

Educational Space in a School in Kenya

Abstract

The article describes a primary school in Kenya, where the school's educational space was analysed in two respects: a) safety and comfort; b) knowledge and skills development, as part of ethnographic research. The research results indicate that the school needs a change in physical space, teaching aids, and greater pedagogical awareness among the teachers. The new education system introduced in Kenya requires much more funding to ensure proper learning conditions and continuing education for teachers. If this demand is met, the quality of the education process may improve.

Keywords: *school in Kenya, educational space, safety, knowledge, skills*

Introduction

One of the factors determining student achievements is the school's educational space, which consists of physical, social and cultural space, and today also virtual space. Schools, like any other space which needs to be designed, are built to provide reliable information about how to think and act in a particular environment (Gislason, 2007). An effective school environment supports learning in harmony with real conditions in terms of the subject being taught and the method used: It serves as an embryonic version of the real social (Dewey, 1997) and cultural space. In this sense, school as a young person's environment is an area that connects people to the world of human products, such as the world of meanings and the world of tools and goods (Szczepański, 1946). The importance and awareness of the school's educational space increase when we have the opportunity to change it and, consequently, to compare it, to establish a benchmark. Globalisation makes it increasingly difficult to find educational spaces in schools that would be worth describing because of their uniqueness. Therefore, what is "different" in education

and noteworthy, can be found in a developing country, in a Kenyan school, where the Internet and digital media are not widely available.

Education System in Kenya

Kenya is a country located in East Africa with evident cultural remains of British colonial origin. In 2022, among 52 African countries, Kenya was ranked 19 in unemployment (Trading Economics, 2022). In Kenya, primary education is available as public or private (Bold et al., 2013). There are currently two “old” and “new” education systems to be continued until 2027. The old system consisted of eight years of primary school, followed by four years of secondary school or two- or three-year youth polytechnics and then higher education (Clark, 2015). In the new education system, children start school at 4 and finish school at 18. The new curriculum offers a learning-oriented environment for the Kenyans based on competence and decision-making capabilities (Inyega et al., 2021). In addition, the curriculum is among the factors contributing to Kenya’s economic development (King, 2007).

Such a curriculum is utopian for Kenyan conditions (Mackatiani et al., 2016) because Kenya still has not solved the problem of violating children’s rights (Brosch, 2019). In addition, there are other problems:

- incidence rate of HIV/AIDS, which has adverse consequences for students’ education,
- exploitation of children (Erastus Munyao, 2022),
- pregnancy in female adolescents, – alcohol and drugs,
- school violence and skipping school (Onderi & Makori, 2013),
- lack of pedagogical skills among teachers,
- extremism among students,
- inappropriate cultural practices,
- ignorance,
- poverty (Erastus Munyao, 2022),
- poor school conditions for studying,
- total disregard for mental well-being and student development needs (Wambu & Fisher, 2015),
- marginalisation of disabled students (Kiru, 2019).

Educational Space in a School

Many typical schools have classrooms designed to be safe spaces for students to learn and develop. The educational space influences the quality of education, so a poorly designed classroom may contribute to students' bad behaviour and learning problems.

Space was an issue under consideration by Michel Foucault (1984), a French philosopher, historian, and sociologist. When analysing the concept of space, he was interested in places with individual properties. It was also the case for the school space in a cultural and social context. Wilson (1995) defines the school space as a place where students can collaborate and support each other because they use various tools and information resources to learn and solve problems.

As the knowledge of active methods and forms of supporting learning processes is constantly changing and is therefore systematically reviewed and improved, the volume of the architectural standard of classrooms is a response to educational, social and legislative changes (Engelhardt, 1942). These changes may result from reinterpreting learning and space according to the progressive pedagogical philosophy, child development theories, and functional architecture theories. Thus, the creation of the learning space should be a synthesis of education, research on the development of children and architecture (Rieu, 2016).

Barrett and Zhang (2009) developed a concept of school space that combines architectural elements and pedagogical aspects. The school space is analysed here in terms of naturalness, individualisation and stimulation, whereas Shrestha and Keith's concept (2020) analyses the space in terms of safety and comfort, physical space and social skills development. Educational philosophy often materialises in the arrangement of seats, educational resources, and teaching strategies (Henden Aaraas, 2017). As such, it is the foundation of these two coherent concepts. Similar assumptions are present in the "situated learning" theory. This theory emphasises the role of the physical and social environment in the learning process (Lave & Wenger, 1991). At present, discussions are being held on creating a new, more comprehensive and flexible educational space (Gómez-Galán, 2018). The concept of a smart classroom (Chang, 2011; Huang et al., 2019), which in developed countries is based on the principles of Education 4.0 (Huk, 2020), represents this theory.

