# CHALLENGES OF EFFECTIVE TEACHING AND LEARNING IN NIGERIAN SCHOOLS IN THE TWENTY-FIRST CENTURY: THE WAY FORWARD

# <sup>1</sup>ANIAH ANTHONY, <sup>2</sup>MOHAMMED UMAR MASALACHI & <sup>3</sup>SOBOWALE FAVOUR MOSUNMOLA

<sup>1</sup>Department of Educational Technology School of Science and Technology Education Federal University of Technology, Minna, Nigeria

Email: anthonyaniah@futminna.edu.ng Phone No.: 08036195385

<sup>2</sup> Department of Science Education School of Science and Technology Education Federal University of Technology, Minna, Nigeria

Email:Mohammed.umar@futminna.edu.ng Phone No.:08104057994

<sup>3</sup> Department of Educational Technology School of Science and Technology Education Federal University of Technology, Minna, Nigeria

Email: favor.sobowale@futminna.edu.ng Phone No.: 08039657282

#### **Abstract**

The paper explore the challenges of effective teaching and learning in Nigerian schools in the twenty-first century: The way forward. The challenges identified in this paper as barrier to effective teaching and learning include, poor planning, inadequate funding, school location and environment, unqualified teachers, non-usage of information, communication and technology (ICT) devices such as computers, internet connectivity, moderns etc. Other constraints are epileptic power supply, poor monitoring of schools, non-motivation of teachers in terms of prompt payment of salaries and benefits. The way forward is to reflect on current relevant understandings related to the challenge areas especially funding for purchase and distribution of modern learning infrastructures to schools and monitoring by stake holders in education to ensure effectiveness among others. The authors noted that, for teaching and learning activities to be effective, there is need for improved budgetary allocation to education of 26% as recommended by UNESCO. This will assist in the purchase and supply of learning facilities, stable electricity to enhance the use of the devices in line with global best latest practices in education and a paradigm shift to massively train good quality teachers on ICTs applications to update their knowledge and skills through seminars and workshops and routine monitoring of schools by stake holders in the education sector.

**Keywords:** Challenges, Effective, Schools, Twenty-first century, Teaching and Learning, Nigeria, Way forward

#### Introduction

Promoting teaching and learning effectiveness has globally been an issue of great concern in the education sector. Although this problem has been properly addressed in the western world, it has however, remain a challenging one in the Nigerian education sector. The 21<sup>st</sup> century education is driven by Information, Communication and Technology (ICT). Hence educational reforms call for paradigm shift in instructional approach i.e. from theory to practice. This is a deviation from chalk and talk method of teaching or lecture method where learners sit or remain passive in the class to receive lectures and take down notes to constructivist learning theory, this is based on the idea that learners must construct and reconstruct knowledge in order to learn effectively (Attard et al, 2010). Contemporary studies in the 21<sup>st</sup> century has shown that the use of ICT devices such as computers, internet and moderns, etc, stimulate students and enable them participate actively in the classroom teaching and learning process for enhanced learning outcomes (i.e. achievement, retention and recall of concepts or material learnt).

Komolafe (2016) defined teaching as the process through which tasks and material content are being imparted on the learners in an organized setting such as the classroom. In the same light Aniah, (2022) stated that teaching is a planned activity carried out under the guidance and supervision of a teacher intended to bring about expected change in the learner or student's behavior. Ngwoke (1995) sees

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learning as a process which cause a change in the behavior of an individual, this change in behavior results from experience or interaction between the individual and the environment. The author posits that the teacher must come up with engaging activities that keep students interested and participating aimed at improving their communication skills. Blicker(2020) defined learning - effectiveness as the degree to which the learning outcomes are achieved. He explained that learning outcomes are statement of what a learner is expected to know, understand or be able to demonstrate after completion of process of learning. Constructivist learning theory defines learning as an active process in which learners are active sense makers who seek to build coherent and organized knowledge (Mayer, 2004). It implies that teaching and learning are inseparable and are aimed at a desired behavioral change in the individual or learner through planned effective teaching and learning strategies (Aniah, 2022).

