</td>
<td>Form 5 and uppersith</td>
<td>44</td>
<td>52</td>
<td>96</td>
</tr>
<tr>
<td>14</td>
<td>County Bilingual College Mankon</td>
<td>Form 5 and uppersith</td>
<td>24</td>
<td>35</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>65</strong></td>
<td><strong>85</strong></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>

Source: Regional delegation of secondary education

The accessible population is defined as those elements in the population within the reach of the researcher. The accessible population of this study was made up of 345 form 5 students and the sample was drawn from 3 secondary schools in the municipality.
Table 2: Distribution of the accessible population of the study

<table>
<thead>
<tr>
<th>School</th>
<th>School type</th>
<th>Male</th>
<th>Female</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Federick Comprehensive High School</td>
<td>private</td>
<td>55</td>
<td>67</td>
<td>122</td>
</tr>
<tr>
<td>CC C Mankon</td>
<td>Government</td>
<td>30</td>
<td>43</td>
<td>73</td>
</tr>
<tr>
<td>Government Bilingual High School Down Town</td>
<td>Confessional</td>
<td>65</td>
<td>85</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3</td>
<td>290</td>
<td>375</td>
</tr>
</tbody>
</table>

The sample of this study was derived from the accessible population of the study and the sample size will consist of 162 students in the selected secondary schools. This sample size was chosen proportionately based on the Krejcie and Morgan table.

Table 3: Distribution of the population of the study

<table>
<thead>
<tr>
<th>School</th>
<th>School type</th>
<th>Male</th>
<th>Female</th>
<th>Total Population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Federick Comprehensive High School</td>
<td>private</td>
<td>55</td>
<td>67</td>
<td>122</td>
<td>31</td>
</tr>
<tr>
<td>CCC Mankon</td>
<td>Government</td>
<td>30</td>
<td>43</td>
<td>73</td>
<td>36</td>
</tr>
<tr>
<td>Government Bilingual High School Down Town</td>
<td>Confessional</td>
<td>65</td>
<td>85</td>
<td>150</td>
<td>95</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3</td>
<td>150</td>
<td>195</td>
<td>345</td>
</tr>
</tbody>
</table>

The instrument for data collection in this study was a structured questionnaire geared towards gathering information on how classroom environment determines students’ academic performance in secondary school. It was used in this study because it was less expensive, easy to fill and assured anonymity. The questionnaire was titled Questionnaire for Students. It carried the name and matriculation number of the researcher and also the topic of the study and ensured confidentiality of the participants. The questionnaire was based on the Likert Scale which used short statements or phrases with responses ranging from Strongly Agree-Agree -Disagree-Strongly Disagree.

The researcher conducted and supervised the distribution and administration of the questionnaires. Given that the study targeted particular institutions and particular individuals, the researcher also distributed the instruments only to individuals found on campus at the time the study was conducted.

**Methods of Data Analysis**

*Conception of the analytical guide*

The analytical guide follows the specific objectives of the study.
**Review and labeling of questionnaires**

Questionnaires that were not properly and completely filled were sorted out. The questionnaires were then attributed serial numbers that could help match them to the database, if there was need for cross-verification.

**Data entry and clean-up**

Data was entered using a pre-designed EpiData Version 3.1 (EpiData Association, Odense Denmark, 2008). Data clean-up (content clean-up and exploratory statistics): Exploratory statistics is an integrated part of data clean-up. Variables were explored to identify questionable entries, inconsistency in responses and outliers and their validity discussed to make the necessary corrections (Nana, 2015).

**Exploratory statistics and data validation**

The pre-designed EpiData Version 3.1 (EpiData Association, Odense Denmark, 2008) database which had an in-built consistency and validation checks to help in minimizing entry errors during data entry initially helped to minimize entry errors. Exploratory statistics continued with further consistency, data range and validation checks in SPSS version 21.0 (IBM Inc., 2012). Other validation test included Missing Values Analysis and Reliability analysis. Entry errors were not identified in this study given that data range check was activated for all the variables.

**Missing values analysis**

Missing Value Analysis is an integrated aspect of exploratory statistics, because it helps to appreciate the rate of missing responses, to identify questions that the respondents did not answer which they ought to have answered and deciding on their fate. In the context of this study, there was no problem with missing values as compulsory entry was set for all the variables in EpiData.

