



RESEARCH DEVELOPMENT IN VOCATIONAL EDUCATION IN NIGERIA: CHALLENGES AND PROMOTION STRATEGIES

*ADEOSUN, TAOFE EK ADESOJI

Agricultural Education Department, Federal College of Education (Tech.), Bichi, Kano State,
Nigeria

Corresponding Author: dradet99@gmail.com, adeosuntaofeekadesoji@yahoo.com

ABSTRACT

The purpose of this paper is to showcase the relevance of educational research developments in promoting vocational education in Nigeria. The paper noted that research development has not been rightly positioned in the scheme of things in Nigeria, and that has affected our educational system in not a small measure, vocational education inclusive. This has overtime led to many of our graduates from different vocational educational training institutes not only unemployable, but also difficult for them to be employers of labour. While conceptualising research as an integral part of any educational programme based on what previous researchers have documented in literature, the paper further explained the research characteristics and as well classified research into its various forms: basic, applied, action, experimental and descriptive. Challenges facing educational research in Nigeria were also not left out in the paper as they were vividly reviewed. That was also thoroughly discussed in the treatise was how advancement in educational research can lead to promotion of vocational education in Nigeria. The paper finally recommended amongst others that National Orientation Agency (NOA) and Non Governmental Organizations (NGOs) should intensify efforts to promote continuity in government policy or programmes by educating the politicians on the reasons why government policies should not suddenly change whenever there is a change in administration. The paper finally noted that for Nigeria as a nation to get it right in terms of developing vocational education, all the stake holders in the educational sector including government at all levels, managements of our various vocational training institutions, Non Governmental Organisations, instructors and the students themselves have active roles to play in ensuring that problems facing educational research become things of the past.

Keywords: Educational Research, Research Development, Vocational Education, Challenges, Promotion Strategies

INTRODUCTION

Promoting vocational education in Nigeria is gaining relevance in the country almost on daily basis. This could be as a result of the level of unemployment in the country. Not only that, it could as well be due to the fact that saleable skills are found lacking in our educated youths today. And if one looks at the problem critically, it will be crystal clear

to one that the problems rested heavily on our institutions which continuously produce half-baked graduates and throw them into the labour market to search for works they lack the skills to do. If further and critical investigations are done on why the institutions could not produce the type of graduates that are employable by our industries, it will surely be realized that our government has contributed immensely and

is still contributing to the problem through different means, ranging from corruption, inadequate funding, among other reasons (Adeosun, 2014).

Another thing is that Nigeria as a nation has not been taking research development as serious as it should. However, various authors have researched into why it has been like that. Any government that claims to take education of its citizens seriously will not neglect research; instead, it will always be working to develop educational research as it is the engine room of the education. Research repositions education by making use of its findings to direct, guide and promote the system efficiently (Nwoka and Thom-Otuya, 2008). It is against this background that this paper tries to see the impact that efforts to develop research has in promoting vocational education in Nigeria, as an attempt to secure our uncertain future.

Vocational Education: An Overview

Oranu (2010) stated that vocational education is a skilled-based programme designed for sub-professional level education and based on a specific vocation. Abdullahi (2008) said vocational education is an instruction in skills necessary for persons who are preparing to enter the labour or who need training in the technology of their occupation. According to Eruh (2007), vocational education is an education designed for experts in the field of education to prepare individuals to acquire practical skills, basic and scientific knowledge and attitudes required as craftsmen and technicians at sub-professional and even professional levels. It could then be deduced that vocational skills is the ability, competencies and knowledge an individual possesses in an occupational area. And that vocational education could be any form of education whose primary

purpose is to prepare persons for employment in recognized occupations (Adeosun, 2012).

Concept of Educational Research

Ibrahim *et al.*, (2002) defined research as a method of solving problems through a scientific procedure or an attempt to uncover facts for advancing knowledge. They also see research as a systematic attempt to find acceptable answers to questions or solutions to a problem through certain logically designed procedures or steps. Aliyu (2006) sees research as the manner in which we solve knotty problems in our attempt to push back the frontiers of human ignorance. He went further that research is ultimately a way of thinking. It is a way of looking at accumulated facts so that a collection of data speaks to the mind of the researcher. Adeshina (2007) defined research as an attempt of man to seek out the truth in a manner superior to accepting beliefs, knowledge, or practices passed down to him for unquestioning acceptance as tradition.

