

# Implementation of Innovative Techniques in Educational Curriculum for Effective Student Leadership Skills Acquisition in Nigeria

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**Abstract:** This study evaluated the implementation of innovative techniques in educational curriculum in Nigerian classrooms. Using the convenience sampling technique, the study adopted 150 public and private secondary school teachers in Port Harcourt as its sample size from which data were collected using a well-structured questionnaire on a 5 point Likert rating scale. Of the distributed 150 questionnaires, 138 were retrieved and analysed using SPSS. The results from the data analysis infer that an aggregate application of visualisation technological tools is to the tune of 20.4% whereas the application of learner's autonomy is to the tune of 20.6%. This goes to show the slow rate at which the Nigerian educational system is embracing innovative techniques in offering educational services in the Nigerian classrooms. Therefore, the study recommends that innovative methods be utilised by teachers in the course of teaching as stipulated by the Federal Ministry of Education.

**Keywords:** Innovative techniques, Practical application, Curriculum, Nigerian classrooms.

## I. INTRODUCTION

Over the past decade, the way and manner in which education is given and acquired has gone through series of re-evaluation and changes to meet the demand for knowledge and skill sets peculiar to the present dispensation. In developing nations, Nigeria in particular, efforts and attempts to upgrade and implement practically innovative techniques in classrooms have produced minimal results. This is due to the fact that the effort of the Ministry of Education and other bodies responsible for the Nigerian educational system has been confronted with several challenges. One of which is the commitment to traditional/conventional instead of contemporary instructional methods. Alison (2019) noted that instructional methods ensure greater efficiency and effectiveness in the acquisition of knowledge or skills by learners. Also, Offorma, and Obiefuna, (2017) lamented that 21st century teachers are still found applying grammar translation method, the lecture method, note dictating and copying, and other teacher-oriented methods in Nigerian schools.

The developed nations are admired for their numerous accomplishments in several fields ranging from the field of medicine, technology and human development to mention a few. However, the key to their success is not a mystery but

rather it can be seen in the massive investment in their educational system.

Chiedozie (2016) in his research stated that creating and sustaining conducive social and working environments for innovation to emerge and thrive is desirable in the education system. A robust educational system that evolves to meet the demand for skill sets is required to confront and provide solutions to the present era challenges. This type of investment comes as result of the understanding of the role of education and the contributions it brings to human, economic and national development thereby improving the standard of living. Chiedozie (2016) further stated that a dynamic and progressive nation demands an educational system that will man a future which will assure a better life for all.

Developing nations fall short of this understanding. They do not say so verbally but it can be seen in their approach and investment decisions in relation to their educational system. In Nigeria, Enueme (2002) and Ogbuagu (2001) lamented that most of the Nigerian schools are characterised by inadequate and over-crowded classrooms, lack of equipment, furniture, teaching and learning materials, coupled with poorly motivated teachers. This claim holds amidst the recognition of the educational industry as a key sector in the national development of the country, Nigeria. To this end, Akuburo and Joshua (2004) observed that in recent times, there have been complaints that the standard of education has fallen.

Education is sometimes perceived as a sector which is resistant to change, while at the same time it faces a crisis of productivity and efficiency. Innovation could help improve the quality of education, as well as provide more "bang for the buck" in times of budget pressures and rising demand (OECD, 2016). In his definition, Hoyle (1993), referred to innovation as the introduction of novelties, the alteration of what is established. Similarly, (Knezovich, 1976), addressed innovation as the generation, acceptance and implementation of new ideas, processes, products or services. In other words, innovation is the upgrade of existing systems, establishment of new orders, a different approach of doing things that assures efficiency and growth as well as development. Therefore innovative techniques entails the application of improved method or new methods in doing things, which in

this case means an improved or a new way by which educational services are offered.

Innovative practices are tools that empower both students and teachers. By engaging in innovative practices, the learners' needs are met because it supports students' preference for learning by doing. Innovative practices are promising for instructors because they support teachers to engage students with hands-on inquiry learning (Udu, 2018).

The modern, rapidly changing world demands quality leadership and, secondary and postsecondary education is crucial for young people to develop leadership skills. The traditional belief that leadership is an inborn characteristic trait that only some people possess has changed and been replaced with a belief that anyone can learn and improve their capacity to lead. Secondary and higher education institutions around the world, recognising the importance of leadership competencies, have made it part of their educational mission to provide students with leadership experiences (Mathews, 2015). For this mission to be accomplished, much attention need to be put in during the curriculum and other activities implementation. This study therefore, evaluated the innovative techniques, their level of practical application/implementation in Nigerian classrooms and the impact on students with respect to leadership skills acquisition.

