

Managing innovative classroom for achieving sustainable development goal 4 in Nigeria

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Abstract

Managing the classroom with focus on creating innovative innovations for quality learning and for quality product cannot be overemphasised. This paper examined management of innovative classroom for achieving sustainable development goal 4 in Nigeria which has to do with quality education. It looked at the concepts of innovation and innovation in education which means how you can use technology to empower students to become lifelong learners who are agents of change. It also reviewed other concepts such as forms of innovation in education, innovative classroom and characteristics, management, innovative classroom management, sustainable development goals, and sustainable Development goal 4. From the review it was observed that managing innovative classroom involves managing innovative instructional process, managing innovative instructional materials, managing innovative communication and managing innovative disciplinary strategies among others. The paper therefore concludes that when the classroom is managed in such a way that the focus is giving to these innovative areas, quality will be achieved which in essence would lead to the achievement of sustainable goal 4. Based on this, the paper recommended among others that; students should always be involved in class activities, teachers should be able to develop and design various types of instructional materials that will help in quality teaching and learning and the government should be able to provide adequate funding to education to enhance provision of educational facilities and instructional materials including charts, graphic materials, high technology equipment like projectors, computers etc.

Keywords: managing innovative classroom, development goal 4, learning

Introduction

Innovation plays a significant role in development. According to Okoli & Okechukwu (2018) ^[6], innovation is one of the forces including knowledge and entrepreneurship in education for sustainable development. The role of innovation in education and development cannot be over emphasised. Many countries have demonstrated that innovation plays vital roles in their educational system. For instance countries such as Finland, Canada, Australia, America, Malaysia, Republic of Korea, Ireland, Mauritania and Botswana in Africa etc. have demonstrated that innovative innovations have a lot to do with their educational system leading to sustainable development (Okoli & Okechukwu, 2018) ^[6].

Technologies, skilled and knowledgeable ICT classroom teachers are some of the secrets of their success story. To achieve sustainable development especially as it is related to sustainable development goal 4 there is need for an innovative classroom full of innovative activities. When the classroom is managed in such a way that the focus is giving to innovation, quality will be achieved which in essence would lead to the achievement of sustainable goal 4. This paper is therefore aimed at highlighting strategies in managing the innovative classroom so as to achieve sustainable development goal 4. In doing this, few concepts such as innovation, forms of innovation in education/classroom, why innovation in education, concept of sustainable development and sustainable development goals, innovative classroom management will be looked at.

What is innovation?

Innovation involves deliberate application of information, imagination and initiative in deriving greater or different

values from resources and including all processes by which new ideas are generated and converted into useful products. Wikipedia (N.D) defines innovation as the process of translating an idea or invention into a good service that creates values for which customers will pay. To be called an innovation, an idea must be replicable at an economic cost and must satisfy a specific need. Innovation includes finding better ways of doing something and new ways to look at Problems.

Innovation is the spark of insights that leads a scientists or inventors to investigate an issue or phenomenon. Okoli & Okechukwu (2018) ^[6] defines innovation as the application of all kinds of knowledge to bring about economic and social growth and it goes beyond science and technology. White (2015) views innovation as the tool or instrument used to exploit changes and opportunity. From all these definitions we can deduce that innovation has to do with new ways, new actions, new methods, of doing something with the aim of creating variety for the purpose of achieving quality of that product.

Innovation in education

Innovation in education means doing what is best for all students. Kimberly in Resilient Educator (2020) ^[7] sees innovation in education to mean change. According to him when there is innovation in education, teachers lessons and curriculum have to be flexible, students will be engaged to think and ask questions, finding ways to keep them interested and giving tools that will make them productive in their future career.

Ashley in Resilient Educator (2020) ^[7] defines innovation in education to mean finding any way you can, to teach all of your students. This means being willing and flexible to

adjust what you teach and how you teach, keeping our students engaged and excited to learn and creating a safe place for them to make mistakes, taking risks and asking questions.

Nochia (2020) ^[4] sees innovation in education as keeping yourself educated about new trends and technology in education. It is being creative with resources one is given. Stephen (2018) ^[8] sees innovation in education as about more than just technology. To him it is about how you can use technology to empower students to become lifelong learners who are agents of change. According to Okoli & Okechukwu (2018) ^[6] innovation in education has to do with design, development and diffusion of technology or practice that is new to education. In fact innovation in education is the bringing in of new ideas with the aid of technology to empower students to learn.