Furthermore, Akanbi (2002) defined research as the process of arriving at dependable solution to a problem through planned and systematic collection, analysis and interpretation of data. Research is also seen as application of scientific method to the study of a problem. It is such a planned search for undiscovered information or materials to fill identified gaps of knowledge. From the definitions above, one can say that research is aimed at finding solutions to a problem, providing additional knowledge or information and finding the conditions under which a certain phenomenon occurs.

According to Jimoh (1998), educational research is always perceived as an activity designed to bring about theories guiding the principle and practice of education. It is a

way of using methods and procedures made popular in the physical sciences to provide solutions to problems facing the education industry. Educational research and indeed research of all kinds, is almost as old as man on earth. The only difference that has crept in over the years is the approach or method employed in particular research activities. Educational research primarily focuses on experimentation to gain awareness on a specific topic. Although teaching deals with specifics, research prepares ground needed for further study. In most cases, a researcher will emphasize on experimentation to learn the casual relationship of a particular subject.

In the work of Wiltshier (2007), the phrase "evidence-based" otherwise known as "research" was first used in evidence-based medicine, in which doctors refer to scientific evidence to evaluate the likely risks and benefits of a particular treatment. In such situation, the scientific evidence will tailor the mind of the doctor in arriving at the most suitable treatment or is used to justify no treatment, where the risks involved carry more weight than the likely benefits. Therefore, Davies (1999) posited that research in education requires utilizing existing evidence and bringing up new evidence where current evidence is unreliable or not even existing at all. However, Biesta (2007) argues that education goes beyond applying strategies to discover pre-determined goals. He continued that education is not a treatment. It does not involve a simple intervention by the teachers to cause a desired effect. Students should also come into play by interpreting and making more sense out of what they are being made to pass through because education is not a simple cause and effect relationship.

The process and products are internally related and to assume educational ends are

given is a mistake. In support of this assertion, Kennedy (1999) posited that reports on case study are always given credence over statistical data in education because "educational events are governed not by universal laws of cause and effect but, instead, by human interactions and by multiple concurrent and interacting influences". Any evidence collected from such interactions will only inform us of what is obtainable at that particular period and not necessarily what is still working or will work in the future. This emphasizes the reason why educational research should be a continuous one.

In his own submission, Field (2011) stated that failure to build education upon research, and then there is every possibility that it will be based upon one or more of the following: dogma, theory, ideology, convenience and prejudice. And that is the more reason why Fashola (2013) defined research as that process that leads to realisation of solutions to problems facing humanity through well-defined methods. He further said that it is a set of procedures that end up in learning to re-learn and un-learn based on new insights arrived at through knowledge. Invariably, research is so essential in education to the extent that one can call it the engine room because it promotes the system.

Characteristics of Research

According to Egbri and Olufunwa (2014), the underlisted are the things to be seen in any work for us to call such a research:

- (i.) Research begins with a questioning mind of the researcher i.e. you look around you, consider the unresolved situations which evoke questions: "why?" what is the cause of that?" "What does it all mean?" Research demands the identification of a

- problem, stated in a clear, unambiguous terms i.e. successful research begins with a clear simple statement of the problem that the researcher seeks to resolve.
- (ii.) Research involves planning i.e. there must be an aggressive plan which leads to the right direction.
 - (iii.) Research deals with the main problem through appropriate sub-problems. The first step in planning research is to inspect the main problem for research in terms of its appropriate sub-problems.
 - (iv.) Research seeks direction through appropriate hypotheses and is based upon obvious assumptions.
 - (v.) Research deals with facts and their meanings. A good research must sooner or later arrive at the point where the fact must be meaningful and that takes place within the mind of the researcher.
 - (vi.) Research is circular.

Classifications of Research

According to Aliyu (2006), research classification can be based on the discipline as the case with education and scientific research. He therefore identified the following types of research:

- (i.) Basic Research: This research has its purpose as the discovery or verification of fundamental principles of truths.
- (ii.) Applied Research: It involves testing theories in a given environment.
- (iii.) Action Research: This attempts to solve particular problem and is not undertaken to build up an organized body of generalized knowledge.
- (iv.) Experimental Research: This is carried out to determine causes of certain conditions or phenomena or

at least to permit the researcher to make casual inferences.

- (v.) Descriptive Research: This type of research is concerned with the collection of data for the purpose of decertifying and interpreting existing conditions, common practices, beliefs, attitudes, on-going processes etc. it describes events and situations as they appear visible to the research.