Research Methodology

The school space is examined in numerous branches of sciences (e.g., psychology, sociology, architecture, IT), but this article analyses the school space from an educational perspective. Therefore, this ethnographic research aimed to describe the learning space of the Kenyan primary school.

Broad-based research in Kenya was conducted by a team consisting of Anna Watoła, Anna Brosch, and Tomasz Huk from the University of Silesia. My part of the research concerned the educational space in the context of local culture (Angrosino, 2007) in Kenyan schools. The research was conducted for several years during our annual visits to the south-eastern part of the country, on the coast of the Indian Ocean. We have been to many schools that were similar to each other, but only in the deliberately chosen one was I able to carry out detailed ethnographic research due to the possibility of accessing a paved road and obtaining permission to conduct interviews and take photographs. We conducted research in the selected school in December 2021. The study concerned the educational space of the school.

During my research, I talked to many teachers, students, and Kenyan scientists. I verified the qualitative data with the principal (teacher), who was familiar with the school's history, knew the teachers working there, the specificity of pedagogical work in Kenya, and the Kenyan culture, traditions, and management of the Kenyan school. In addition, I verified the data with a student who spoke English communicatively and knew the Kenyan rituals and customs.

My study involved a photograph analysis and interviews with the school headmaster and one of the students. I used the school space assumptions developed by Barrett and Zhang (2009) as well as Shrestha and Keitsch (2020) to analyse the research material (photographs). Based on these two concepts, I used two categories of education space: a) safety and comfort, b) knowledge and skills development. The interview with a student was used as an additional explanation of the photographs. I selected 123 photographs for analysis out of 952.

Safety and Comfort

The examined school consists of several buildings (Photo 1). Three of them, arranged in a U-shape, are teaching and administrative buildings. The rest, a little away from them, are toilets.

The teaching and administrative buildings include the headmaster's office, the staffroom and the classrooms. The classrooms are entered on the courtyard side, allowing students and teachers to move around smoothly. Close to the main school building, 10 m away, there is a nursery school in a long ground-floor building. Most buildings are made of stone, and few are made of wood. The roofs of all the buildings are covered with a corrugated sheet, which is often used in Kenya. The school, in some places, is surrounded by a makeshift fence made of wooden sticks and spiked wire. The main role of the fence is to protect against wild animals, mainly monkeys. The school is connected to a water supply system. However, there is no running water in the taps because the "students did not turn off the taps and water was running all day long", as the headmaster said.

In the school courtyard, which seems very spacious, there are two 50-litre blue barrels with water to wash hands and two black 200-litre barrels with rainwater for the students to drink.

As part of the government project, the school is connected to electricity, which is announced by a mural on one of the school buildings "The electrification of this school was implemented by Rural". Interestingly, the mural is the most colourful part of the school. Unfortunately, electricity has only been supplied to the headmaster's office and the staffroom.

There are many handmade posters on the walls in the school headmaster's office. One of them contains a school development plan, which envisages the construction of additional 20 toilets, 7 classrooms and 1 administrative building over three years. The headmaster's office and the staffroom have windows with panes and bars. It is due to the students' records stored there. Additionally, the headmaster's office has an inkjet printer, a clock on the wall, and two tables covered by an oilcloth.

In the staffroom, there are teachers' desks and wooden shelf racks. Each desk has an elegant chair with a special thick transparent foil to protect the furniture from damage and dust. The wooden shelf racks, which bear the names of each teacher, contain a stack of written works by students pressed down by stones of a melon size so that wind would not blow them away (Photo 2). There is a mess on the shelf racks, with the students' works mixed with rubbish, such as plastic bottles. Behind the school, under the staffroom's windows, there are two spots to cook over a fire. Three flat stones (Photo 3) with a lighting fire in the middle serve as a field kitchen for teachers to prepare meals. It should be noted that the teachers only prepare these meals for themselves. There are 10 yellow 50-litre drinking water barrels in one of the classrooms, which are intended for the teachers only (Photo 7). Remember that students can only drink rainwater from barrels in the courtyard.



Photo 1. School courtyard with the classrooms.



Photo 2. Shelf racks containing the students' works in the staffroom.

1,5 m by 2 m openings serve as windows. Some of them are barred. There are no doors in the classroom; there are only entrance holes. The classrooms are equipped with wooden desks permanently connected to wooden benches, a blackboard, and a chair for the teacher. In one of the classrooms, this red chair is used, despite being damaged with a missing backrest and a defective seat.

