

EXPOSITORY REVIEW OF FLIPPED CLASSROOM MODEL: AN INNOVATIVE TEACHING APPROACH FOR UNIVERSITIES IN NIGERIA

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Abstract: *The study was an expository review of flipped classroom model: An innovative teaching approach for universities in Nigeria. The concept of teaching and teaching models, flipped classroom methods/model and some prospects of flipped classroom model of teaching were discussed and highlighted. The various types of flipped classroom model available for use in universities in Nigeria were thoroughly described, ICT and flipped classroom model of teaching blend were mentioned and the constraints to using ICT for flipped classroom model of teaching in universities in Nigeria stated. It was then concluded that flipped classroom model of teaching tends to be more receptive for learning, thus, enhances teaching and learning. Therefore, these recommendations were made that university lecturers should expose themselves to training that would enable them use flipped model of teaching without difficulty, university management should make it possible for lecturers to attend trainings on the use of flipped classroom model of teaching by way of providing require financial and other resources, the government should provide required facilities in the universities that would encourage use of flipped classroom model of teaching in such universities etc.*

Keywords: *Flipped classroom model, innovative teaching approach*

Introduction

Education is the bridge at the centre between the achievement of the goals, the present state of the society, and the people as the vehicle for meeting the goals set by the society. Education is a powerful tool for harmonizing groups and individuals as well as enabling them to attain set goals and objectives. According to FRN (2016), education is for facilitating self-actualization, national consciousness, national unity, national development, egalitarianism and provision of opportunities for the citizenry. Based on that, a question could be asked on how education plays the role assigned to it? It is at this point that the idea of teaching comes to light.

According to Amadioha (2017), teaching is an ancient practice that is as old as man himself. Every human endeavour virtually demands the act of teaching to be carried out whether formally in an institution or informally with parents/guardians at home. The religious circle uses it to sell their kind of believe and culture to intending converts and the faithful. In the academic field, it is an instrument for hammering the intent of national desires and aspirations to all who would take over the transmission of a people's culture from generation to generation. This may be why Maduwesi and Eya (2006) see teaching as an operation that is part of human existence which seeks to help other people to learn. The

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assumption is that it is a process of interaction between two people in order for it to lead to a change in the behaviour of one or both of them. For Afe (2004) teaching is a process by which a teacher guides the learner in the gaining of knowledge, acquisition of skills and attitudes, a system of interaction, that allows the teacher and the learner to take part on the teaching-learning process. This act makes opportunities for the student to benefit from the exposure that would result from the interaction process between him and the teacher. Jeremiah and Alamina (2017) describe teaching as an activity that professional teachers get involved in. This therefore, presents teaching as a professional practice whereby the teacher plays his role as an active initiator and implementer of national intents as stated in the curriculum.

Ezeani (2006) had debunked the position of teaching as being for imparting knowledge, skills, attitudes and values as it may have been previously construed and believed by many; a situation he called the traditional view of teaching which has paved way for a different and new meaning to the concept of teaching. This means that teaching is now believed to mean a profession. In this profession, there are ethics and competencies acquired that make the practitioners to continue to remain relevant in the profession. Hence, Dorgu (2015) described teaching as a deliberate act of a profession in order to bring about purposeful change in the learner. The aim of the teacher is to troubleshoot the three domains of learning (cognitive, affective and the psychomotor) of the learner to obtain the most positive results possible. This was affirmed by Dorgu and Buseri (2011) who said that this process must ensure positive changes in the learner's knowledge, skills, and attitudes using planned actions. The said planned action may include models, methods, techniques and strategies.

