

Environmental Influence on Academic Performance of Secondary School Students in Port Harcourt Local Government Area of Rivers State

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Abstract

This study examined the influence of environmental factors on the academic performance of students in Port Harcourt local government area of Rivers State. Four research questions guided this study. The population of the study consists of six hundred teachers and students. Whereas the sample was two hundred and fifty (250), teachers and students. An instrument titled "Environmental influence on Academic Performance of Secondary School Students Questionnaire" was utilized to elicit information from the respondents. Data was analysed, percentages were used to find solutions to the research questions. The major findings of the study were;

1. Performance is affected by environment
2. That improper maintenance of fixtures led to lower than average student's performance.
3. Home background has effect on the academic performance of students.
4. The use of internet has made students to be lazy in their academic works. Based on these findings, the following recommendations were made; school should try to maintain the school facilities and dull colored points should not be used on painting that there should be interactions between teachers and students. Teachers should relate to all the students no matter their background. Teachers should change their ways of setting questions so as to stop students coping directly from internets.

Introduction

Environmental influence before now have not been considered as one of the factors that affect academic performance in secondary schools hence it has little or no attention in educational discourse and consideration. But over the past decade remarkable studies have indicated a correlation between the environment and academic performance of students. Environment plays major role in the life of every individual whether a students, teachers, employer or employee. Though some people are yet to believe that environment brings about better performance. Udoh (1980) in his article "The Environmental Health Problems in Nigeria Schools", Identified some unhealthy practices in our schools. These include sitting of schools, inadequate facilities, poor ventilation etc.

Most of our schools have no light, insufficient facilities, sick buildings and no ventilation. Under these conditions the health of students and teachers according to Udoh (1980) may be adversely affected, which will in turn reflect on students performance.

Therefore, for the students to carry his learning effectively and efficiently, it is necessary that learning takes place in conducive environment.

Hence it is pertinent to critically look at the environmental factors that influences academic performance of students, measures that can help improve them and make some recommendation because at the very heart of our educational mission is the goal of improving academic performance. Studies have shown that environmental factors to a large extent affect both the physical and psychological potentials of an individuals. This has led to the contention that many students fail to develop their potentials due to inadequate environmental stimulation. However, there are some environmental factors which have contributed to this poor performance of students which are home background, inadequate school facilities, misuse of technology such as internet and school climate such as teacher-student relationship etc. Given this situation, the problem of the study therefore is to find out really if these are the main environmental factors that affect the academic performance of secondary schools students in Port Harcourt city.

Research Questions

In the course of this research, the following questions were used as a guide;

1. What factors affect student use of school facilities?
2. What are the climate factors that affect student's academic performance?
3. What influence has home background on the academic performance of students?
4. What influence has technology on student's performance?

Influence of Environmental Factors on the Academic Performance

One of the factors that influence academic performance is school location/site of the school. This is so because in a situation whereby the school is sited in a noisy area like airport or in the heart of a city like Port Harcourt city, where activities disrupt the teaching/learning of the students. One will not expect such students in this area to be doing well academically. Onukwo (2004) in his note says that a conducive environment enhances a child's growth and development. Children feel happy in a peaceful and friendly environment whereas schools sited in noisy urban streets are associated with deficits in mental concentration leading to student's poor performance.

Noise is anything that interferes with teaching/learning process. Noise produces influence on children's information processing strategies, feelings of personal control as well as their level of arousal. Economic, motivational and emotion are also other factors that influence academic performance of students (Franser 1978). These hamper the child's intellectual development considerably as such treatments invariably result in negative self-concept. Also culture influences student's academic performance. The cultural environment influences aspiration because culturally based explanations of behaviour tend to focus on the moral codes that operate within particular families, communities or groups. As culture has to do with beliefs, values, norms and socializations, research evidence has shown that the environment whether urban or rural industrial also contributes to what a child learns and how it is being learned. Some communities have a history/tradition of formal education and modern education influences. Then while some are not so well equipped. The gadgets, resources, facilities in both types of community will influence the learning processes of the child. Student's cannot single handedly achieve all their goals. So they must be equipped with adequate technological facilities such as textbooks, clients, computer, visual and audio-visual aids, photographs and posters.

Vikoo (2003) views instructional material as "any device with instructional content or function that is used for teaching purpose, including books, supplementary reading materials, audio-visual and other sensory materials, scripts for radio and television instrumentation programs for computer management packaged sets of materials for construction or manipulation. Also Vikoo (2003) sees instructional material as anything that can be profitably employed to facilitate teaching learning process. Therefore, class without learning material can lead to student's poor academic performance.

Influence of school facility on students achievement

This is a considerable* support that a variety of sustainable designs a significant influence on student's behaviour and academic achievement.

