THE EFFECT OF THE CLASSROOM’S ENVIRONMENT ON THE LEARNING EXPERIENCE OF PRIMARY AND SECONDARY SCHOOL STUDENTS IN OTA, OGUN STATE

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Abstract
The learning environments of primary and secondary schools play a determinant role in the overall learning experience and quality of education delivered to students. However, good academic curricula and teaching practices are not enough to stimulate this desire in students because the immediate environment where most of their day is spent in plays a significant role. The classroom’s environment can affect the learning experiences of students negatively if improperly or inadequately designed.

The purpose of this study is to enumerate ways in which the classroom’s environment affects the learning experience of students in primary and secondary schools and make recommendations in cases were challenges were observed. This paper seeks to investigate how the various aspects of the classroom’s physical environment namely lighting, appearance, acoustic quality and classroom furniture among others affect the learning experiences of students. The sample size of 120 respondents was derived from a survey with questionnaires involving four schools in Ota, Ogun State; two private secondary schools, one public secondary and a private primary school.

Given that the features in some of these classrooms do not meet criteria indicative of a conducive learning environment, the study implies that meeting such needs is critical to incubating a wholesome learning experience in classrooms in Ota.

Keywords: learning environment, learning experience, primary schools, and secondary schools.

1 INTRODUCTION
Students spend large portions of their time sitting in a classroom [1]. It is therefore of optimum importance that every aspect of a classroom’s environment be analysed to understand how it may be affecting the learning experiences of these students. This will enable designers and educators strategize ways to manipulate these factors to enhance the learning experiences of children and also design better classrooms in the future.

The classroom must be properly designed and optimized in such a way that it enhances creativity and promotes a positive learning environment [1]. This is so that it supplements the academic curriculums and teaching methods in good schools. There are many areas to consider when trying to analyse what aspects of the classroom’s environment affects the learning experience of students. To do this one also has to analyse the environment that surrounds these classrooms.

Current literature on classroom environments [2] have stated that certain elements such as colour and lighting are very important in the classroom as well as the arrangements of the desks. The classroom environment was further broken down into three categories;

The Emotional environment which is characterized by a friendly atmosphere in which students can feel comfortable to express their varying ideas and opinions without any fear of being judged. The teacher plays a very important role in making the classroom a positive environment. The Physical environment basically refers to how the desks are arranged in a classroom. Also, the colour of the classroom is also considered for example warm colours are inviting. The Respectful environment refers to the characteristics of the classroom being a place where equal rights are expressed. Every student should have the right to make contributions because students need to feel accepted, wanted and respected [2].

The physical environment refers to the physical elements of the classroom. There is strong evidence of the effect of the basic physical aspects such as noise, lighting, air quality, temperature, etc., on learning. There is conflicting evidence, but forceful opinions, on the effects of lighting and colour.
Other physical characteristics affect student perceptions and behaviour, but it is hard to come to a
general conclusion. The interactions of different elements together are as important as the
consideration of single elements [3]. The temperature is an aspect of a classroom’s environment that
is hard to control, but it can play a vital role in keeping students focused and engaged. A classroom
that is way too cold or way too warm can make students sluggish or inattentive. As for air quality, poor
air circulation can generate dust or air pollution that can affect allergic students. A classroom with
fresh, warm air can create an atmosphere conducive enough for learning. Temperature, heating and
air quality are the most important individual elements for student achievement [4]. Research has
shown that noise creates an uncomfortable environment and most definitely not an ideal place to
function well academically. A school’s location is very important, schools located close to airports or
the centre of a city are prone to receive a lot of noise. Under these conditions, students should not be
expected to perform well academically. The focus of students will be disrupted frequently and this
inevitably will damage the teaching and learning process. A conducive environment is vital for a child’s
development and growth [5].

Sound is another important element teachers need to be mindful of as it can play a vital role in the
attention and success of a student [6]. In our attempt to eradicate noise, we must not make the
classroom a vacuum, as that too can become an uncomfortable situation. Some students have shown
preference for a little noise to prevent distractions. Allowing them to listen to music quietly, through
headphones can increase their productivity. Another strategy would be to turn on some quiet music for
them to listen to while working. It could become a great opportunity to engage students who are
musically inclined, to find calm soothing songs that can enhance concentration [6].