Missing values rate was calculated using the following formula:

\[
MV = \frac{(\text{Number of missing responses}/\text{Total number of expected responses}) \times 100}{\text{Number of variables} \times \text{Sample size}}
\]

**Findings**

The findings of this research are presented based on the research question under investigation

**Academic Performance**

The findings here provide information on the academic performance of the respondents as presented on table
Table 4: Distribution of respondents to Academic Performance

<table>
<thead>
<tr>
<th>Items</th>
<th>Agreed</th>
<th>Disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often answer questions in class</td>
<td>143</td>
<td>19</td>
</tr>
<tr>
<td>I often do well in test</td>
<td>157</td>
<td>05</td>
</tr>
<tr>
<td>I often do my assignments</td>
<td>132</td>
<td>30</td>
</tr>
<tr>
<td>I often do well in practicals</td>
<td>139</td>
<td>23</td>
</tr>
<tr>
<td>I am always engaged in class activities</td>
<td>102</td>
<td>60</td>
</tr>
<tr>
<td>I am always top in my class</td>
<td>146</td>
<td>16</td>
</tr>
<tr>
<td>I am often given awards</td>
<td>142</td>
<td>20</td>
</tr>
<tr>
<td>I often get promoted to the next class</td>
<td>151</td>
<td>11</td>
</tr>
<tr>
<td>I often do well in my course work</td>
<td>145</td>
<td>17</td>
</tr>
<tr>
<td>I always pass end of year exams</td>
<td>104</td>
<td>58</td>
</tr>
<tr>
<td>MRS</td>
<td>1361</td>
<td>259</td>
</tr>
</tbody>
</table>

The findings on table 4 reveals that (88.3%) respondents agreed that they often answer questions in class while few (11.7%) disagreed. Again, almost all (96.9%) respondents agreed they often do well in test while very few (3.1%) disagreed. More so, majority (81.5%) respondents agreed that they often do their assignments while few (18.5%) disagreed. Likewise, majority (85.8%) respondents agree that they often do well in practical while few (14.2%) respondents disagreed.

Also, majority (63.0%) of respondents agreed that they always engaged in class activities while some (37%) respondents disagreed. Similarly, majority (90.1%) respondents agreed that they are always top in class while very few (9.9%) disagreed. Equally, majority (87.7%) respondents agreed that they well in course work while few (12.3%) respondents disagreed. Correspondingly majority (93.2%) respondents agreed that they are often given awards while very few (6.8%) disagreed.

Furthermore, majority (89.5%) respondents agreed that they often get promoted to the next class while few (10.5%) disagreed. Additionally, majority (64.2%) respondents agreed that they always pass end of year exams work while some (35.8%) respondents disagreed. The findings on the multiple responses set reveal that majority (84%) respondents agreed that classroom environment enhances academic performance while few (16%) disagreed. This shows that classroom environment enhances academic performance of learners.

Research Question: How does class size affect student’s academic performance?

The findings here bring out information on class size and its effects on students’ academic performance.
Table 5: Distribution of respondents according to classroom size

<table>
<thead>
<tr>
<th>Items</th>
<th>Agreed</th>
<th>Disagreed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Our classrooms are well constructed</td>
<td>126</td>
<td>77.8</td>
</tr>
<tr>
<td>Our classrooms are accommodating</td>
<td>100</td>
<td>61.7</td>
</tr>
<tr>
<td>We are not overcrowded in our class</td>
<td>113</td>
<td>69.8</td>
</tr>
<tr>
<td>we easily learn in groups</td>
<td>103</td>
<td>63.6</td>
</tr>
<tr>
<td>We are more engage in activities in class</td>
<td>138</td>
<td>85.2</td>
</tr>
<tr>
<td>Our classrooms are conducive</td>
<td>120</td>
<td>74.1</td>
</tr>
<tr>
<td>Our teachers have ample space</td>
<td>111</td>
<td>68.5</td>
</tr>
<tr>
<td>Our teachers easily interact with us</td>
<td>132</td>
<td>81.5</td>
</tr>
<tr>
<td>Our teachers have one-one interactions with us</td>
<td>102</td>
<td>63.0</td>
</tr>
<tr>
<td>I easily learn from my friends</td>
<td>110</td>
<td>67.9</td>
</tr>
</tbody>
</table>

MRS 1155 71.3 465 28.7

The findings on table 5 indicate that majority (77.8%) respondents agreed that their classrooms are well constructed while some (22.2%) disagreed. Again, majority (61.7%) respondents agreed that their classrooms are accommodating while some (38.3%) disagreed. Still, majority (69.8%) respondents agreed that they are not overcrowded in our class while some (30.2%) disagreed. Likewise, majority (63.6%) respondents agreed that they easily learn in groups while some (36.4%) disagreed. More so, majority (85.2%) respondents agreed that they are more engaged in activities in class while few (14.8%).

Equally, majority (74.1%) respondents agreed that their classrooms are conducive while some (25.9%) respondents disagreed. Similarly, majority (68.3%) respondents agreed that their teachers have ample space while some (31.5%) disagreed. Correspondingly majority (81.5%) respondents agreed that their teachers easily interact with them while few (18.5%) respondents disagreed. Furthermore, majority (63%) respondents agreed that their teachers have one-one interactions with them. while some (37%) respondents disagreed.