To guide the study in achieving its aim, two null hypotheses were formulated:

*H<sub>01</sub>: There is no correlation between the level of application of visualisation technology tools in Nigerian classrooms and effective student leadership skills acquisition.*

*H<sub>02</sub>: There is no significant relationship between learners' autonomy in Nigerian classrooms and the level of acquisition of student leadership skills.*

#### *The Concept of Innovation*

Innovation, according to the United Nations Education Science and Cultural Organization (UNESCO) in Okoye (2012), is a general change that is deliberate and must never be regarded as simple adjustment. Continuing, UNESCO added that innovation refers to any persistent change in the patterns of behavior of members of an identifiable social system. It is a novel departure from a customary practice that can be sustained for some time which is situational and relevant to a group in time and place, and when widely adopted, it becomes a reform. Innovation is a technique, idea, a practice or an object that is perceived by an individual or another unit as new (Nwafor, 2007). Microsoft (2009) sees innovation as the act or process of inventing or introducing something new. It is also a new invention or way of doing something. Furthermore, innovation is a change in the thought process of doing things or the useful application of inventions and discoveries (McGeown 2011).

Innovation in Education according to Nwafor (2007) is a deliberate, systematic, novel, specific and persistent change in the system of a particular society, which is aimed at improving the system or creating a new one, for a more effective and efficient means of attending to the educational needs of the social group, in their social environment.

Innovation in education will require a shift from teacher centered to student centered. Accordingly, Isioma (2015) admits that the learner-centered approach in teaching known as the contemporary or innovative approach takes into consideration students' interest, passions and capitalises on their strengths as well (Isioma, 2015).

This type of innovation promotes the 4Cs: Communication, Collaboration, Creativity and Critical thinking, which is the focus of today's teaching (Offorma & Obiefuna, 2017).

According to Walters, Green and Walters (2017), teachers and teaching methods must reflect the needs of the learners, the nation, and the world as a whole. This approach as acknowledged by Moemeka (2016) allows for learners' active participation in knowledge construction; creating interaction and positive learning environment; developing initiative; reasoning and critical thinking; developing manipulative skills in learners and making learners more productive rather than by rote learning as in the traditional approach. Under learner-centered approach, students learn from cognitive, social interaction and psychological point of view. According to Moemeka (2016, p.172) methods in this category include:

- i. Discussion
- ii. Activity
- iii. Project
- iv. Inquiry
- v. Role play
- vi. Modeling
- vii. Student demonstration
- viii. Guided discovery
- ix. Experimentation/laboratory
- x. Concept mapping
- xi. Games and simulations etc.

Hence, it is important to apply contemporary teaching methods in the teaching of school subjects in a developing country like Nigeria. However, according to Moemeka (2016), the majority of these instructional methods are still not used in schools by 21st century teachers in Nigeria. In recent times, advancement in technology has also uncovered certain emerging approaches to teaching-learning process of certain subjects. According to Tips for Educators (2016) and Candler (2016), these include: Visualisation, technology tools, active learning, and learner autonomy.

### Visualisation Technology

Visualisation is a good teaching method for teaching, reading and literacy to enhance reading culture and achievement in a small group. This is done by using text materials to visualise what is learnt in small groups. It is used to help students organise and get connected to concepts with mastery, ability to transfer knowledge and lead to a deeper, longer-term understanding of what is taught. Veřmiřovský (2019) asserts that visualisation is associated with cognitive activities; hence, teaching students with visualisation skills helps them to understand, recall and think critically about the subjects they study. Also, Shatri and Buza (2017) opined that the use of visualisation approach in teaching helps to increase communication, critical thinking, motivates students to learn, increases their cooperative ability and provides analytical approach to various learning based problems. Nevertheless, the recent push in technology has offered new ways of teaching and learning in educational sector using ICT to facilitate learning as well (Shatri, 2015).

### Learners Autonomy

Learner autonomy is an innovative approach that refers to students' abilities to plan out learning objectives for themselves. It is a contemporary innovative form of individualized learning approach. According to Alonazi (2017), learner autonomy is seen as the learner's ability to take responsibility of their own learning. In this way, learners build the capacity for critical thinking and recognize strategies that help them succeed. Learners accept responsibility for their learning, review their learning, and evaluate its effectiveness. This environment is one that is positive and motivating, and encourages collaboration and social interaction.

### Leadership Education Implementation

Engaging in student leadership development (SLD) as an educator is not an easy task. In the

SLD there are roadblocks, such as the pressures of academic progress (Whitehead, 2009). In order to consider how educators can carry out successful leadership programs, this section will consider best practice or proven method in a given field.

### Education Coordinator

Adriansen & Madsen (2013) studied the effects of facilitation within environmental study groups and found that, by creating student facilitators to lead discussion, there was an increase in participation, increased student happiness, and it made the material more relatable to students. Facilitation is based on the experience of learning through relationships that provide feedback, and in this way is very much related to leadership skills, whether the educator is facilitating a group or if students are practicing the art of facilitation (Adriansen & Madsen, 2013).

