

# Exploring the Environment for Sustainable Development: The Plight of Nigerian Children

<sup>1</sup>Adeoluwa, Olufemi Victor & <sup>2</sup>Laleye, Ademiotan Moriyike

<sup>1</sup>Department of Vocational and Technical Education,  
Ekiti State University, Ado-Ekiti.

<sup>2</sup> Department of Science Education, Adekunle Ajasin University,  
Akungba-Akoko, Ondo State

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## Abstract

*This paper discusses the plight of Nigerian children as they try to explore the environment for sustainable development. Having identified the development of nations as a function of how well the people have explored the environment, the paper regrets that the Nigerian environment, though blessed with a lot of resources, remains untapped or inadequately tapped. Since the efforts at sustainable development should also be futuristic, there is the need to ensure that Nigerian children are well motivated to explore the environment for a desired tomorrow. Children are interesting and inquisitive and they engage the environment in many ways. There is, therefore, the need to relate local practices to the science classroom so that children can understand the connection and be able to solve life's problems. Having highlighted the ways of exploring the environment, the paper discusses the challenges of Nigerian children in exploring the environment and recommends solution to the problems.*

**Keywords:** Exploring, Environment, Sustainable, Development

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## Introduction

It is common knowledge that, all over the world, human races, cultures, systems and even technology are diverse. While some have been to the moon, are in space and still planning to reach out to other planets, some others are still trekking about, in fact, wondering why anyone needs a carrier in a motor car to move from one place to another. This may be attributed to how deeply, consciously and meaningfully each people has explored its environment towards sustainable development.

However, everyone is born into an environment and this refers in the scientific sense to the natural world in which everyone lives. In other words, it is the total surroundings of a man, the

conditions around him which influence his development and his existence. Nigeria is not only rich in its environment but greatly diversified in weather, topography, terrain, vegetation and mineral resources. Taking a trip round the country, one would find varying food and cash crops which are products of the varying nature of the environment. But the natural environment seems unexplored by the inhabitants and, in every sector, the reflection shows as a nation full of untapped or inadequately tapped resources. Infact, it appears that the Nigerian environment is a frozen potential (one that has gone to sleep), if one may borrow the expression of Kafiriri (2012).

Although efforts appear to be on even if only much towards the sensitization of the citizens to this unfortunate reality but one would rather the citizens face tomorrow as it appears today is far spent. Tomorrow is in the children of today and that is why it is needful to ensure the inculcation of the exploration of the environment in the children and all those who have the responsibility of guiding them so that by that, we would have ensured that tomorrow will not be like today. This paper will address itself to the ways of exploring the environment for sustainable development, the challenges of Nigerian children as they do this and probable solutions to the problems.

### **Children and the Environment**

Children are very interesting and very inquisitive. They possess some skills naturally from birth. Nobody teaches a baby to suck breast or to cry. These they do naturally. They are therefore able to interact with their environment from birth. As growth and development take place in them, they increasingly engage with people and objects thereby exploring their environment the more. Science deals with observations and investigations and these are common with children, which show the scientific tendency in them.

Better Brains for Babies (2016) explains that children engage their environment in many ways from birth to twelve months. These include that they respond to sound and touch, follow moving object with eyes, suck and grasp objects, put everything in mouth and learn to transfer things from one hand to the other hand.

Beyond twelve months, children are little scientists (Zero to Three, 2014). At this time, they begin to venture out into the world to explore, discover and learn. When they get beyond age two, they find fun in doing

things themselves, like learning to wear shirts or even helping to sweep the floor. As their thinking skills develop, so also is their language. As they grow older, they exhibit skills that show creativity, problem solving, self control and coping.

Moreover, as children play with their friends, they act out a lot of the activities of adults like trying to prepare soup and, in doing these, they explore the environment, selecting plants and objects to use to accomplish their tasks. Therefore, the richer in nature the environment is, the more the interaction of the children and the better the learning of the children. The onus is therefore on caregivers, teachers and parents to ensure a robust environment for the exposure and learning of children so that they can interact and thereby understand many concepts as quickly as possible.

### **The Essence of Sustainable Development**

Sustainable development was described by Kudan in Ugoh (2008) as a construct which envisions development as meeting the need of the present generation without compromising the needs of the future generation. It implies that while the environment is being explored to meet the present need, it does not compromise the ability of the future generations to meet their own needs. This ability to meet the needs is determined by human capital through the training of the mind and exposure to technological advancement.