Forms of innovation in education

Some forms of innovations in education are;

- Innovations in the way education system are organised and managed.
- Innovation in instructional techniques or delivery system especially in the classroom
- Innovations in the way teachers are recruited, prepared and compensated.

However for this paper looked at innovation in the classroom. Whatever becomes the practice in education begins in the classroom. The classroom is the central place where most educational activities take place.

Innovative classroom

The classroom is a part of the entire school organisation where teaching and learning takes place. It is a place where the process of transformation of the behaviour of learners takes place. There are two major types of classroom in the context of this paper. These are traditional approach to classroom and innovative approach to classroom. In the traditional model the teacher stands between the students and the knowledge. Students have no or little knowledge about the subject when come to class. In class they get taught all the knowledge about a subject. Students have to do the more comprehensive knowledge at home. The process of thoughts is mostly viewed after doing a test.

On the other hand innovative classroom is that classroom that allows for continuous learning and gives room for creativity. Students in the innovative classroom are encouraged to think and asked questions.

Characteristics of Innovative classroom

From www.thetechedvocate.org an innovative classroom has the following characteristics;

1. Reflection by encouraging students to ask questions.
 2. Constant learning;
 3. Creativity.
 4. Connection
 5. Principles and routines and strong values to guide the class.
 6. Problem-solving
 7. Collaboration
 8. Variation of teaching or learning technique
 9. Goal setting by learners
 10. Opportunities for revision
- Shulman (2018) ^[9] also posits ten ways educators can make

classrooms more innovative which are;

- Mindset
- Self-reflection
- Asking open-ended questions
- Create flexible learning environments
- Create a place for all learners
- Use problem-finding
- Let students take risks and fail
- Consider a flipped classroom model
- Invite entrepreneurs and innovators into the classroom
- Use the design-thinking process

The term Management/ Innovative classroom Management

The term management is seen as the task of planning, controlling, supervising, motivating, and directing the performance of defined set of tasks in an organisation. It is a process of getting things done and achieving a defined set of organisational goals. Classroom management therefore involves the total processes of conducting the classroom instructional process in a manner that the basic objectives of the instructional process are optimally achieved within the context of resources used and handling of classroom inhibitions (Agabi, 2006) ^[1, 2 3]. There are basic tasks involved in managing the classroom. Some of which are; managing the classroom activities, managing the instructional resources, managing classroom communication, maintaining discipline etc. When all these activities are carried out not on rigid manner but giving for initiative innovation then one will say it is innovative classroom management. Managing innovative classroom is the process whereby the total process of conducting the classroom instructional process allows room for creativity, novelty and innovations in classroom situation in the pursuit and achievement of instructional objectives.

Sustainable development goals

Sustainable development goals (SDG) is otherwise known as the global goals for a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. These goals are seventeen in number, which build on the successes of the millennium Development goals. According to the UNDP in Osaat and Uche (2018) ^[6] the goals are;

1. Ending poverty in all its forms every where
2. End hunger, achieve food, security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities.
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth full of productive employment and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. Reduce income inequality within and among countries
11. Make cities and human settlements inclusive, safe,

- resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
 13. Take urgent action to combat climate change and its impact by regulating emissions and promoting development in renewable energy.
 14. To conserve and sustainably use the worlds, oceans, seas and marine resources.
 15. Protect, restore and promote sustainable use of terrestrial eco-systems, manage forests, combat dissertations and halt and reserve land degradation and biodiversity.
 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective accountable and inclusive institutions at all levels.
 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

However, in this paper the focus in on sustainable development goal 4 which has to do with ensuring inclusive and equitable quality education and promote lifelong learning opportunities.

Sustainable Development goal 4

Sustainable Development goal 4 is one of the 17 sustainable development goals which is developed to ensure inclusive

and equitable quality education and provide lifelong learning opportunities for all. Sustainable development goal 4 is all about achieving quality education. To achieve this quality education one of the targets is to ensure that boys and girls complete free equitable and quality primary and secondary education leading to relevant and effective learning outcomes by 2030.