Lighting is a very important classroom environmental factor because it either increases or decreases
students’ visual perception as well as their mental attitude and thus performance. Light therefore can
play a major role in engaging students. Majority of schools use fluorescent light bulbs and this creates
a buzzing noise that distracts as well as make it difficult for someone who prefers natural lighting [6].
The lighting of a classroom should be measured by the active elements of its total educational
environment. A good number of schools make use fluorescent light bulbs in their classrooms.
Fluorescent bulbs create a buzzing that could be distracting as well as making it difficult for students
who prefer natural lighting. Some schools even have challenges of lack of natural lighting in some of
the classrooms and this is not architecturally acceptable, however, lamps with softer lighting can
create a warmer environment for students to focus.

Humans all have a basic biological reaction to colour and their psychological reaction to colour does
not prevent the basic biological reaction that stems from human evolution [7]. When colour is
transmitted through the eyes it is argued to affect mood, mental clarity and energy levels [3]. Bright
colours on any colour background attracts an individual’s attention [8]. This popular claim suggests
that humans’ have reactions in our minds when we see or think of a colour. The effects of such
reactions and the possibility of consistencies between people are however very debatable [3].

Depending on the age of a child, different colours are considered stimulating; younger children prefer
bright colours and patterns while adolescents prefer calmer colours [7]. Strong warm colours are
suggested for younger children, but the use of intense primary colours are discouraged [9]. Also,
different preferences for particular colours have been found between males and females[10] [11] [12]
along with suggestions that males prefer bright colours while females prefer soft colours [13].
However, some argue that there is no difference in colour preference between males and females [14]
[15] [16]. It has been pointed out that the experiments that determine the colour preferences of people
generally involve small patches of colour that are viewed for a short period and that the findings do not
show what preferable colours people want their offices or classrooms to be painted with [17].

The quality of sanitation in a school is also a factor that affects the learning experience of students.
Having functioning toilet facilities and drinking water sources in a school has positive effects on the
test scores of students [18]. However, if the provision of improved sanitation and drinking water
facilities positively affects the learning experience of students, educational bodies can focus on
redirecting funds towards developing and installing better sanitary facilities in schools. Studies show
that the sanitary and convenience facilities in Nigerian schools (especially schools owned by
government) are dilapidated, poorly maintained or is totally non-existent [2].

Different room arrangements serve different purposes, it is necessary for classrooms to have some
degree of flexibility. Some improvements to environment may save time, which is then available for
learning. ‘Ownership’ of space and equipment by both teachers and students is important. Ownership
and engagement are ongoing elements, so there has to be a balance between permanent and fresh
elements (e.g. when displaying student work). Some physical elements in the classroom improve comfort, well-being and probably attitude which probably improves achievement [3].

The furniture in the class must be very comfortable for the students because most of the average student’s day is spent in the classroom. It is important for schools to gear-up their classrooms and other learning spaces with the proper furniture that enables students to carry-out their school task comfortably and does not distract from their ability to focus and learn. Furniture like chairs, tables, cabinets, bookshelves, multimedia tables, notice boards etc. are examples of furniture needed in a classroom space. Some schools in western countries have a space in the school called the School Lounge. This space is designed to suit the students comfort to a very satisfactory level. Apart from the adequate furniture provided, the space is also quiet for concentration and is spacious enough for students to spread out materials and project for easy accessibility. Also, adequate and readily accessible equipment and apparatuses in the classroom is necessary in making learning and learning process exciting for students.

Many classrooms in Nigeria are rectangular in shape and have their desks arranged in rows. This system of arrangement seems to make students lose focus and that it leads to a higher number of disruptions in a classroom [19]. This structure does not encourage interaction between students and focuses more on the student as an individual completing their own work. Humans are social creatures and desire attention [1]. Classroom organization can also play a very large role in student discipline [19]. Students tend to notice their teacher’s habits, so if a teacher doesn’t pay attention to details they invent ways to get away with mischief. The way students respond to instructions in the classroom and focus on learning is greatly influenced by the arrangement of the classroom. The quality of the classroom arrangement considerably influences the academic performance of students. The quality of the classroom arrangement is directly linked to how intelligently the classroom space was used. This leads us to spatial factor which relates to how the classroom space was organized and it also has a great influence on behaviour particularly on communication.

Another way to modify a classroom’s seating arrangement is to organize the desks in a circle around the classroom. This will work better with smaller class sizes, but can still be used occasionally in others. This strategy works well when promoting public speaking and classroom debate [20]. However, when using an organised classroom strategy, a balance must be reached. When there is too much structure set in place it can suppress creativity, and when there is not enough structure, it can lead to distractions and reduced focus. Teachers can have a very difficult job of finding the balance between freedom and spontaneity with rules and guidelines. In order to achieve this, teachers can include more engaging activities or lessons into an already established classroom [21].