A model according to Aguokagbue (2006) is a representation of real-life situation. An object or something you use to make a replica of its kind. The term

has found relevance in Geography, Biology, Engineering, so all aspects of education has use of it in their own way. In teaching as a practice, there are models or methods and this possibly declares the way a classroom for a particular teaching act is to look or be. This means that every classroom has a mode, look or appearance that would ensure for adequate teaching and learning to take place. In other words, the instructional approach specified for a particular classroom at a particular point in time becomes its teaching model. Various models (methods) are employed in the teaching act. According to Jeremiah and Alamina (2017) who classified these models into three as teacher centered models, learner centered models and the innovative models. The teacher centered models are the traditional approaches to teaching, examples include lecture, demonstration and story-telling etc. The learner centered teaching model beams its light on the interest and the active involvement of the learner in the teaching process. Its examples are: play away, project, discussion, field trip etc. while the innovative teaching model may include constructivism, concept mapping, flipped classroom, cooperative model and mobile teaching models etc.

Again, Jeremiah and Alamina (2017) describe flipped classroom as a reversed order of the traditional teaching model, a teaching approach where the learner gets exposed to the lesson before he/she comes for classroom interaction with the teacher and his contemporaries where areas not understood are made clear to the learner and if there are questions to be asked, it is done at this point. Also, the learner is permitted to contribute to the lesson meaningfully. It uses a variety of techniques that may include reading, video viewing or research and reporting while the class time is used to resolved difficult areas of a particular lesson. The name flipped classroom comes in varied forms depending on the type adopted since there are several types of flipped classroom approaches/techniques or model. The intent is to ensure educational objectives are attained.



The major aim or objective of every teaching and learning encounter is to enhance students' achievement, retention and the development of positive attitude. This can only be achieved through the use and application of suitable teaching methods/models during the implementation stage of the school curriculum by the teacher at all levels of education. It is expected that the teachers teaching at the Teacher Education level apply appropriate teaching methods in order to achieve the desired objectives and outcomes in the learners at that level of education.

Many research works among which are (Yore, 2012; Meziobi, 2014, & Njok & Sunday, 2014) have indicated that even teachers at the Teacher Education level in the universities fail to apply adequate methods in teaching which has negatively affected students in learning. In providing solutions to remedy the said problem, (NTI, 2009) has recommended various teaching methods, particularly, the innovative methods without due regard to flipped classroom model, a method one would say encourages participatory teaching and learning, in that, it is learner centred, relative to teaching at the level of the university. In view of the above, this study, expository review of flipped classroom model: An innovative teaching approach for universities in Nigeria.

Concept of Teaching and Teaching Methods/Models

Teaching is the process or use of different methods, styles and techniques in carrying out teaching-learning process in order to help learners to learn. Teaching is an aggregate of events that takes place outside the learner which is constructed to support the act of learning (Sequiera, 2012). The definition sees teaching as multifaceted, that is, that the process includes more than one thing. A doing process that is interwoven since the said aggregate of things are likely not to occur singly but concurrently running and making the effect of the process felt. However, it is an event which occurs, so there is the tendency for the event to begin and stop at some point, in other words, there is a time for it to start and a time for it to end; an indication that it is actually a process. But it

should not be forgotten so quickly that the teaching process has a design, that is, an order that is followed. According to Maduwesi and Eya (2006), it is an interaction process that a mature person and a less mature person do, in order to influence the behaviour of the less-mature person positively. Yet, there is a problem that Akudolu (2006) points out on the impression of this definition especially when it is defined as a process whereby one person intermediates the learning material and the learner. This makes the definition much more complicated because:

- a. It makes every and anyone a teacher
- b. It also allows room for the teaching of anything and at any time or information to the learner, this to the researcher is too much of a gap, rather it should stipulate the professional standing of who should be a teacher, the thinking level of the teacher as well as what material is appropriate to be taught as the learning takes place; this is as to the how the substance of education is arranged.

