

Student-centered Teaching and Learning in Higher Education: Transition from Theory to Practice in Nigeria.

By

Stella U. Anyanwu¹

Department of Curriculum and Instruction
Alvan Ikoku University of Education, Owerri,
Imo State, Nigeria

. E-mail: sugosol@yahoo.com Phone: +234 803 269 9645.

And

Fidelia N. Iwuamadi²

Department of Curriculum and Instruction
Alvan Ikoku University of Education, Owerri,
Imo State, Nigeria.

E-mail: fidelngozi@gmail.com Phone: +234 803 677 5560.

Address all correspondence to the primary author:

Stella U. Anyanwu

sugosol@yahoo.com, +234 803 269 9645.

Abstract

The paradigm shift from teacher-centered to student-centered pedagogy has a world-wide advocacy for its practice at all levels of education. Nigeria, a major sub-Saharan country (population-wise), is in the process of making a transition from teacher-centered to student –centered mode of education. It therefore becomes pertinent to focus attention on its higher education system, a preparatory level for its future teachers. This paper therefore presents an insight into the theory and practice of this pedagogy, specifically focusing on the transition status at this level. Some challenges, including low quality education system, low pedagogical understanding among teachers, relatively large class sizes, curricula demands, paucity of technological infrastructure, and assessment challenges, are highlighted in this paper. Suggestions to fast-track this transition are made for the government and its regulatory agencies, as well as teaching faculties, to act on the recommendations, as it concerns them.

Keywords: constructivism, student-centered learning, teacher-centered learning, higher education, Nigeria.

Introduction

The benefits of education in a globalized world cannot be overstressed just as the pedagogy for its transmission remains a concern for all involved in the business. The paradigm shift from the traditional teacher centered to the student centered modes of education has created some challenges in colleges and universities where teachers are produced (Barret et al. 2007), (Mascolo, 2009). Student centered pedagogy is an offshoot of constructivism, an ideology which believes that learners construct their understanding through their actions and experiences on the world. This

constructivist posture has given rise to various active teaching and learning methods. As the theory and practice of student centered learning enjoys a burgeoning advocacy for application at all levels of education all over the world, it is pertinent to note that Nigeria, one of the largest sub Saharan nations is also translating this pedagogical theory into practice. As this paper provides an overview of the theory and practice of this pedagogy, it puts a specific focus on its exit from theory into practice in Nigerian higher education. Contending issues are identified and possible solutions are proffered.

Education and constructivism

The concept 'education' refers to the process of facilitating learning. In this process, knowledge, values, skills, habits and beliefs of a people are transferred to other people. It involves the development of the powers of reasoning and judgement resulting in the ability of one to acquire intellectual maturity for living. To educate is to develop the faculties and powers of a person through such processes as teaching, discussion, storytelling, training, instruction and other related activities. Education formally takes place under the guidance of teachers or educators in learning environments. Educators are usually influenced by one philosophy or the other in performing their roles. One of such philosophies is constructivism. Constructivism according to Abdal-Haqq (1998) is a theory of learning which explains the nature of knowledge and how human beings acquire learning. As Richardson (1997) explained, it maintains that individuals create, construct or create their own new understandings or knowledge through the interaction of what they already know and believe with events, ideas, or activities with which they come into contact. This means that knowledge is acquired through getting involved with the content and not just by imitating and repeating things. In constructivist settings, learning activities are characterized by active engagement, problem solving, enquiry and collaboration with other learners. In constructivism, the role of the teacher in the classroom is that of a facilitator, a guide, and co-explorer as he engages the learners to ask questions, make challenges, formulate their own ideas and opinions on issues, and make their own conclusions. The teacher creates an environment that will raise the learners' motivation to discover new knowledge and skills as he no longer transfers facts to students, and rarely stands all the time in front of the class dishing out facts to the students. On the contrary, there are activity centers around the classroom and the teacher moves from one activity center to another. Considerable attention has been accorded constructivism in learning, teaching and teacher education including policy making (Richardson, Teets & Starns, 1996). Consideration has been given to it as a more natural, relevant, productive and empowering framework for raising valid teachers in the present century.