A display or storage system can also increase the functionality of the classroom. When students work on projects, the teacher can display these finished products in the classroom. Hanging students’ work is a great opportunity to build rapport with the students and creates a visually stimulating environment to look at [19].

Technology is everywhere we go, entangled in almost every part of our lives. It affects our everyday lives, from how we shop, to socializing, to connecting, to playing and most importantly learn. With the great advancement in technology and its imminent effect on our lives, some schools are still delaying the use of technology devices in their classrooms as a valuable learning tool. Most researchers agree that the incidence of academic misbehavior in primary secondary schools has increased significantly in recent years [22]. However some educationalists and academics disagree on the root causes of this alarming behaviour.

Here are some of the ways technology and its equipment can help improve the learning experience of students in the classroom. The students will be well equipped and prepared for their future career if used correctly and supervised by the teacher. Technology in the classroom will help to discover more and better learning. Also technology creates better avenues for communication among students and hence encouraging collaboration in the classroom. The teachers can better prepare the students for a more technology advanced world. Technology has an exciting vibe it brings wherever it may be found. For young kids in schools, it would spark up their fascination and would help students stay engaged.

Students are daily acquainting themselves with a lot of mobile devices and engaging open educational resources to learn. This improved dependence on mobile devices and increased desire to use more resources such as e-books are making it critical for institutions to employ strategies such as online courses and also online platforms for completing tasks.
2 METHODOLOGY

A detailed literature review was carried out for the purpose of identifying relevant factors that could significantly affect the learning experience of students in a classroom. Data was collected by handing out questionnaires specially designed to retrieve relevant information concerning the state of classrooms in various schools in Ota, Ogun State. The relevant factors identified in the literature review were arranged in the questionnaire to get both the students and teachers opinions about the classroom conditions. Finally, the data were analysed using statistical package for the Social Sciences (SPSS).

3 RESULTS

The results showed that majority of the students across all the schools were satisfied with their school environment, but they did complain about thermal discomfort, of which the teachers seemed to be more aware of. Poor natural ventilation is not to blame, but because Ogun State is located in the tropical region of Nigeria it is not sufficient. Also because a large quantity of quality schools are located in this region, children from all over the country come to school here, so a majority will not be used to this climate. Across all the schools involved in the study, the only form of artificial ventilation available were ceiling fans. Air conditioning systems were not considered at all, as they are deemed a luxury and not a necessity.

Across all the schools no shading devices were installed, so a majority of students and staffs complained about glare, this seems to be the normal trend in Nigeria as only a few schools install shading devices. The results also showed that only the primary school students indicated that they had a personalised class with their works displayed on the wall.

The general arrangement of all the classrooms were in rows however sometimes students work in groups which helps to disrupt this arrangement a little. External noise and visual distraction from activity areas close to the classroom environment was also an issue.

All these negative factors did not affect the results of majority of the students as their average scores were 75%, due to the fact that the students and teachers are hardworking enough to make up for the negative circumstances they encounter. However the only school which did not complain about visual distraction had a large number of students scoring above the 75% average and very few below. This may however be as a result of the quality of education that is offered there.

Finally from visits to the schools, it was observed that maintenance of school facilities is a very big issue, most especially the walls of the classroom which needed to be freshly painted. This gave the classrooms a very dull aura and which cannot be conducive for learning.

4 CONCLUSION

The learning environments in these schools clearly need enhancement to improve the learning experience of its students, even though they do not show signs of affecting the student’s results.

Nigerian schools need to take time to plan the design of their learning environments so that it meets modern standards and also encourage and equip teachers to teach with the right methods and styles. Most importantly, already existing environments need to be meticulously maintained as most schools in this part of the world do not maintain their learning environments efficiently due to their desire to make maximum profit.

Our nation is a developing one and our primary and secondary schools will largely determine how much development will occur in the future, we must invest in their learning environments now, so that we can produce competent leaders and professionals that will move this nation forward.

ACKNOWLEDGEMENTS

The authors are thankful to Covenant University for providing a platform to start and complete this study. The authors are also thankful to Faith Academy Secondary School located in Canaanland for actively participating in this study. The authors are also thankful to Covenant University Secondary School for actively participating in this study. The authors are also thankful to Kingdom Heritage Model School for actively participating and this study. The authors are grateful to all the aforementioned schools who gave their precious time to make this study see a successful end.
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