The last statement possibly made on this by Amadioha (2017) captures teaching as a way of helping someone to learn through an arranged programme of event with the learner being actively involved. From this highlight, teaching is meant to help anybody whether old or young to learn and that it must be properly designed to serve its purpose. This is an affirmation of knowledge, skills, values and attitudes but as a professional practice (Ezeani, 2006). Jeremiah and Alamina (2017) also confirmed this assertion because their view of teaching is that it is an educational engagement that only those who are trained as professionals in it are free to engage in its practice. With this view, teaching can be regarded as a professional practice whereby the teacher supports the learner to gain knowledge, acquire skills, attitudes and values that would encourage a positive behaviour required by the society.

The foregoing definitions of teaching leave us to agree to the declaration of Ibe-Bassey (2002) who sees teaching as a scientific, rational and properly arranged activities of



translating the curriculum content in the order the principles governing it has so outlined for the profession. The scientific nature of teaching implies that it goes with observation and testing perhaps this is coming on the ground that teaching and testing is the only way to find out if the learner has learnt, therefore, the search for the most appropriate and best method for transmitting facts and most valuable messages in a teaching episode is what makes teaching actually teaching. Perhaps the reason that made Jeremiah and Alamina (2017) to conclude by saying that teaching is a programme scene directed towards building desired learning experiences by a professional teacher in a learner through following laid down methodology according to the demand.

Therefore, it becomes imperative to discuss the methods of teaching. Teaching method/model is that principle in pedagogy/ andragogy and management approach applied for a classroom situation (TechCom, 2018). It was added that part of what determines the teaching method/model to use in a classroom are teacher's philosophy of education, number of students in the classroom, field of study and the mission pursuit of a school. Jeremiah and Alamina (2017) had described teaching method as the procedural approach used in teaching a lesson. The said methods must include strategies, techniques and skills of teaching but all aimed at achieving the educational objectives while Jeremiah and Vipene in (Jeremiah & Alamina, 2017) describes teaching method as all the step-by-step approach put in order to achieve the aim of a lesson.

The implication is pointing at teaching methods as the paraphernalia of the various designs and constructions arranged in a sequential and continual order to enable a lesson to be taught by the teacher and learnt by the students such that the reason for the lesson is attained. Since this is the case, the question should be, is it possible to use one teaching method for every subject? The answer the researchers believes should be no because each subject is unique in its own way, therefore, each subject

will require its own teaching methodology in order to meet the objectives of a specific lesson. This leaves us with the assumption that there exist many teaching methods which according to Jeremiah (2009) are teacher-centered methods, learner centered methods and innovative methods. According to TechCom (2018) which says that the teaching methods include high-tech teacher centered, high-tech student-centered, low-tech teacher centered and low-tech student-centered. The emphasis here, however, is that, there is a teacher centred approach and a learner centred approach while innovative approaches are conjured.

The innovative teaching methods resulted from continuous research work that human beings apply themselves to and the methods known so far are constructivism, concept mapping, flipped teaching/flipped classroom, cooperative learning and mobile teaching. Others are active learning, integrated technology, distance learning, games and simulation, project model, mastery learning, case study, minimalists training model etc. (Nwafor, 2007; GMU, 2010; Amadioha, 2017; Jeremiah & Alamina, 2017).

Concept of Flipped Classroom Method/Model of Teaching

Teaching method is any model or strategy used in manipulating teaching such that learning is made easy and effective for the students. It is that approach used in teaching to encourage learners to learn. This is why Voltz, Sims and Nelson (2010) describe it as that way a lesson is organized and delivered to the students in their diverseness and differences such that learning is attained. The pursuit of teaching must put into consideration that the students to be taught come from different backgrounds and that they have come also with their different learning styles and learning experiences from their different backgrounds. Therefore, the intent here is to ensure that the diverse and different learning needs of the students are met and since the reason for one student learning may not be the reason why another student is



learning, hence, different teaching methods will be necessary to be used to keep them attentive to lessons such that after a lesson they are able to use what they have learnt to solve problems that face man on day-to-day basis.