Classroom application of constructivism

Research has shown that the quality of teaching and learning is improved when learners have enough opportunity to clarify, ask questions, apply and build up new knowledge. Then, serving as guides rather than leaders, teachers create opportunities for learners to engage in new materials that help them to understand and apply information. In this way, teachers become the fuel that energizes the drive in students to engage in learning. Student centered learning which is an offshoot of constructivism positions the student as well as his learning needs at the center of operations thereby calling for different teaching strategies to accommodate them. These may include role plays, group discussions, problem solving, case studies, and more. Application of these strategies create a positive impact on the learners' critical thinking skills, motivation, transfer of new information as well as their interpersonal skills. Expressing his view on student centered learning, Kember (1997) states that knowledge is constructed by the student while the teacher is

only a facilitator of learning rather than a presenter of information. Harden and Crosby (2000) describe student centered learning by focusing on students' learning and the activities the students engage in so as to achieve this, and not what the teacher does. The emphasis here is on what the student does. Burnard (1999) identified 'choice' as relevant in student centered learning as student might choose what to study, how and why it will be studied. On their own side, Lea et al (2003:322) highlighted some important points about student centered learning. They include the following: reliance on active rather than passive learning

- emphasis on deep learning and understanding
- increased responsibility and accountability on the part of the student
- increased sense of autonomy in the learner
- interdependence between teacher and learner
- mutual respect between the learner and teacher
- a reflective approach to the teaching and learning process on both teacher and learner

Student centeredness relates primarily to the constructivist view of learning because of the importance it places on independent learning, activity, and discovery. Although in literature and usage, the concept of student centered learning is not always used with consistent meaning, (Paris & Combs, 2006), the general issue is to adjust teaching activities in order to influence student learning because students may engage in doing more than the teacher (active), as they choose what to learn, and as power relationships shift between them and the teacher.

In contrast with the constructivist position in teaching and learning is the traditional approach where the teacher 'fills' the learner with deposits of information considered as true knowledge for retrieval by the learner when needed. In this approach as typified in the lecture method, teachers do most of the talking while the learners remain passive listeners. As Richardson (1997) observed, constructivists generally maintain that information acquired through this transmission model of teaching is not well integrated and is usually accessed and articulated only for academic activities as examinations and recitations.

Insight into classroom practices in Nigerian higher education

The paradigm shift from teaching to learning has given rise to a widespread development on student centered learning. (Ahmed, 2013) Although student centered learning is a frequently used terminology in institutions of higher education, Lea et al (2003) maintain that even though these institutions claim to be practicing it, they do not in reality. Observations of classroom practices in higher education in Nigeria confirm this as classrooms in colleges and universities are intensively teacher centered, a situation which works against students becoming successful mature learners. Weimer (2002) identified five specific areas where teacher centeredness can be clearly observed. These include the balance of power, the function of content, the role of the teacher, the responsibility of learning, and the purpose and processes of evaluation. These areas are hereby contrasted with classroom practices in higher education in Nigeria.

Balance of power shifts

In this area of teacher centeredness, the balance of power shifts to the extent that the teacher will share some decisions about the course with the students in such a way that the teacher and students collaborate on course policies and procedures concerning for instance, assignments, evaluation and content. Students make more decisions about these, such as making choices from a variety of assignments, creating opportunity for students to make policies on student evaluation. Presently, observations of practices in Nigerian higher education classrooms indicate a gap in power

balance as it is the teacher (lecturer) who makes decisions concerning the course to be taken by the students. Issues concerning the course outline, for instance, with regards to the content, the schedule for learning, the class attendance policy, even the evaluation process are determined and communicated to the students as directives coming from a superior in charge. This, as Weimer (2002) stated, makes students anxious, rather than empowered, self-motivated and confident. In balancing power, the students may take the balance initiative in suggesting adjustments when necessary, but the difference is the case as it is the teacher who has control over all.