Sustainable development however rests on a mass mobilization of the citizenry through conscious efforts to raise the level of scientific literacy in the society. Osuji (2004) implies that sustainable development is a developmental process that is equitable and sensitive to ecological and environmental issues. It depends on the initiative, resourcefulness and

discipline of human beings who are the managers of developmental programmes.

To achieve sustainable development, it appears, however that the knowledge of the environment is germane. This is because that knowledge is needed not only to live healthily and peacefully in the environment but also to be able to preserve and develop the environment.

Sustainable development implies, therefore, that while attending to the challenges of today, the agencies, practices and systems which would ensure continuous upward growth and stability in the near future must be set in motion.

### **The Need to Explore the Environment for Sustainable Development**

What drives development today appears to be the advancement in the right application of the knowledge of science and technology. Technology in itself is the application of scientific concepts in creating systems which attempt to solve the problems of life. If sustainable development is desirable for Nigeria therefore, there is the need for Nigerian children to explore the environment more consciously than ever before. This will engender a proper understanding of the environment in which they live so as to be able to assess what systems are not helping matters in the development of the nation and thereby be able to evolve what systems can help.

For children, it helps to have a good grasp of the scientific explanations in the classroom and thereby enrich learning. Alebiosu (2006) observes that a lot of practices in our society are scientific. Examples include the local tie and dye of cloth (solvents and colour separation techniques), production of gaari or cassava flakes and pap (fermentation and hydrolysis) and the production of

local gin (brewing and fractional distillation). These are evidences of the relationship between the local practices in the Nigerian environment and formal scientific concepts.

There is, therefore, the need to consciously relate practices to science classrooms so that it would be easier for children to understand the connection and be able to solve life's problems using the available materials in the environment. It was probably the lack of this which made some beliefs and scientific practices shrouded in myths and secrecy; making some believe that all is witchcraft. Today, for example, there are evidences to show that western medicine is failing in certain aspects. No wonder there is more interest of Nigerians in the medicinal plants and foods which litter environment. Wouldn't it have been good if the curricula of primary and secondary schools contain studies on these plants which are very common in environment and their medicinal strength? Imagine an average secondary school leaver having the knowledge of medicinal plants in the environment. This would have gone a long way to reduce the health challenges of today, many of which have unnecessarily terminated the lives of productive Nigerians or made them incapacitated.

### **Ways of Exploring the Environment**

There are many ways in which children can explore the environment. Some notable ones are highlighted here which teachers and parents can utilize to make children have guided exploration of the environment.

A very common way is observation and this begins at home. As adults wash clothes, prepare food or fetch water at home, children make observations and sometimes ask questions. Teachers, caregivers and

parents must grant them ample opportunity to make the best use of their power of observation. Some of the time they want to imitate people around them because they have observed the people and what they do. Parent also need to offer them the opportunity of natural objects by taking them out on a walk. This gives them opportunity to observe materials and compare or contrast them. Parental help also comes handy here as they can ask them questions for example as to whether the puppy is a baby or an adult or which is male or female between the cock and the hen.

Another common way is making choices. Children decide what to do a lot of the times, whether to jump, dance, climb, or crawl. Through these they get opportunities to explore the environment. Many times, they decide to cook or dig and they get to know the difference between wet and dry soil. Because they can be regarded as negative feedback control systems who derive learning from the feedback they get from their interaction with stimuli (Adeoluwa, 2013), they also discover what is safe and what is dangerous as they make choices about their activities. They must also be helped to explore meaningfully as they make their choices. When they decided to make music by tapping broom stick on the table, for example, they should be encouraged to tap the stick on plastics, pottery, metal or glass to let them differentiate the sounds each of them produces.

Children also explore the environment by manipulating objects around them. They get easily attracted to objects which encourage problem solving. For example, they like to interact with computers, handsets, and remote control device for televisions and compact disk. By manipulating these objects, the learn more. Through this they also develop skills which remain with them. Instances of this

can be found when they manipulate rubber threads with their fingers to make circles and bag shapes. They may also use palm fronds to make brooms or use newspapers or calendars to make kites, 'ship' and 'gun'. Instead of yelling at them for destroying materials at home, adult should rather help them by providing them materials with which they can showcase their skills.

Through relationship with peers, children also explore their environment. In fact, one of the best ways to learn is learning through peers. Many times they arrange themselves on benches, chairs or abandoned vehicle as they substitute the sound of the car engine with the sound of their mouths. While doing this, they interact and compare notes of their experiences. Even when they play with balls they get to know which moves faster among kicking, throwing and bouncing.