Wooden desks are in deplorable condition (Photo 4). Most of them have damaged, torn, or even decayed tops. Some of them have information about the donor, such as "DONATED BY ALBERTO", which is a student's joke that wittily highlights the conditions they are in. Alberto is one of the well-known Tanzanian singers. There are 2 to 3 people sitting at one desk. It happens that tall students sit

in the first row because of bad behaviour. Unlike in European countries, students of different ages work in the same classroom at the Kenyan school, depending on their level of knowledge, which results in a large variety of students in terms of physical maturity (e.g., their height).



Photo 3. Field kitchen for the teachers



Photo 4. Classroom with desks

Handmade posters are displayed on the walls, which serve as teaching aids (Photo 6). The blackboard is a separate black-painted section in the central wall of the classroom.

The floor in the classroom is a concrete screed that is damaged in many places. It contains about 20 cm deep holes, which poses a real risk for the students and teachers.

School toilets are in separate buildings painted white and blue. Almost all of them outside make the impression of the best buildings on the school premises. The exception is one of them, clearly decayed, which seems to be on the verge of collapsing. The toilets with no running water consist only of a floor opening to meet physiological needs. Although the toilets are not labelled anyhow, the students know which ones are for girls and which are for boys.

Sandy and brown colours dominate in the school. Many places are messy. In the classrooms, the headmaster's office, and the staffroom can be seen: rubbish on the floor; not arranged, torn handbooks, workbooks, teaching aids and documentation. One of the classrooms has a stack of damaged wooden tables and benches. The mess can also be seen outside the school. Small stacks of trash can be seen in some areas. On the school's premises, I did not notice trash containers, but only holes in which the rubbish was dumped. I learned from the student interview that, as a penalty, the students often dug holes for new rubbish.

The only source of light in the classroom is large windows that do not have panes. The lack of doors and the fact that there are window openings on both sides of the rooms makes the ambient air temperature and humidity close to those outside. The lack of doors and windows means that during the lesson in each classroom, the teacher must first ensure order and silence. Loud playing and singing could disturb students studying in the neighbouring classrooms. According to the student's interview, there is a prefect in each classroom who assigns penalty points to misbehaving students.

There are residential buildings – households, about 50 m away from the school. According to the interview with the student, some people settled illegally around the school. The residents are conflicted with the Indians who own the surrounding land.

The ground is paved in the school courtyard, and the vegetation is varied. Two great baobabs are particularly noticeable, as well as mango trees, which grow close to the school buildings. Coconut palms grow around the courtyard, and a cashew tree, which is a symbol of the school. These few trees create shaded areas that protect the students from the sun. The small number of trees makes the school's area transparent with well-visible nearby buildings.

Uniforms are typical outfits in Kenyan schools, and each school has its own uniform colour. In this school, girls and boys wear light blue shirts and dark blue shorts or skirts. The vast majority of the children have shoes, although they are most often in poor condition. Girls and boys have short hair for cultural reasons. The deviation in this regard for girls is braided hair in a style specified by the school. The breaks between classes take 5 and 10 minutes and 1.5 hours (lunch

break). The classes last 35 minutes, from 6.30 a.m. to 4:30 p.m., at approximately 6.00 p.m., it gets dark in Kenya. A traditional manual bell signals the beginning and end of the classes and breaks.

Knowledge and Skills Development

The teaching aids used in the school mainly include a blackboard (Photo 5), coursebooks and handmade posters, often faded and damaged (Photo 6). They contain the English alphabet, some terminology of English and Swahili, information about the solar system, a multiplication table, mathematical operations, and maps of Kenya with surrounding countries. Posters are often torn off, and visible marks remain on the walls. The classrooms also have large rulers, protractors and set squares to draw on the blackboard. Based on the interview with the headmaster, I concluded that the school had 30 new tablets. Unfortunately, they are not used because none of the teachers has the appropriate competence to use them.

The school pursues a curriculum connected with Kenyan tradition and culture. Therefore, the teaching aids include covered skin drums, necklaces and coral bands because the school carries out a curriculum connected with tradition and culture. Cultural products are just a few such colourful objects in the school.

The subjects taught are mathematics, English, Swahili, science, social study, agriculture, art, religion taught by a teacher of a given religion (the headmaster is



Photo 5. Classroom blackboard



Photo 6. Example of educational posters in the classroom

a Muslim, although this is a religious minority in this school), cultural activities for environmental and social well-being, and physical education.