# **Challenges of Effective Teaching and Learning in Nigerian Schools**

It is important to note that challenges are sometimes good catalysts for change. Where there is no challenge, there may be little or no change. However, if change comes, there will be healthy, strong, good quality educational system and manpower to benefit Nigeria as giant of Africa (Okebukola, 2002; Mogbo, 2014).

One of the most important challenges (principle of good teaching) is the need for planning. Planning provides a structure and context for teachers and students as well as a frame work for reflection and evaluation (Spencer, 2003). Spencer (2003) gave four fundamental questions that teachers should ask themselves when planning a teaching session, they include;

- (i) Who am I teaching? The number of learners and their study level or stage of training;
- (ii) What am I teaching? The topic or subject matter, the type of expected learning (knowledge, skills, behaviors);
- (iii) How will I teach? Teaching and learning methods, length of time available, location of teaching session, internet resources, SGL skills models, etc, and;
- (iv) How will I know if the students understand? Informal and formal assessments, questioning techniques, feedback from learners.

School location and environment - if schools are located in a noise environment e.g. motor parks, markets or polluted environments such as industries and refuse dumping sites, teaching and learning will not be effective. Classrooms that are not well ventilated, no good lighting system could also affect teaching and learning effectiveness.

Issue of Unqualified Teachers – The issue of unqualified teachers that are employed to teach in our schools is worrisome to a large extent and responsible for students' poor academic achievement as a result of lack of desired knowledge, skills, poor orientation or sound background training in the field of teaching.

Absent of Modern Teaching and Learning infrastructures (ICTs) in Schools –

The greatest technological challenge in Nigeria institutions is how to establish a reliable cost effective internet connectivity. Issue of access to ICT networks. Some institutions have Campus Area Network (CAN) backed by wireless narrow band while others have only internet café with grossly insufficient computers based with 50:1 ration (fifty students to one computer). High student enrollment, inadequate funding of university and lack of budget to exacerbate the problems of ICT infrastructure.

Power Supply- A major source of worry in education industry in line with technology application in our classrooms is inadequate electricity supply to enhance the operation and maintenance of available instructional media in our institutions of learning in Nigeria. Inspite of late president UmaruMusa Yar'adua (2007) assurance to lunch a national emergency programme on power supply in 2007, the sector has not witnessed any meaningful change to this moment considering it position as giant of Africa, and 6<sup>th</sup> largest producer of crude oil in the organization of petroleum exporting countries (OPEC) and 5<sup>th</sup> largest US (United States) source of imported oil and 8<sup>th</sup> worldwide crude oil producer. It is indeed pathetic and even more disturbing because Nigeria cannot boost of stable and affordable power supply to put to use the available technological media that aid or support teaching and learning in our classrooms and also take care of other economic activities that enhances development.

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Funding-Poor funding of education by successive government is responsible for most problems in the sector today. Nigeria as a developing nation requires quality education to raise the manpower need that will lead to development and advancement of its citizen and the nation at large. The world is knowledge-driven, hence, there is a world demand for quality education to bridge the information gap between developed and developing nations like Nigeria using ICTs platforms or devices in our classrooms and schools. Inspite of the huge human and material resources deposited in the country, there is no evidence of change as a giant of Africa.

## The Way Forward

Planning is an important issue for effective classroom teaching and learning. The following will help the teacher if adhered to;

- 1. Device a lesson plan for each teaching.
- 2. The lesson plan may be very detailed or simple broad brush plan.
- 3. The lesson plan should define learning outcomes or objectives to be achieved.
- 4. Timing of activities.
- 5. Decide on the best teaching and learning method to achieve the outcomes (pedagogy).
- 6. Identify learning resources and support materials
- 7. Finalized any linked assessment or evaluation to ascertain students' achievement (Quality Assurance and Productivity Unit (QAPU), Fut, Minna, 2012).

Funding – Adequate funding of education will minimize most challenges such as adequate facilities provision, inadequate infrastructural facilities, classrooms etc. The Holy Bible says that money answereth all things even though it is the root of all evils. Ecclesiastes 7: 12; Isaiah 55: 11; 1Timothy 6: 10. If Nigeria wants meaningful and quality education, the budgetary allocations to education should be more than the proposed 26% by UNESCO. This will enhance provision of basic learning infrastructures for effective teaching and learning, also motivate teachers and make them more committed. It concluded that the current fund allocation of less than 10% is not adequate. (UNESCO, 2004; UNESCO, 2006).