The function of content

In student centered learning, the course content is used as a means of helping students to learn how to learn through the development of study skills, time management, and self-expression both orally and in writing. The concepts embedded in the course serve as light ignited by the teacher for the acquisition of critical thinking and problem-solving by the students. Some active learning strategies such as role play, group discussion and problem-solving which demand slower pace or pausing give room for creative interaction with the content thereby producing students who are more mature and enthusiastic in their learning skills. A high degree of job satisfaction for the teacher is not left out in the process (Wright, 2011). Although the entire content may not be covered, the flexibility in content delivery and study strategies accommodate the learning needs of the different students. In contrast, when students are faced with a large and unmanageable amount of content, the course objectives may not be attained as the course content is not covered. The students now resort to memorization instead of conceptualizing the content, and only the students who are capable of regurgitating the information given by the teacher can perform in the examination. This is the situation in higher education in Nigeria, and this high stake of examination for success and certificates was rated as the highest cause of examination malpractice experienced in Nigeria (Petters & Okon, 2014).

The role of the teacher

In student centered classroom, learning is promoted in the learner when he is involved in the learning activities. Students experience learning when they take part in such activities as responding to questions or giving examples, giving summaries or participating in problem-solving activities. The student is no longer expected to be a passive recipient of knowledge and information from the teacher as if he were an empty vessel. Rather the teacher acts as a facilitator to enable him process and assimilate information in meaningful ways. This is achieved through the creation of learning opportunities in which students are actively engaged such as peer-learning activities, cooperative activities involving peer interaction, and relating the principles with other disciplines rather than by traditional teaching methods. For a more effective learning, it is beneficial and desirable for the teacher to move towards a model in which students engage more actively in the learning process. This is confirmed by Oldenburg (2005), Knights and Woods (2005). Student centered learning implies planning class activities where the focus is on identifying students' tasks that lead to learning rather than teachers' tasks for presenting the lesson. These teacher roles have transformed the classroom from teacher centered to student centered. However, the metaphoric transition from "sage on the stage" to "guide on the side" (Wright, 2011), indicating the paradigm shift in the role of the teacher has not fully taken effect in Nigeria. This is because most of the classroom activities are still carried out by the teachers (lecturers) as they still bear the responsibility of choosing and organizing the learning content, interpreting and applying the concepts, as well as evaluating the students' learning while the students write down and memorize the information or facts.

The responsibility for learning

In student centered learning, it becomes natural for students to assume the responsibility for learning. The teacher redesigns the course in such a way as to enable students assume the responsibility of learning by being actively involved in class exercises, fieldwork and use of computer-assisted learning packages and more, as against passively receiving knowledge from the teacher. A blend of face-to-face and on-line learning affords students the opportunity to fix their own time and place of learning. (Cornelius & Gordon, 2008) According to Perry et al. (2005), students who have high control in their learning are most successful in completing college instead of dropping out due to failure. In Nigeria, the responsibility for learning is not completely that of the learner. The teacher is still the primary provider of information and facts for learning through the lecture approach. Although assignments and projects are assigned to learners, they are not frequent in occurrence, and are often for end point judgement.