Facilitation is one strategy of teaching leadership skills. If we want to teach leadership specifically, Cogner's Four Approaches to Leadership Development are key to consider what goals we are working towards and what activities align with those goals (Allen & Hartman, 2009). The four approaches or goals are personal growth, conceptual understanding of what leadership is, feedback or assessment, and skill building. Sources of learning, activities, or specific examples of leadership intervention are identified within each approach (Allen & Hartman, 2009). Once educators have a leadership goal, competency, or outcome they are aiming for they can choose an intervention that would best align with that aim.

## II. RESEARCH METHODOLOGY

This study adopted a descriptive survey research design. It adopted a sample of 150 secondary school teachers from 67 secondary schools in Port Harcourt using the convenience sampling method. Primary data which was used in the study were developed using a structured questionnaire on a five (5) point rating scale of 5, 4, 3, 2, and 1. The questionnaire were statistically analysed using frequency tables and the research hypotheses were tested using descriptive statistics to determine statistical mean compared against the derived criterion mean. The data were analysed with SPSS. Any weighted mean below 3.0 was rejected while any waited mean score of 3.0 and above was accepted. The criterion mean is determined as thus:  $5+4+3+2+1=10/5=3.0$

## III. DATA PRESENTATION AND ANALYSIS

The data collection instrument (questionnaires) were disseminated to the selected participants via hand delivery and were collected some hours later. However, from the 150 questionnaires distributed, 138 questionnaires were retrieved fully completed, representing a response rate of 92%.

Table 1. Response Rate

	Response	Percentage
Responded	138	92
Not Responded	12	8
Total	150	100%

Table 1 shows that from all of the 150 samples, only 138 questionnaires were retrieved fully filled by the respondents making a response rate of 92%, while 12 questionnaires were not completed making the percentage of those who did not respond 8%.

Table 2. Respondents Demographic Data

Variables	No. of Respondents	Percentage (%)
<i>Age Distribution</i>		
21-30 Years	27	20%
31-40 Years	51	37%
41-50 Years	39	28%

51-60 and Above	21	15%
TOTAL	138	100%
<i>Gender</i>		
Male	65	47%
Female	73	53%
TOTAL	138	100%
<i>Marital Status</i>		
Married	87	63%
Single	21	15%
Divorced	30	22%
TOTAL	138	100%
<i>Educational Level Attained</i>		
OND	41	28%
HND/BSC	73	53%
MSC/MBA	24	17%
TOTAL	138	100%
<i>Working Experience</i>		
1-5 Years	47	34%
6-10 Years	59	43%
11-15 Years and Above	32	23%
TOTAL	138	100%

Table 2 presents all demographic information of the respondents according to their age, gender, marital status, educational level attained and their working experience.

The information as shown in Table 2 reveals that 37% of the respondents which are the majority, are within the age bracket of 31-40 years of age. This results lends credence to our choice of this sample size as it ensures credibility of empirical findings because the individuals are well within the active working age and with working experience of 6-10 years constituting 43% of the respondents, it validates the choice of the sample size and also the statistical result that will be deduced from the analysis.

Also, Table 2 shows that 53% of the respondents were females with the male counterparts constituting the other 47%. It is noteworthy to recognize that the disparity between male and female that participated in the study is slim. This implies that the deployment of convenience sampling technique in determining our sample size ensured the involvement of broad participants regardless of their gender to ensure unbiased findings.

Furthermore, Table 2 also reveals that 63% of the respondents were married, 22% were divorced and 15% were still single as at the time of this study. And finally Table 2 shows that 53% of the respondents had obtained a BSc or HND while the others had either an OND or MSc/MBA which represented 28% and 17% of the respondents respectively. The implication of this educational level attainment is that it shows

that their responses are reliable because they were more objective than subjective in their answers and this is due to their educational exposure and years of active engagement in classrooms, at one point a student and then a teacher.

#### *Test of Hypotheses*

The basis for decision making is determined by measuring the grand mean against the criterion mean of 3.0 as standard. This has been earlier stated and explained in the research methodology section

*H<sub>01</sub>: There is correlation between the level of application of visualisation technology tools in Nigerian classrooms and effective student leadership skills acquisition.*

Table 3: Statistical Analysis of Responses

Descriptive Statistics			
	N	Mean	Std. Deviation
I do not know and understand the concept of visualisation technology	138	2.51	1.558
School management have not considered the use of visualisation technology in the classrooms	138	2.32	1.367
The unavailability of visualisation technology infrastructure does not prevent its usage in the classrooms and acquisition of leadership skills by students	138	2.79	1.432
Projectors are not used often in some of our practical classes	138	2.31	1.387
I have not used visual display in teaching in classroom	138	2.35	1.453
Valid N (list wise)	138		