According to the interview with the student, typical physical education classes never take place, so instead, the children study the language of Swahili. There are no component grades at school, only final grades at the end of the semester. Students are most often examined orally during a lesson. Sometimes those who do not answer correctly are thrown out of the classroom.

For example, the cultural activities for environmental and social well-being include the following assignments: “describing events that promote environmental and social well-being”; “making ornaments from locally available material”; “singing the Kenyan national anthem”; “Making posters”; “Displaying a sample of local foods in their food groups”; “Singing a folk song”; “Presentation of a skit play”; “Participation in sporting activities”; “Watching videos on cultural events”. The objective of the assignments is to develop national and cultural identity and to prepare students to work in the tourism industry, in case this may turn out useful in the future.

The students’ attendance at school and educational achievements are noted in the students’ records made of A4 grid notebooks by the teachers (Photo 7).

There is a faded school name and coat-of-arms on one of the outside walls. The coat-of-arms includes two palms, a book, a key [to knowledge] and a cashew tree. It means that this is “A school under a cashew tree”. Above the coat-of-arms is the school name, and below is the motto „excellence and perfection”. The school mission is also presented on the wall: „to attain high academic standards be knowledgeable with high understanding and integrity to cope with any challenges in life”.

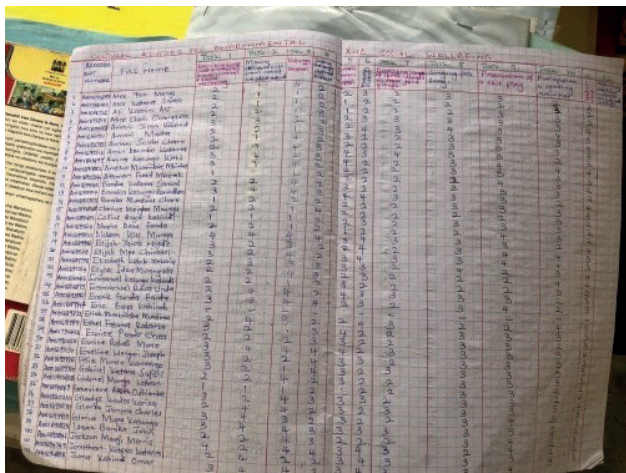


Photo 7. Students' records



Photo 8. Classroom during a lesson

In my research, I noticed that the classrooms are often crowded (Photo 8), and the students get into scuffles and fights. It also happens between the teachers and the students. A large number of the students make it impossible to carry out individual or teamwork. By analysing one of the photos in which I found a list of groups, I concluded that there were 1056 students in the school: in 2 nursery school units and 8 primary school groups. The official number of students is much lower – 665. According to the school headmaster, there were 16 teachers employed

in the school, so there were 66 students on average per teacher. The school's website shows that this average figure is 47.5 students. Hence, these figures are understated. There are two groups in the 6th grade and two groups in the 7th grade. In other grades, there is just one group per grade. Therefore, there is an average of 132 students per classroom. Officially this average is lower, equal to 83.1 students per classroom.

When all the students show up at school, the courtyard seems to be an insufficient area for about 1000 students.

Conclusions

The actions of the Kenyan schools have contributed to achieving a high level of literacy, but there is still a lot to be done in terms of a coherent education strategy (Czerepaniak-Walczak, 2018) and ensuring adequate spatial conditions for the school. These factors determine students' educational achievements and, as a result, Kenyan prosperity.

From the perspective of European education, the space in this school reflects the dysfunctional nature of the educational environment. Overcrowded classes can lead to excessive stress and overstimulation, loss of student identity, lack of control over the group, and frequent fights. There is no room in the school for students to develop their social competencies, which are connected with shaping the student identity (Donoghue, 2007).

The school space does not provide safety for the students in terms of water availability, hygiene measures, and the prevailing mess. Therefore, there is a high risk of spreading various bacterial and viral diseases (Chindapol, 2019).

The teachers' work effects are not satisfying because there is a lack of adequate space and teaching aids, and if there are some, they are damaged. The teachers do not have the appropriate pedagogical skills or competencies in information and communication technologies.

Some school buildings are provisional, while the sandy, brownish and light brown colours are depressing. Similarly, the colours of the classrooms are gloomy as well. The rooms are improperly animated, and there are no references to the beautiful Kenyan culture or the natural world. After all, these elements could create the school's macrocosm (Dudek, 2000) to strengthen social and cultural relations between the users.

My research shows how much is yet to be improved at Kenyan schools as they still cannot provide safe learning conditions and proper teaching equipment.

The educational space in the examined school is below European standards. It is due not only to economic reasons but also to the majority of the local community not attaching importance to the ambient aesthetics or order.

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