According to Vikoo (2003) teaching methods should be explained and discussed, and presented based on the three learning domains which are categorized as: Cognitive, affective and the psychomotor

In a situation where the intention for teaching is the cognitive category, then it means that the teacher is concerned with the development and growth of the learners intellectually. So the teacher should teach in a way that will make the students analyze, synthesize, and evaluate ideas and concepts. The methods that can help enhance intellectual capacity development include discussion, questioning, socratic approach, team teaching, field trips, lecture, etc. If the teaching is focusing on encouraging the students developing affectively, things that arouse interest, emotions and represents values, and attitude review must be presented to them. The mode of teaching that would lead to this is phallic unlike the former that is didactic.

The teaching methods that may be suitable for effective development are: modeling, simulation, drama, games and maybe role playing. They are all activity oriented. Suppose the emphasis for teaching is the psychomotor, then all activity oriented and connected approaches must be given the chance required and skills to be enhanced, may be these could be the how to demonstrate, illustrate, perform in one way or another, such that the total skills development is the intent. Thus, some of the teaching methods to employ may include inquiry process/procedures, demonstrations, experimentation, programming, assignment, project, micro teaching, mastery learning e.t.c. (Dorgu, 2015).

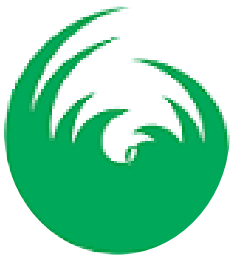
However, from the foregoing, it is only hazy than clearer to say that a teaching model can only be used in teaching for enhancing a particular domain of learning without the

other. This means that while a domain may be the focus for the use of a particular method, yet the other two domains of learning are automatically being trained in the learner, hence, what led to some experts designing the nomenclature blended learning; a types of innovative teaching methods. And as earlier mentioned, Jeremiah and Alamina (2017) have listed these methods to include constructivism, concept mapping, flipped teaching, cooperative method, mobile teaching etc.

Flipped classroom model of teaching is a teaching model that utilizes information and communication technology (ICT) in enhancing the process of teaching and learning otherwise called curriculum implementation so that more interaction opportunities are provided for the students by the teacher to learn in an unconditioned environment (Bishop & Verleger, 2013; Bergmen & Sams, 2012). Class work and homework/assignments are used interchangeably, an indication that the classroom has been flipped, that is, reversed from its traditional or original mode, since what was meant to be done in class is now done at home.

This model of teaching came into being based on an article published by Alison King who disclosed that class time should be for the development of meaning. Upon this, Lage, Platt and Treglia built their idea which is on classroom inversion with the help of media technology to aid teaching. But the knowledge of Flipped Classroom Model was concretized by Salman Khan when she went about preparing videos to be watched before the class holds, thus, presenting an idea of students being exposure to a topic before it is taught in class (Jeremiah & Alamina, 2017).

In this teaching model, students are provided with videos and other information and communication technology assisted learning opportunities to use while doing independent study at home, in this wise, they are getting informed, entertained, and learning at the same time and perhaps developing their innate abilities better to find more meaning with life that would have been difficult for



the teacher to help them cultivate if all the activities were to be teaching which is being carried out in the classroom environment. Indeed, according to (Johnson & Campbell, 2013) who gave their description of flipped classroom pedagogy also known as flipped classroom model of teaching is a teaching method in which the lecture and homework routine plagues a teaching and learning setting as the components of a course is turned inside out.

According to (TUTA, 2018) flipped classroom model of teaching is done in a flipped classroom in which the terms of learning experience, gaining of knowledge and application is inverted such that students gain needed knowledge before class, instruction/teacher guides students action, and interaction to ensure for clarification and use of knowledge gained through the process. This statement is very clear that students do not just get flipped taught on any kind of knowledge but that knowledge which is useful and would enhance their academic performance and contribution to the well-being of themselves, objective centered and aimed at meeting specific teaching and learning purposes at every given time, and their society.