The School Climate and Environment – The school represents an important social environment that influences students' development and their self-image. Understanding different individual need of all its students is one of the main tasks of a school (Allodi & Rydelius, 2008). Teachers are key participants in the process since they can directly influence those differences in their classroom and in every day communication with students. Classroom climates constitute an important component of effective teaching. Classroom climate according to Isaiah and Azanor (2016) refers to the social climate (relationship and interaction) and the emotional climate (feelings for each other) of the classroom. Isaiah and Azanor (2016) further explained that classroom climate is determined by such factors as teacher – students' interaction, student-students interaction, communication, discipline and well ventilated classrooms.

Qualified Teachers – The challenges of quality education in Nigeria are inseparable from good professional teachers who are saddle with the responsibility of routine classroom teaching and learning. It is good to note that for effective teaching and learning to take place in our schools, the teachers need to be qualified, skilled and well trained in the act of teaching. To improve the image of teachers in the learning and teaching profession in Nigeria, We may consider adopting the Japan's International Project Education Achievement (IEA) model. This model focuses on the following critical areas:

- (i) Teacher preparation institution programmes;
- (ii) In- service Education and Teacher Centres.
- (iii) Supervision of classes for effective teaching and learning.
- (v) Provision of relevant standard learning textual materials and equipment.
- (vi) Periodic monitoring and evaluation of the curriculum etc (Mogbo, 2014).

Absent of Modern Teaching and Learning infrastructures (ICTs) in Schools:

Nigerian government need to collaborate with NETWORK service provider in the country to extend their services to both urban and rural areas for access to ICT network and for effective internet connectivity to enhance media application in the classroom. Issue of access to ICT networks need urgent

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attention to break this crippling access barrier confronting education in Nigeria. School leadership that values technology and education reform activities should use reward structure to influence or motivate teachers that excel in classroom technology application.

Technical support is needed in schools where all or most teachers are using technology, particularly if new or experimental systems are involved or extensive use is made of computer networks. At least five kinds of technical support assistance are necessary:

- 1. Help in planning for technology uses and acquisitions.
- 2. Training on how to use new hardware and software.
- 3. Demonstration and advice on how to incorporate technology into instruction
- 4. On-demand helps when software problems or hardware failures arise.
- 5. Low-level system maintenance (Aniah and Nsofor, 2015).

Stable Power Supply to Schools - When technology is discussed, power must be mentioned as source of energy to enhance uninterrupted operation of the media. It therefore holds that our classrooms should be provided with alternative energy source by making available stand-by generators in both urban and rural schools in order to maintain stable operation of technological media during classroom instruction whenever there is electricity power outrage.

#### Conclusion

The paper identified certain peculiar factors that hinders effectiveness of teaching and learning in the Nigerian educational system and provides the way forward. The authors strongly stressed that Nigerian educational authorities should learn from experience of western countries such as Japan, United States and Canada by investing significant resources to train both teachers and students in seminars and conferences through adequate funding of the sector. Also, it is important that the general learning environment, classroom structures, ICT based facilities and other resources be well established to enhanced effective teaching and learning in Nigerian schools.

### Recommendations

If the following recommendations are adhered to, the quality of teaching and learning in Nigerian schools will significantly improve:

There is an urgent need for improved funding of education sector to cover provision of basic teaching and learning facilities i.e. ICTs, improve on teachers' welfare to boost their moral as it is with other parastatals in Nigeria like Nigeria National Petroleum Cooperation (NNPC), Federal Inland Revenue Services (FIRS) just to mention a few.

Nigeria should learn from experience of developed nations like Japan, USA, Ghana and Canada etc. and invest significant resources to train both teachers and students through seminars and conferences.

Adopt the Japan's International Project Education Achievement (IEA) model as shown in this paper. Learning environment/ good classroom structures and quality planning are critical to effective teaching and learning especially in this 21<sup>st</sup> century where emphasis is based on the ICT application.

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