One of the most critical physical characteristics of classroom is lighting (Philips 1997). The importance of an appropriate visual environment for learning task deserves careful consideration. The visual environment affects a learner's ability to perceive visual stimuli and affects his/her mental attitude and thus, performance. Dunn (1985) insisted that the lighting of a school should be considered on active element of the total educational environment. He found that good lighting contributes significantly to the aesthetics and psychological character of the teaching space; students perform well than in a dark classroom. Harton's (1972) suggest that the ability of individuals in school to concentrate on instructions was strongly influenced by factors such as lighting.

Classroom lighting plays a particularly critical role because of the direct relationship between good lighting and students performance. Students cannot study unless lighting is adequate. The effectiveness of information collection is reduce in bad light seeing in bad light can lead to the development of ineffective programming of the information collection process which may become habitual. Bad light leads to discomfort and poor academic performance.

Color choice can also impact the teaching-learning process. Sinofsky and Knirck (1981) found that color influences students attitudes, behaviours and learning. This is because color affects a student's attention spent and affects a student and teacher's sense and time. Paints color in schools especially carefully planned color schemes positively affects academic achievement of students. Papadatons (1973) in his findings suggests that the proper use of color in schools can convert an atmosphere that is depressing and monotonous into one that is pleasing, exciting and stimulating. Change in color schemes in schools reduces absenteeism and promotes positive feeling about schools.

Color also affects blood pressure in students. Wohlfarth (1986) and Synderiak (1987) associated warm color with slight elevations in blood pressure. Therefore, lighting and color choice lay a significant role in the achievement of student's academic performance.

School Climate as it Affects Academic Performance

Physical structure of a school building and the interactions between students and teachers, are two main diverse factors that both affect and help to define the broad concept of school climate. School climate has been researched for many years and continued to be examined and redefined as a result of its significant influences on educational outcomes.

Clearly, school climates is multidimensional and influences many individuals, including students, parents school personnel, and the community. Additionally, school climates can be of positive influence on the health of the learning environments as Freiberg (1998: P. 22-26) notes "school climate can be a positive influence on the health of the learning environment or a significant barrier to learning. School environment can affect many areas and people within schools. For example, a positive school climate has been associated with fewer behavioural and emotional problems for students.

Additionally, specific research on school climate in high risk urban environment indicates that a positive, supportive and culturally conscious school climate can significantly shape the degree of academic success experienced by urban students (Hayness and Corner, 1993). School climates research suggests that positive interpersonal relationships and optional learning opportunities for students in all demographic environments can increase achievement behaviour. Regarding the roles of teachers and administrators. Taylor and Tashakkori (1995) found that a positive school climate is associated with increased job satisfaction for school personnel. Attending a new school can be frightening for students and this apprehension can adversely affect student's perceptions of their schools climate and learning outcomes. Therefore, providing a positive and supportive school climate for students is important for a smooth and easy transition to a new school. Furthermore, school climate can play a significant role in improving a healthy and positive and supportive school climate for students is important for a smooth and easy transition to a new school.

Furthermore, school climate can play a significant role in improving a healthy and positive school atmosphere, Freibery (1998:22) notes "the interaction of various school and classroom climate factors can create a fabric of support that enables all members of the school community to teach and learn at optimum levels".

A positive school climate can yield positive educational and psychological outcome for students and school personnel. Similarly, a negative climate can prevent optimal learning and development. (Freibery, 1998: Johnson and Johnson, 1993, 1997; Kuperminc et al, Kuperminc Leaderbeater and Blatt, 2001; manning and Saddle mire, 1996). School climate including "trust respect, mutual obligation and concern for others welfare can have powerful- effect on educational relationships as well as learners" academic achievement and overall school progress.

The Influence of Home Background on the Academic performance of students

Motivating students to achieve set goals in school is of great concern to teachers, parents and researchers. A child's first educational experiences are centred in the homes; his ideas, attitude and general pattern of behaviour are as a result of his childhood rearing. The variation in the academic attainments of students could be related directly to differences in the home and its influence. For the purpose of this research, the home is categorized into monogamous and polygamous type and both have effects in difference ways on the academic progress or achievement of the child. Durojaiye (1975) in his investigation among four thousand (4000) primary and secondary children from Ibadan in Nigeria found that 88% of children from extended family situation were influenced by grand parents, aunts and uncles in discipline at home, 92% complained of lack of clear standard to follow, 91% complained of being unable to study at home because of their being sent on errands by relatives. The study also found out that 78% justified the need to lie as a means of escaping blames and punishments from all sides and 75% admitted regular stealing. The extended family system, the said appeared to be the less favourable than unclear family for the emotional and academic well being of the child.

Some polygamous homes burden children with domestic duties that they had little time left for rest or study. In some cases the children from polygamous home were left to care for their younger ones, which prompted their inability to attend school. Evans as cited in

Egwuche (1981) noted that family size to a large extent determines the relative amount of physical attention and time which each child gets from his parents. Too many children in the home entails less amount of attention in terms of time available for each child. It is also possible that family size effects the level of intellectual quantity that the child brings into the classroom. Evidence from several studies suggest that a measure of intellectual quantity varies directly with the size of the family and that correlation cuts across social class line.