Additionally, majority (67.9%) respondents agreed that they easily learn from their friends while some (32.1%) respondents disagreed. The findings on the multiple responses set reveal that majority (71.3%) respondents agreed that, classroom size enhance academic performance while some (28.7%) respondents disagreed. The findings show that when the classroom size is appropriate, this enhance students’ academic performance.
Research hypothesis: There is no significant relationship between class size and students’ academic performance.

To further ascertain the effect of class size on students academic performance. The Spearman Rho correlation coefficient was computed as indicated below on table 7.

Table 6: Perceived effect of class size to enhance academic performance

<table>
<thead>
<tr>
<th></th>
<th>Class size</th>
<th>Academic performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>162</td>
</tr>
<tr>
<td>Academic performance</td>
<td>Correlation Coefficient</td>
<td>.373**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>162</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

From table 6 the Spearman rho correlation coefficient (R = 0.373, P=0.01) indicates that there is a moderate positive correlation between class size and students’ academic performance. This shows that if class size is appropriate, it would greatly enhance students’ academic performance. Hence the null hypothesis is rejected and the alternate hypothesis is accepted which states that there is a significant effect of class size on students’ academic performance.

Class size is an important factor in classroom design and drives a host of costly facility-related issues that are part and parcel of the school building’s planning, design, construction, cost, maintenance, and operation. Given that education is labor intensive, class size is a big factor in determining the number of teachers needed and, hence, how much education will cost. While social scientists are engaged in an intense debate over the effects of class size on educational outcomes, there is widespread popular belief that smaller classes are better.

Hence, this objective was designed to examine how class size affects student’s academic performance. Hence, the findings revealed that, majority of the respondents agreed that, these class size do affect their performance as the number of students per bench affect how they study and in the other hand, affects their performance. Also, this could be seen on the responses of even some of the respondents who stated that, they are comfortable their class size. Class size is an important factor in classroom design and drives a host of costly facility-related issues that are part and parcel of the school building’s planning, design, construction, cost, maintenance, and operation. Given that education is labor intensive, class size is a big factor in determining the number of teachers needed and, hence, how much education will cost. While social scientists are
engaged in an intense debate over the effects of class size on educational outcomes, there is widespread popular belief that smaller classes are better.

This finding is in line with Earthman (2002) who revealed that comfortable classroom temperature and smaller classes enhance teachers’ effectiveness and provide opportunities for students to receive individual attention, ask more questions, participate fully in discussion, reduce discipline problems and perform better than students in schools with larger classes. There is a gap in the quality of students in crowded classrooms, using inadequate and absolute equipment, disillusioned teachers. These combined deficiencies perhaps affect the student’s academic performance. Large class size is not conducive for serious academic work. Similarly, an alarming class size of 100 or more students in the secondary schools leave the teacher overworked and therefore unable to exercise patience and a positive attitude. They are also reluctant to offer extra time to build and help the intellectually ill students.

Conclusion

This study concludes that, classroom size significantly impacts students’ academic performance and it was evidently proven that, these variables affect students’ academic performance. Classroom environment no matter their adequacy and quality ways of usage, still has a role to play in boosting students’ academic performance. In trying to compare the basic roles played by classroom environment in the educational process, the researcher concluded that, they are complementary with each other depending on the other to achieve a unifying goal. If students are provided with appropriate teaching materials and assistance needed to succeed, they will certainly be a high achiever. Teachers cannot teach children all the skills they need to survive without also, the available necessary learning facilities to complement the methods of approach by teachers. Likewise, schools won’t be able to carry out effective and efficient teaching without the available and adequate facilities which are of good qualities.

Recommendations

The findings of this study revealed significant issues about classroom environment and students’ academic performance. The results reveal that, some students agreed and disagreed on the items on the indicators hence, to ravage this situation, the followings points were recommended.

Government should therefore inject more funds into the system for the procurement of teaching and learning facilities. This responsibility lies on the educational planners and administrators in the Ministry of Secondary Education. Also, corporate organizations and individuals should be encouraged by the schools to donate generously in cash and kind for the provision of staff educational development.

Apart from school and public libraries, education resource centres should be established by government such as teacher centres and audio visual centres. Teachers’ centres could serve as place where teachers could work together in groups to generate ideas that would make them more competent in the profession. Also, teachers should make use of local instructional materials while teaching and when there is not available improvisation should be adopted.

Based on the findings, it was recommended that the funding for education should be improved and proper consideration should be given to the provision of facilities in the annual budget by the government. Also, parents should be sensitized on the important role they play as the first care giver of the child. This can be done through PTA meetings where they should be encouraged to
always monitor and communicate with their children, helping them to do home works. This is because when they interact as often with their children, they are likely to develop language fast.

References