Purpose and process of evaluation

The common focus of student centered teaching is learning, and so evaluation takes a shift from teacher centered to student centered perspective. This implies also a change in the evaluation processes to accommodate activities which will get students involved in assessing their own work and that of their peers through constructive critical questioning as this may reduce anxiety and cheating during examinations. Wright (2011) compiled a list of research findings which indicate high relationship between frequent in-class assessment and improved learning, thus suggesting that assessment of learning should be an on-going exercise in the process of teaching and learning. The addition of more formative evaluation which provides feedback to students on their learning enhances it, and also provides more focus for them by highlighting their learning gaps which they need to fill up. These come in form of comments and feedbacks on work done, written comments on assignments, grades from multiple choice questions for feedback only. In support of peer and self - assessment is Lea et al. (2003) position that both give some control and responsibility back to the student. Assessment aligned with student centered teaching may not necessarily be continuous, but rather uses a variety of evaluation instruments and mechanisms (Vavrus & Bartlett, (2011). These may include experiments, projects, role playing, dramatic expressions, songs and more. These authentic tasks call on students to be active, creative and think critically about how principles and concepts learned in the classroom could be applied in different contexts.

In Nigeria, the policy demand for formative and summative evaluation in any course in the universities is 30% and 70% respectively; 40% and 60% respectively for colleges. Much as this is an attempt to adapt to the shift to student centeredness in teaching and learning, the execution of this policy is observed to be inconsistent in institutions of higher education in Nigeria. This is because much of the time, students are made to engage in only one or two formative assessments such as assignment, written test, or project without clearly defining the objectives of such an exercise. In spite of the widespread awareness and use of the term 'student centeredness' in teaching and learning, one contending issue with the pedagogy is the fact that claims are made by many teachers in higher education to be practicing student centered teaching and learning without doing so in reality (Lea et al. 2003). In its release, the World Education News and Reviews (WENR) (2004), gave hints why Nigeria should make a shift in pedagogical emphasis from staff teaching to student learning: high dropout level, inadequate graduate quality, and poor university curriculum. This implies that higher education in Nigeria has not adequately embraced student centered teaching and learning. What then are the impediments to this pedagogical paradigm shift in higher education in Nigeria?

Challenges of transition from theory into practice

Much as awareness has been created about student centered teaching and learning, in higher education in Nigeria, there is still a gap in the transition from the pedagogical theory into practice as a result of some challenges encountered at that level of education.

Low quality education system

There is no gainsaying the fact that there is a functional relationship in the education subsystems within any nation. Any fault in a subsystem affects the other subsystems, and so, input in a subsystem determines the output. Nigeria is no exception. Teachers are produced by the same education system they teach in. Therefore if an education system is of low quality, it becomes necessary to provide effective training and support to teachers throughout their careers because teachers should be able to have control of the curriculum which they communicate to students of varying ability. As observed in the UNESCO Global Monitoring Report (2010), many sub Saharan African countries (of which Nigeria is one) do not provide good initial training for the relevant skills. Consequently, teachers resort to teaching in the same way they were taught.

Low level of pedagogical understanding among educators

The ability to positively lead the student to learn effectively requires the teacher to be knowledgeable in his content area, as well as display a good level of pedagogical content knowledge. This demand is deficient in the Nigerian higher education subsystem. A higher percentage of people who teach at this level of education, though highly certified in their various content areas do not possess the requisite pedagogical content knowledge to drive the students' learning in the right direction because they do not have the understanding of how to teach content with the appropriate methods especially those aligned with student centered pedagogy (Guro & Weber, 2010; Schuille & Dembele, 2007). This situation is responsible for the continued use of lecture as a method of teaching where lecturers ask fact-based questions and rarely model participatory methods as practiced in student centered learning. The result, as noted by Lewin and Stuart (2003) is that students rarely experience the student centered methods preached or taught by those lecturers.

Large class sizes

As Ajiboye and Adeyinka (2007) noted, large class sizes constitute a hindrance to effective teaching and learning as they can negatively impact on two important and related aspects of classroom teaching: instructional time and classroom management. This is because a large class might become rowdy, and instructional time would be wasted in controlling undesirable student activities. Not only this, large class sizes contradict the principles of student centered teaching and learning as they restrict the use of certain active learning strategies like group discussion where a class is too large for the strategy. A variety of active learning strategies can be employed in small classes, but the same cannot apply in large classes as that will impose a lot of physical and logistic constraint on the activities of the lecturer.