Quality education connotes standard of education, quality of service delivery and quality of management. The level by which classroom activities are managed most often determines quality of education given to the citizens. Quality of education therefore can be assured when varieties or initiative innovations are employed in the management of classroom that will lead to achievement of quality instructional process. The need therefore to manage innovative classroom to achieve quality education being sustainable development goal 4 cannot be over emphasised.

Managing innovative classroom to achieve sustainable development goal 4

A lot of things are there to be done in order to achieve innovative classroom which in turn will lead to quality education which is equivalent of sustainable goal 4. In this paper innovative classroom management is achieved through managing Innovative instructional process, Innovative instructional materials, innovative communication and innovative disciplinary strategies.

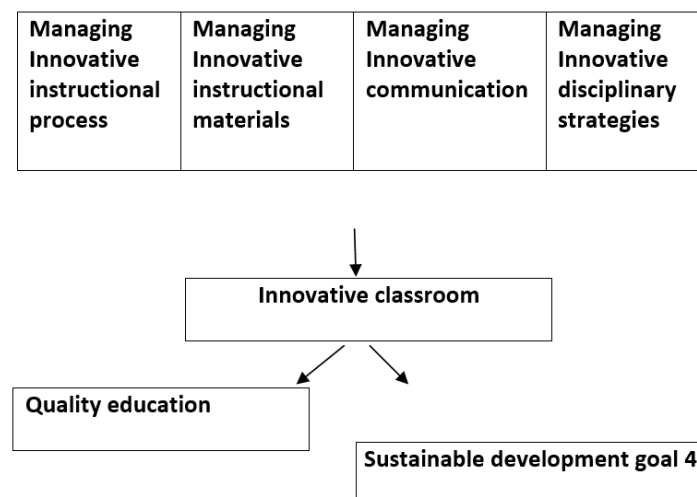


Fig 1: Model of managing innovative classroom for quality education

Managing innovative instructional process/classroom activities

To achieve quality education a classroom full of creative activities is required. Classroom instruction is an inter-play between the teacher, the students and subjects. Managing classroom activities involves planning the classroom activity that entails the teacher creating a guiding sequence and method that would enable him interact positively with his students in a teaching-learning situation. The teacher in an innovative classroom will encourage creativity that will foster innovation by encouraging students to think and be able to bring out solutions to every day problem and develop responses necessary to deal with future challenges. To manage innovative classroom activities, there should be variation in the teaching methods and techniques. Innovative classroom does not rely on teaching or learning technique to get a point across. An innovative classroom

includes teaching strategies that are always evolving and are different from day to day. An innovative classroom never stops to learn. The teacher should encourage constant learning by using every event as a teachable moment (www.thetechadvocate.org).

Managing innovative instructional resources

Instructional resources are those elements used in any teaching-learning exercise to promote greater understanding and facilitate the learning process. They come in the form of human and material resources designed to enrich the class activities and indirectly or directly to achieve effective teaching and learning (Ebong, 2006) [2]. These resources range from charts, graphic materials, high technology equipment like projectors, computers etc. Managing innovative classroom therefore depends on the creativity or resourcefulness of the teacher. Through their creativity,

teachers should be able to develop and design various types of instructional materials that will help in quality teaching and learning. There should be that connection between the teacher and the students.

The teacher must always know his or her students as well as the trends that are emerging in the profession. He or she will seek out new techniques and technologies and encourages students to do same.

Adopting innovative communication strategies

According to Agabi (2006) ^[1, 2, 3], classroom instructional process is all about effective communication once the necessary conditions in terms of facilities and instructional resources, school climate and teacher competence are adequate. No quality teaching and learning can be achieved without effective classroom communication. Classroom communication is the process by which information is passed from the teacher to the students and from the students to the teachers and from students to students (Osaat and Jack, 2019) ^[5]. Classroom communication is try-directional. To manage an innovative communication that will lead to quality teaching the teacher should discourage mono talking and encourage students to talk while teaching goes on. Classroom exercises that will generate discussion in the class should be encouraged among students. Classrooms should be opened for problem-solving. Innovative classroom does not wait for problem to appear. Innovation starts with a question and not an answer. New technologies and understanding can only be developed when students begin to ask questions about 'why' and 'how'. Students should be encouraged to ask questions.