Some Prospects of Flipped Classroom Model of Teaching in Universities in Nigeria

Some of the prospects of flipped classroom model of teaching stated by (TUTA, 2018; Acedo, 2018) are as given below:

1. It gives learners more control over what they are learning.
2. It encourages learner-centered learning and cooperation among the learners.
3. It makes for the availability of technological facilities guaranteed lessons and learning experience for the learners.
4. Parents are able to easily access and tell if their children and/or wards are learning or not.
5. It encourages efficiency of the learning process.
6. Learners learn at a deep level beyond what they would have normally learned.

7. There is active participation of the learners since their tools for learning is what they have interest in.
8. It increases the rate of discussion and interaction among the learners.
9. Feedback from the teaching and learning process is easy and accessible to both the teacher and learners.
10. It promotes creativity among the students, self-confidence development and presentation skills enhancement.

For Michigan State University (MSU, 2018) in a publication asserted that flipped classroom model of teaching is hinged on four pillars which are: flexible environment, learning culture, intentional contents and professional educator.

Types of Flipped Classroom Available for use in Universities in Nigeria

Flipped classroom model of teaching could come in different forms for use in universities in Nigeria as discussed below (Frydenberg, 2017).

1. The Standard Inverted Classroom: The students are given homework to do on watching a lecture video and reading any materials that may be necessary and when it is time for class, they carry out practice on what they have learnt earlier, so that more opportunities for learning is made available.
2. Discussion Oriented Flipped Teaching: The teacher gives lecture videos or reading assignments to the learners. During class time, time is now totally for discussion and for the learners to explore the subject matter while contextualization is offered.
3. The Demonstration Flipped Classroom: This is used mainly for subjects that need learners to remember and do activities over and over again. It is used more with subjects that are of the natural sciences (Chemistry Physics, Biology etc.). In fact, the impact is necessary for mathematics so that learners show how they saw an approach demonstrated.
4. The Faux Flipped Classroom: This helps younger learners who are underage as compared to what they



are expected to learn, so when they watch a given video, they have adequate time to study the content on their own and freely at will and the teacher in the class is then able to move from student to student discussing whatever their challenges may be with each of them.

5. The Group–Based Flipped Classroom: The student uses this model to help one another as they share ideas and knowledge in groups even with them also having videos and content materials to read from earlier. It encourages teamwork and to share their knowledge in a way understandable to each one of them.

6. The Virtual Flipped Teaching: This is commonly used for older learners more and can even remove classroom time at all, that is, there will not be classroom time anymore. So learner will get their videos, assignments and/or collect it online using the online management systems, so that they can visit the teacher at a private time for one-on-one clarification based on the need of each student.

7. Micro Flipped Classroom: In this type of classroom, short video lectures are distributed as study material along with short assignments. The rest of the lecture and assignments are conducted during the classroom time.

8. Flex Flipped classroom Model: The Flex model comprises the making of every class a mixture of online instruction and classroom interaction. This is different from the rotation model as every class is converted into online instruction and classroom time. In the rotation model, there are only 1 or 2 courses that are divided in this manner. The school implementing a flex model resembles office areas as students are provided cubicles for online instruction. Classrooms of different sizes are used for small-group lessons, group activities, doubt clearing, individual counseling, or just tutoring.

9. Flipping the Teacher: The teacher must not be the one to provide all the videos needed for a flipped teaching, even the students can also provide some when this occurs,

here, the students' proficiency is authenticated. Each of the learners will show their competence through this means especially if they have to view video themselves showing where they are doing a presentation. This process of using flipped classroom teaching models in carrying out educational activities can only be achieved with the help of Information and Communication Technology (ICT). Some of the equipment, gadgets and devices needed are: Computers, Multimedia projectors, Interactive board, Personal computer tablets and television.