Class sizes remain over bloated in Nigerian higher education as a result of an ever increasing student enrolment, coupled with lack of accompanying infrastructural support (Idogho, 2011), as well as shortages of qualified academic staff. At the tertiary level of education, the number of students has risen. By 2004, 48 state and federal universities enrolled over 400,000 students (WENR, 2004). From 15,000 in 1970, enrolment rose to 1.2 million in 2012 (WENR, 2013). This upward trend in enrolment from year to year is typified in the University Of Lagos Faculty Of

Education, where student enrolment figure rose from 4,096 in 1990/91 to 6,045 in 2005/2006 according to Ibidapo (2007). This trend gives rise to large class sizes that hinder the use of active teaching and learning strategies that involve students in doing things and thinking about the things they are doing, either individually, in pairs or in small groups.

Demands of the curriculum

Another challenge to the application of student centered teaching and learning in institutions of higher education in Nigeria is the nature of the curriculum which is structured in various subject areas requiring content coverage in a specific time and for a specific end examination. Much time is required to create activities for active learning, and so not much of the content can be covered within the available time frame before the examination. This inconsistency in the pedagogy of student centered learning with content coverage, and demands of examination constitutes a challenge to the pedagogical transition from teacher centered to student centered teaching and learning.

Assessment challenges

The provision of the National Universities Commission (NUC, 2007) which stipulates that the final grade of a student in a semester consists of two parts: final assessment grade and all assessments prior to final examination. This NUC document also provides a list of possible methods of assessment of students' progress which are to be applied in combination by the teacher who does the assessment. There is also provision for the adoption of student peer group assessment. In all, not all of these provisions are implemented in practice. There is final examination alright, but other assessments prior to the final examination are not executed in line with the demands of the guideline. Osadebe's (2015) evaluation of continuous assessment practice by university lecturers revealed a low extent of evaluation practice of these lecturers with regard to the provisions of the National Policy on Education and the handbook on continuous assessment of the Federal Government. Often, as observed, assessments carried out by most lecturers not only fall short of being formative, but are not continuous as they are often terminal, and one shot, executed towards the end of the course or semester. Not only this, the regulation provision for the application of a combination of assessment methods is often ignored. This scenario portrays assessment practices in higher education still as primarily for end point competition and judgement rather than for self-improvement in the process of learning

Paucity of electricity and internet connectivity

The challenge posed by absence or poor internet connectivity is another clog in the wheel in the application of student centered teaching and learning in Nigeria. This is in addition to the epileptic nature of electricity supply needed to power the relevant electronic equipment needed for teaching and learning. This condition limits the use of active learning resources as computer-assisted learning packages and more.

Conclusion and recommendations

Going by the theoretical and pedagogical stand of student centered teaching and learning as reviewed, it is evident that more effective learning can be achieved using this approach more than the teacher centered pedagogy. Although the higher education sub system in Nigeria is transiting to the student centered pedagogy, but that seems to be in principle, not yet fully in practice as a result of challenges which include low quality of the education system, low level of pedagogical understanding among educators, large class sizes, curriculum demands, inadequate electricity and

internet connectivity, as well as assessment challenges. The following recommendations are expected to drive a faster transition from teacher centered to student centered teaching and learning in higher education in Nigeria.