Musgrave in Egwuche (1981) found out that the greater the number of children in the family, the lower the measure of intellectual quantity of the subsequent children. The significant relationship between socio-economic class and success in school has been shown by Fraser (1978) she looks at socio-economic class as one of the major causes of unnatural inequalities in education. In most western countries, all types of public and private schools serve different social class. She further explain that inequality of educational opportunities results when there is keen competition to enter an institution and their need to play high fees.

Studnets from higher socio-economic to classes are expected to perform better in schools. Dubey (1972) states that the most important predictor of achievement in school associated with the family is socio-economic status. He concluded by saying that his relationship of socio-economic achievement is always consistent, no matter

whether our measure of status is occupation of the parents, education or both of them. On the whole, the child's background affect the school success. Also family stability has been found to exert serious effect on the child's education. Divorce, separation and single parenthood affect the children academic performance.

Technology influence on the academic performance of students

Technology is of significant importance to the academic achievement of students. But instead of achieving academically, students turned to be cheating instrument.

Most researchers concur that the incidence of academic misconduct in our middle schools and high school has increased significantly in recent years (Underwood and Szaba, 2003). Although educators and academics disagree on the

root causes of this alarming behaviour. There is little disagreement that the accessibility of computers, the internet, and other electronic resources such as CD-ROM encyclopedias has made cheating quicker and easier for our current generation of Technology-Savvy teen. Cyber cheating" (meaning the use of technology tools in inappropriate ways for academic work. Because of this cheatings on students, Futton (1997) persuasively argue that schools must change traditional approaches to learning in order to help today's students acquire the skill set required for succeeding in the work place of the future.

These advanced skill will be achieved "through the learner's interactions with the content" "in the digital ages" and not through "the transmission of facts" (Futton 1997). Therefore assessment tools should be designed in a way that knowledge and information are used in the adult world.

Crownwell (2000) claims "many trends watchers think cheating is epidemic, usually beginning in middle school and extending through college. Cheating is starting younger in elementary school infact. And by the time students hit middle and higher school, cheating is for many, like gym class and lunch period, just part of the fabric of low things are what is changed is technology. It made cheating so easy (Schulte, 2002).

Also Thomas (2001:102), quoting Macabe (2001), asserted that "higher scholars are much more liable than college students to use the net to cheat, and computers have redefined younger kids concept of which constitutes cheating" McCabe also claims, based on his findings, that 15 to 20 percent of higher scholars bought or downloaded papers from one of many paper websites to submit as their work. Research by the Jeseption institute of ethics (1988) is another example of a frequently quoted survey involving 20,829 middle and students, where 70 percent reported that they had cheated in school. It should be noted that while in academic and elsewhere have found fault with some of the survey techniques, or have questioned the interpretation of some data, he overwhelming proportion of literature suggest that students plagiarism at secondary level is a pervasive practice, with significant percentages of students copying directly from the internet and other electronic sources without proper attribution. For example, in their analysis on cheating, Athanasous and Oiaschinde (2002) found that "substantial properties of males and females ends up in cheating "substantial proportions continue cheating in college or universities".

Conclusion

Location/setting of school is one of the environmental factors that influence the academic performance of secondary school students. Onukwo (2004) in his note recorded that conducive environment enhances a child's growth and development. But schools sited near airports or at the heart of city like Port Harcourt city are always and leads to deficits in mental concentration of students in such schools.

School buildings is one of the school facilities that influence academic performance of students. The designs of classroom and its lighting also determine if students will perform well or not. Dunn (1985) said that students perform well than in a dark. Without light it is obvious that students may develop bad sight.

Sinofsky and Knirck (1981) found that color influences studnts attitude, behaviours and learning, color affects a students attention span. Paints color in schools especially carefully planned color schemes positively affects academic achievement of students. A proper use of color in schools can convert an atmosphere that is depressing and monotonous into one that is pleasing existing and stimulating.

School climate can be a positive influence on the health of the learning environment or a significant barrier to learner (Freibery 1998:22). School climate research suggest that positive interpersonal relationships and optional learning opportunities for students in all demographic environments can increase achievements levels and reduces matadaptive behaviour.

Home background as one of the factors that affect the academic performance of secondary school students helps to position a child academically. For child's first educational experiences are centred in the home, that is his ideas, attitudes and general patterns of behaviour are a result of his childhood rearing. If a child was brought up well he will excel academically and the reverse will be the case if he was brought up in an unfriendly environment like polygamous home where attention is given to many people in the family. Evans as cited in

Egwuche (1981) noted that family size to a large extent determines the relative amount of physical attention and time which each child gets from his classes are expected to perform better in schools. Dubey (1972) states that the most important predictor of achievement in schools associated with the family is socio-economic status.

Use of technology such as internet will be very important to the academic performance of students. Most of the misconduct in our schools today is due to the use of internet. As Underwood and Szaba (2003) cited that incidence of academic misconduct in our middle schools and high schools has increased significantly in recent years. The use of internet in solving class work has made cheating in secondary schools quicker and easier.

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