Children also interact with objects by touching them and by this they explore the environment. When they get to shops where clothes are sold, they touch different materials and by this they understand that there are different textures. They also touch moving animals like millipede, snail, rhinoceros beetle, etc. The mimosa pudica plant, like the millipede, is sensitive to touch and when children interact with it by touching, they learn from the experience.

Children also explore the environment by engaging in activities that are nature oriented. They observe the sky at night and talk about what they see. So also do they go to the farm and participate in farming activities. It is common to see children plant seed in a container or at the back of the house and they monitor the plant as it grows. Participating in nature oriented activities makes them to understand the environment better. For example, they can differentiate

plant and identify the leaves of different fruit trees.

Children can explore their environment through different means. But what is more important is that adults should guide them to be able to draw conclusions from their observations. That is why it is of essence that adults should engage them in scientific activities through their exploration of the environment. For example, one can make them find which kind of cup among plastic, china and ceramic keeps drink warm the longest. One can make them list objects in the house which came from things that were once living (Evans, 2008).

### **Challenges of Nigerian Children in Exploring the Environment**

Many Nigerian children have poor parental background as far as the exploration of the environment is concerned. Most parents who live in the villages and who have the rich environment where they can guide children to explore do not have enough understanding regarding what benefits exploring the environment can give to children. Moreover, those who may have the understanding either do not have the time or are over-protective, not granting children ample opportunity of the environment which they can explore. This is because their children are rather indoors watching foreign films.

This, in itself, is another challenge. Nigerian children except those in the stark villages, spend too much time watching foreign children films, playing foreign-based computer games or browsing on the handset. Educative as some of them may be, they are based on environments which are different from Nigeria. This does not give them enough room to explore their environment. Moreover, when they now join adults to watch local films, the films are very unscientific as

they mostly contain concepts and acts which are shrouded in mystery and magic and which end up solving life's problems or so it seems, without any plausible explanation of how it came about.

Added to these is the reluctance of indigenous science practitioners to divulge information containing the explanation of how they do what they do. This is common with traditional medicine. Perhaps, the problem is the fear of flooding the trade with practitioners who may get the initial practitioners out of job.

The education system in Nigeria is classroom-based and this does not help the quest for scientific literacy. To achieve a guided exploration of the environment, teachers are supposed to take the science class a lot of the time outdoors. This is difficult as the curriculum does not favour this because lessons have specific duration which appears to be pretty too short for any meaningful outdoor experience. Moreover, teachers appear not to be properly trained for it as they either do not have the courage to do it or adequate knowledge of how it should be done. Therefore, they hardly link learners' knowledge of informal science to their knowledge of formal science.

Lastly, Nigerians seem to prefer imported materials to local ones. It is common to hear people refer to local products, especially with regards to clothings and equipment, as inferior. This does not help the attitude of children towards exploring the environment to develop Nigeria.

### **Conclusion**

This paper has presented Nigeria as a rich environment with a lot of resources and this environment needs to be adequately explored for sustainable development. However, there are challenges bedeviling the exploration of the environment by

children. It is high time therefore that stakeholders collaborated to ensure the needful if Nigeria will experience sustainable development.

### Recommendations

The Nigerian environment is rich and children need to explore it to the benefit of tomorrow. No matter what the hindrances are, there is always a way out. The following recommendations are, therefore, made:

- There must be a mass mobilization of parents in Nigeria through the media to sensitize them on the relevance of guiding children to explore their environment. Non-governmental organisations dealing with children, the learning of science and sustainable development can make this happen.
- Academic associations should be better sponsored so as to do more in gathering scholars to brainstorm on the challenges of science in Nigeria land.
- Government should partner with Nollywood, using drama to ensure a sensitization of Nigerian children towards meaningfully exploring their environment for the development of the country.
- The curriculum for science at the primary and secondary school levels should be reviewed to allow for adequate flexibility and out-door activities in the delivery of instruction.
- Training and re-training of teachers should be embarked upon to equip them the more with the skills they need to link the formal science teaching with the informal scientific practices and children's exploration of their environment so that the

application of what is learnt can be easy for the children.

- Indigenous science practitioners should be encouraged by government to collaborate with scientists so that the environment can be adequately explored. for all to benefit.
- The Federal Ministry of Education should ensure the inclusion of a subject on medicinal plants and fruits in the curriculum of primary and secondary schools. This will encourage a deeper exploration of the environment and also remove a lot of the health challenges of Nigerians today.

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