1. The Federal Government should endeavor to raise the quality of the education system by raising the quality of training and support to teachers and educators of all the education sub systems. This will break the vicious circle of 'teaching the way you were taught' over the years. This can be achieved through the provision of professional development workshops for lecturers and educators through higher degree programs, or attendance of voluntary programs.
2. In order to address the issue of low pedagogical understanding among lecturers, the Federal Government, in conjunction with the NUC should make certification in content pedagogy a mandatory requirement for prospective lecturers at the higher education level, while those already in service should undergo an in-service and certification in the pedagogy of their various content areas. This will ensure quality in teaching and learning in all the various content areas in higher education.
3. The issue of large classes is currently a huge challenge in higher education in Nigeria. While the Government should take a lead in upgrading the existing classroom facilities for acceptable class sizes in federal higher institutions, it should ally with the NUC, the regulatory and administrative bodies of state and private higher institutions to enforce a benchmark on acceptable teacher- student ratio in these institutions. The higher institutions should be mandated to recruit adequate number of qualified teachers to match the ever growing student enrolment at this level of education.
4. With regard to the inconsistency of student centeredness with content coverage and demands of examination and the time frame within which they must operate, lecturers /teachers should restructure the content of the course they teach by deciding on a course structure (choosing relevant topics, organizing and sequencing the course content), selecting a teaching strategy in line with the learning objectives, and then creating a schedule. To create a schedule involves gauging the available time for activities both inside and outside class time and fitting it into the academic calendar. This creates flexibility in content delivery as well as study and time management skills needed for possible content coverage.
4. To improve the practice of formative evaluation as an element of student centeredness, higher education regulatory bodies should ensure the execution of the relevant provisions through regular program monitoring. On their own part, lecturers should add variety to the application of formative assessment activities which provide feedback to students on their learning. This will focus their attention on the students' learning gap as well as areas they can still develop.
5. Relevant Information and Communications Technology (ICT) infrastructure should be put in place by the various funding bodies of the higher education institutions. This will facilitate the application of instructional packages and on-line information sourcing as needed. In addition, the Federal Government should ensure a steady supply of electricity needed to power the instructional equipment.

References

- Abdal-Haqq, Ismat (1998). Constructivism in teacher education: Considerations for those who Link practice to theory. *ERIC Digest*. Retrieved from <http://files.eric.ed.gov/fulltext/ED426986.pdf>
- Ajiboye, J.O. & Adeyinka, T. (2007). Problems and issues in teaching and learning in Nigerian public schools: Implications for policy making. *The Social Sciences*, 2 (1) 24-30.

- Ahmed, A. K. (2013). Teacher centered versus learner centered teaching style. *The Journal of Global Business Management*. 9 (1) 22-34.
- Barret, K. R., Bower, B. L. & Donovan, N. C. (2007). Teaching styles of community college Instructors. *The American Journal of Distance Education*. 24, 37-49.
- Burnard, P. (1999). Carl Rogers and post modernism: Challenged in nursing and health sciences. *Nursing and Health Sciences*. 1, 241-247.
- Cornelius, S. & Gordon, C. (2008). Providing a flexible learner centered program: Challenges For educators. *Internet and Higher Education*. 11 (1). 33-41.
- Guro, M. & Weber, E. (2010). From policy to practice: Education reform in Mozambique and Marere Teachers' Training College. *South African Journal of Education*. 30, 245-259.
- Harden, R. M. & Crosby, J. (2000). AMEE Guide No 20: The good teacher is more than a lecturer-the twelve roles of the teacher. *Medical teacher*. 22 (4), 334-347.
- Ibidapo-Obe, O. (2007). The challenge of teacher education in Nigeria: The University of Lagos experience. Paper presented at the at the second Regional Research Seminar for Africa organized by UNESCO Forum on Higher Education, Research and Knowledge, Accra, Ghana, March 22-24. Retrieved July 22, 2015, from <http://portal.unesco.org/Education/es/files/52638/11734339725IBIDABO-OBE.pdf>
- Idogho, P. O. (2011). Higher education in Nigeria and the challenges ahead. *European Journal of Educational Studies* 3 (2). 269-276.
- Kember, D. (1997). A reconceptualization of the research into university academics conceptions of teaching. *Learning and Instruction*. 7 (3). 255-275
- Knight, J. K. & Wood, W. B. (2005). Teaching more by lecturing less. *Cell Biology Education*. 4 (4), 298-310.
- Lavoie, D. & Rosman, A. J. (2007). Using active student centered learning based instructional design to develop faculty and improve course design, delivery and evaluation. *Issues in Accounting Education*. 22 (1), 105-118.
- Lea, S. J., Stephenson, D., & Troy, J. (2003). Higher education students' attitudes to student Centered learning: Beyond 'educational bulimia'. *Studies in Higher Education*. 28 (3) 321-334.
- Lewin, K. & Stuart, J. (2003). Insights into the policy and practice of teacher education in low Income countries: Multi-Site Teacher Education Research (MUSTER) project. *British Educational Research Journal*. 29 (5), 691-707.
- Leyendecker, R., Ottevanger, W., & Van den Akker, J. (2008). *Curricula, Examinations and Assessments in Secondary Education in Sub Saharan Africa. SEIA Thematic Study No 5*. Washington D. C.: World Bank.
- Mascolo, M. F. (2009). Beyond student centered and teacher centered pedagogy: Teaching and Learning as guided participation. *Pedagogy and Human Sciences*. 1 (1), 3-27.
- NCCE, (2012). *Minimum Standards for General Education Courses*. Garki Abuja: NCCE
- NUC, (2007). *Benchmark Minimum Academic Standards for Undergraduate Programs in Nigerian Universities (Education)*. Abuja: NUC
- Oldenburg, S. (2005). Grammar in the student centered composition class. *Radical Teacher*. 75(1), 43-43.
- Osadebe, P. U. (2015). Evaluation of continuous assessment practice by university lecturers. *International Journal of Education and Research*. 3(5), 171-178.
- Paris, C. & Combs, B. (2006). Lived meanings: What teachers mean when they say they are learner centered. *Teachers & Teaching: Theory and Practice*. 12 (5), 571-592.
- Perry, R. P., Hladkyj, S., Pekrun, R. H, Clifton, R. A., & Chipperfield, J. G. (2005). Perceived