Innovative classroom also encourages horizontal communication in which case students communicate with each other in form of collaboration. Students should be encouraged to collaborate with each other in attempt to achieve a purpose, geared towards quality learning to take place. A collaborative classroom encourages innovation by pushing students to work with others who may be different from them, beliefs, behaviour or background. Collaboration in the classroom encourages discussion which is the father of all innovations.

Managing innovative disciplinary strategies

Discipline is one of the oldest classroom management tools. No effective teaching /learning can take place in an atmosphere of disorderliness. As Kpee (2006) ^[3] rightly says discipline is necessary if stated school goals will be achieved. No wonder Agabi (2006:9) ^[1, 2, 3] says;

Disciplinary process is part of teaching, since children are expected to be properly brought up both in character and in learning. Teachers therefore owe themselves and the school system the responsibility of effectively managing the disciplinary behaviour of children so that it will have the desired impact on the learning outcome in the classroom.

Managing innovative disciplinary strategies cannot be overemphasised. Discipline strategies are all the efforts employed by the teacher to counter students' behaviour that contravenes school discipline. Different types of these strategies are there such as involving students in class activities, attentiveness and the use of eye contact by the teacher, knowing students by their names, giving attention to each unique child, reducing tensions by the use of novelties, jokes and funs to get students relaxed in class, etc. These strategies become innovative when the teacher is able

to vary the application of these strategies when the need arises and not dwell on a particular one over and over. Apart from that the teacher in an innovative classroom should encourage consistency and diligence by establishing hard and fast guidelines on how the day is run.

Conclusion/Recommendations

The role of innovation in education and development cannot be over emphasised. Innovation has to do with new ways, new actions, new methods, of doing something with the aim of creating variety for the purpose of achieving quality of that product. In education, innovation means doing what is best for all students. Though other variables could attest for achieving development, making the classroom innovative has been observed to be a step in the right direction. Innovative classroom breeds quality teaching and learning which leads to quality students (output) and thereby achieving sustainable goal 4 which is quality education. Therefore, to manage innovative classroom to achieve sustainable goal 4 it is imperative to manage innovative instructional process, innovative instructional materials, innovative communication and innovative disciplinary strategies. To achieve this therefore, the paper recommends the following;

1. Teachers should be able to develop and design various types of instructional materials that will help in quality teaching and learning.
2. Teachers should be able to vary teaching strategies that are always evolving and are different from day to day.
3. Students should be encouraged to collaborate with each other in attempt to achieve a purpose, geared towards quality learning to take place.
4. Teachers should be able to vary the application of these disciplinary strategies when the need arises and not dwell on a particular one over and over.
5. The government should be able to give adequate funding to education to enhance provision of educational facilities and instructional materials including charts, graphic materials, high technology equipment like projectors, computers etc.

References

1. Agabi OG. The classroom system. In O. G. Agabi & N. C. Okorie (Eds). Classroom management. Owerri: Totan Publishers LTD, 2006.
2. Ebong JM. Planning the instructional resource unit. In O. G. Agabi & N. C. Okorie (Eds). Classroom management. Owerri: Totan Publishers LTD, 2006.
3. Kpee GG. Classroom discipline. In O. G. Agabi & N. C. Okorie (Eds). Classroom management. Owerri: Totan Publishers LTD, 2006.
4. Nochia. Innovation in education, 2020. Resilient education.com/classroom. Retrieved 4/5/2020
5. Osaat DS, Jack IF. Enhancing effective classroom communication for achieving functional primary education in Nigeria: The roles of the teacher. British international journal of education and social science. 2019; 6(3):33-39.
6. Okoli NJ, Okechukwu UD. University education in Nigeria: issues challenges in the 21st century and the way forward. In S. D. Osaat & C. M. Uche (Eds). Globalisation of higher education and the advancement of sustainable development goals. A book of reading in Honour of Prof. Nkechi Jessie Okoli. Port Harcourt:

- University of Port Harcourt Press Ltd, 2018.
7. Resilient Educator. What does Innovation in education mean?. Resilienteducation.com/classroom, 2020. Retrieved 4/5/2020
 8. Stephen S. Why innovation in education, 2018. Online. nwmission.edu/articles. Retrieved 6/4/2020
 9. Shulman RD. 10 ways educators can make classrooms more innovative, 2018. www.forbes.com retrieved 28/9/2020
 10. Wikipedia. An innovative classroom. www.theteched vocate.org retrieved 4/5/2020