Source: SPSSV21

Grand Mean=  $2.51+2.32+2.79+2.31+2.35/5=2.456$

The statistical analysis of responses to null hypothesis 1 gave a grand mean of 2.456 which is lower than the criterion mean of 3.0. The interpretation of this result is that the 138 individuals that responded on a Likert scale of 5, 4, 3, 2 and 1, gave a grand mean of 2.456 implying that the respondents consent to the assertion that the practical application of visualisation technology as an innovative technique in the Nigerian classroom is not correlated with effective student leadership skills acquisition is low. Therefore, null hypothesis one is rejected and the alternate hypothesis that there is correlation between the level of application of visualisation technology tools in Nigerian classrooms and effective student leadership skills acquisition is accepted.

*H<sub>02</sub>: There is no significant relationship between learners' autonomy in Nigerian classrooms and the level of acquisition of student leadership skills.*

Table 4: Statistical Analysis of Responses

Descriptive Statistics			
	N	Mean	Std. Deviation
Students in the Nigerian classroom are not taught to have self-awareness	138	2.71	1.486
Students in the Nigerian classrooms are not groomed to challenge existing theories/ideas and create own meanings to concepts	138	2.45	1.335
Students in the Nigerian classrooms are not challenged to work creatively in complex situations	138	2.77	1.336
Students in the Nigerian classrooms are not engaged in Problems based learning situations	138	2.67	1.431
Students in the Nigerian classrooms do not take responsibility for their own learning	138	2.52	1.379
Valid N (list wise)	138		

Source: SPSSV21

Grand Mean =  $2.71+2.45+2.77+2.67+2.52/5 = 2.624$

The empirical findings from responses to the null hypothesis 2 gave a grand mean of 2.624 which is also less than the criterion mean of 3.0. This implies that learner's autonomy as an innovative technique has practical applications in Nigerian classrooms and has significant relationship with the level of acquisition of student leadership skills. Therefore, null hypothesis two is also rejected and the alternate hypothesis is accepted.

#### IV. RESULTS AND DISCUSSIONS

The result of the statistical analyses gave empirical evidences that satisfies the aim of this study.

There is already detailed explanations on the findings of the respondents' demography. Hence, this section focuses on the results of the hypotheses tests.

*H<sub>01</sub>: There is no correlation between the level of application of visualisation technology tools in Nigerian classrooms and effective student leadership skills acquisition.*

This null hypothesis was tested between means - the criterion mean and the grand mean. The criterion mean was determined from the 5 scale Likert rating adopted in the instrument used in the collection of data. It was determined as 3.0 whereas the grand mean gotten from the analysis of data using statistical package for social sciences (SPSS) version 21 gave a mean of 2.456. The implication is that the null hypothesis one is rejected.

*H<sub>02</sub>: There is no significant relationship between learners' autonomy in Nigerian classrooms and the level of acquisition of student leadership skills.*

This was also tested with the grand mean against the derived criterion mean. The findings reveal a statistical mean of 2.624 against the criterion mean of 3.0. The implication is that there is application of learner's autonomy in Nigerians classrooms and there is significant relationship between learners'

autonomy and the acquisition of student leadership skills. At a mean of 2.624 from a sample size of 138 and based on the questions asked, the application of learner's autonomy in the Nigerian classrooms is statistically significant.

However, from discussions with study participants, he possible challenges to the massive embracement of innovative techniques includes the following: weak institutions, addiction to the old pattern, cost of innovation, difficulty in implementing educational policies that supports innovation, etc.

Why we can take comfort on the fact that the country has started embracing innovative techniques in the educational system, there is a far out cry for a rapid development in the educational system because the educational system is largely responsible for human development, it empowers individuals to make and implement better policies, innovate and create systems and institutions that foster economic development and growth.

#### V. CONCLUSION

This study has implications on the policy of education in Nigeria, in making sure that the recommended innovative methods are utilised by teachers in the course of teaching as stipulated in the Federal republic of Nigeria (FRN) (2013). The study also has implications for the realisation of sustainable quality education, if the contemporary methods are well implemented as it ought to be by teachers. It has implications for teacher supervision and monitoring by Ministry of education, to ensure that the innovative methods are effectively implemented as asserted by Modebelu and Duvie (2012). At the moment, the implementation of innovative techniques in Nigerian classrooms is statistically significant and from the study findings, there is a significant relationship between learners' autonomy and the acquisition of student leadership skills. The finding also reveals that there is a correlation between the level of application of visualisation technology tools in Nigerian classrooms and effective student leadership skills acquisition. Based on this findings, it is suggested that preparation strategies that maximize learning, learning transfer, and leadership identity formation be implemented in the educational curriculum in Nigeria. These include the use of student-centered instructional pedagogies.

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