- Academic control and failure in college students: A three year study of scholastic Attainment. *Research in Higher Education*. 46(5), 535-569.
- Peters, J. S. & Okon, M. O. (2014). Students' perception of causes and effects of examination malpractice in the Nigerian educational system: The way forward for quality education. *Procedia-Social and Behavioral Sciences*. (114), 125-129.
- Richardson, V. (1997). Constructivist teaching and teacher education: Theory and practice. In V. Richardson (Ed.). *Constructivist Teacher Education: Building new Understandings*. (pp. 3-14). Washington D.C. Falmer Press.
- Scheville, M. & Dembele, J. (2007). *Global Perspectives on Teacher Learning: Improving Policy and Practice*. (Fundamentals of Educational Planning, No. 84). Paris: IIEP-UNESCO.
- Teets, S. T. & Starn, B. A. (1996). Foxfire: Constructivism for teachers and learners. *Action in Teacher Education*. 18 (2), 31-39.
- UNESCO (2010) *Global Monitoring Report*. Paris, UNESCO.
- Vavrus, F., Thomas, M. Bartlett, L. (2011). Ensuring quality by attending to inquiry: Learner Centered pedagogy in sub Saharan Africa. Addis Ababa: UNESCO International Institute For Capacity Building in Africa. Retrieved July 29 from <http://www.eng.unesco-iiieba.org/sites/default/files/fundamentals%204%20Eng.pdf>
- Wright, G. B. (2011). Student centered learning in higher education. *International Journal of Teaching and Learning in Higher Education*. 23 (1), 92-97.
- World Education News and Reviews-WENR (2004). Higher education in Nigeria: A status report. Retrieved July 16, 2015 from <http://wenr.wes.org/2004/09/wenr-septemberoctober-2004-higher-education-in-nigeria-a-st...>
- WENR (2013). Education in Nigeria. *World Education News and Reviews*. Retrieved July 29, 2015 from <http://wenr.wes.org/2013/07/an-overview-of-education-in-nigeria/>