ICT and Flipped Classroom Model of Teaching Blend in Universities in Nigeria

Information and Communication Technology (ICT) is relevant to flipped classroom model of teaching as it is the channel or medium through which flipped classroom model is made operational based on the following:

1. It is a new educational approach to curriculum implementation process.
2. It offers opportunity for education as well as balancing it with entertainment
3. Flipped classroom model encourages group collaboration in teaching-learning through the use of ICT
4. The help of ICT usage in curriculum implementation using flipped classroom model eliminates time and geographical limitation for teachers and learners.
5. It provides speedy dispensation of curriculum content to the learners.
6. It facilitates the demonstration of lessons by the teachers.
7. It enables the students to carry out their assignment on time and provide feedback quickly.
8. It enables students and teachers to do reflection, deduction, collaboration and interactive teaching-learning without barrier.



9. It permits students to maintain a running discussion.

Constraints to Using ICT for Flipped Classroom Model of Teaching in Universities in Nigeria

There are some challenges affecting the application of ICT in curriculum implementation: These include:

- a. Attitude of Teachers: Some teachers display negative attitude towards the use of ICT in curriculum implementation process. They do not seem to be interested in learning new tricks that would increase their capacity to be effective in curriculum implementation may be one needs to be in touch with the e-application to teaching-learning process regularly, to some people this is a hard work for them to do.
- b. Inequality in Access to Technological Gadgets: There are some schools where some of the teachers do not have access to gadgets that can enable them to succeed as better curriculum implementers. If not nowadays, in the past it was very expensive to own a personal computer even now the purchasing price has not come down so low that they can be easily acquired, yet it is vital that teachers who want to improve on their curriculum implementation practice should endeavor to have personal computers in order for their job to be made easier.
- c. Lack of Knowledge of ICT: Studies have shown that teachers lack of knowledge of ICT has contributed in no small measure to the handicap faced in the use of ICT for curriculum implementation. Most of these teachers find it difficult to use e-learning packages and cannot even produce materials that could facilitate its application to teaching and learning as it would be needed.
- d. Lack of Mastery: A good number of teachers who use ICT packages do not have mastery of them, thus, they do not have confidence in themselves.

It was discovered that those of them who use ICT do so just for presentation purpose not necessarily for these individuals to become masters of the art.

- e. Training: The teachers do not have adequate professional training to be able to use ICT gadgets and packages. This is so because they are not provided effective professional training, lack of exposure to new and emerging soft wares, poor knowledge of how to do connectivity of equipment and soft-ware, unpreparedness on the part of teaches to want to learn new ways of incorporating ICT in education. These and many more are some of the challenges facing ICT integration in university education and for emphasis teacher education curriculum implementation (Mbelede, 2019; Nwosu, 2019; Ukwuoma, Best-Njoku & Okezie, 2019).

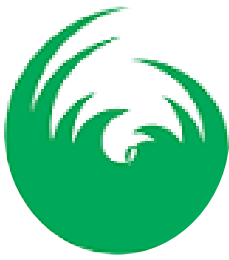
Conclusion

The conclusion that can be drawn from this discourse is that flipped classroom model of teaching has a blend of several teaching methods/ models together to form its own approach; an approach that one can be adjudged more suitable and acceptable for use since it claims to deliver instructional objective much more receptive to the various domains of learning were they are assimilated without much difficulty considering the audio-visual and kinesthetic learning is done simultaneously. However, it is vital to say that education stakeholders should joins hands with the government to provides facilities in the universities that would encourage its use for teaching.

Suggestions

The following suggestions were given to support the research:

1. University lecturers should expose themselves to training that would them use flipped model of teaching without difficulty.
2. University management should make it possible for lecturers to attend on the use of flipped



classroom model of teaching by way of providing require financial and other resources.

3. The government should provide required facilities in the universities that would encourage use of flipped classroom model of teaching in such schools.
4. Lecturers must be patient with the students to enable learn efficiently how to use flipped classroom as this would reduce work load later.
5. Other education stakeholders should help the government to empower the student with required gadgets and equip the universities.

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