Problems Facing Educational Research in Nigeria

There are myriads of problems facing educational research in Nigeria today. According to Jimoh (1998), some of the problems are as analysed below: First, there is a complete absence of a clear cut philosophy of national development, a philosophy that will serve as guide towards the direction our country, Nigeria wants its developmental efforts concentrated. As a result of changes in political power anytime election holds in Nigeria, and the attendant instability, inconsistency and incoherence in governmental programmes and policies, the practitioner in the education industry, including the researcher, is left unguided. In the course of evaluation of a particular policy, it is on record that in most cases, even before reaching half way in the evaluative study, such a policy might have been completely replaced with a new one.

According to Aina (2013), many laboratory equipment and other teaching facilities are wasting away in our various schools due to incessant change in political government. Fashola (2013) said that conducting meaningful research locally on any educational programme would always be a mirage in a situation where there is no sustained and definite policy in the different aspects of our national life.

Another problem is poor funding. In most cases, resources available for research in Nigeria are grossly inadequate. This is so bad to the extent that even when provision is made for special funds simply for research, it is often insufficient to take care of the research demands of the country. Aina (2013) observed that UNESCO recommendations that fixed 26% of the total budgetary allocation of a country to education sector have never for once been met by Nigeria government. The allocation to education sector has always been grossly unfavourable. He went further to say that the allocation to education in 2003 was 7%, 2004 was 12% while 2005 was 11%, these figures simply show government nonchalant attitude to education. When this happens, definitely research in education will suffer a serious set-back. Since vocational education is known to be capital intensive, as a result of poor funding, most of our tertiary institutions involving in vocational training lack adequate equipment/infrastructure.

Ogu (2008) reported that the infrastructure inadequacies in the Nigerian universities serve as setback to learning and research. He went further to state that many Nigerian universities offer courses in technological education/vocational education program without having basic infrastructure to run them. Odetunde (2004) submitted that due to the poor infrastructural facilities in our tertiary institutions, students are made to learn in buildings with broken walls, environmentally depressing and not conducive learning situations. Okebukola (2002) also posited that even though research is gaining value on daily basis in the world economy as a result of supremacy of knowledge, and consistent change in technology, lack of adequate budgetary allocation and the belief that research is expensive have given rise to disappearance

of research centres in almost all Nigerian universities.

Corruption is also seen as a problem that affects research development in Nigeria. For example, money meant for staff training and purchase of vocational equipment/facilities are converted to personal use while basis for sending staff for training is on whom you know syndrome. Lecturers in virtually all our tertiary institutions have mortgaged knowledge by selling handouts and other learning materials at outrageous prices. Staffers of many polytechnics have seen themselves as sacred cows that cannot be punished simply because the chief executives in those institutions are busy embezzling money by giving out contracts that never existed and diverted fund meant for workshop and laboratory equipment to their personal use. All these bounced back on the quality and level of research development in Nigeria.

Another problem is the attitudinal challenges according to Fashola (2013). He posited that wrong intention by the researchers is enough to nullify what should have been the essence of research even if our government maintains stable policies and make provision for adequate funding. It appears that somewhere along the line, researchers are giving considerations to economic side of research and not the benefits that are accruable from research, and before we know it, research will only be seen as a step to career advancement and progression instead of waiting for global relevance and utility. This is actually what led to research that should have taken months now being done in weeks, owing to the fact that the researcher wants the results for publications in order to meet up with the requirements for promotion or the award of professorship (Fashola, 2013).

In the work of Ubogu (2019), the following factors are listed as the challenges facing educational research in Delta State of Nigeria:

- (i.) Absence of a clear cut philosophy of educational research in national development,
- (ii.) the lack of clear-cut policy statement on functional educational research in Nigeria,
- (iii.) lack of budgetary allocation set aside for research in education and related fields,
- (iv.) Research activities mostly sponsored by individuals and groups,
- (v.) Lack of appropriate policy making bodies to guide activities in the area of educational research,
- (vi.) Inadequacy of special funds to meet the research needs in Nigeria,
- (vii.) Over dependence on foreign aid such as USAID and the UNESCO to support research,
- (viii.) Shortage of equipment used for experimental and scientific research,
- (ix.) Over dependence on experimental survey which are less demanding and are the common types of research in Nigeria',
- (x.) Over emphasis' of the general "publish or perish" syndrome by researchers in Nigeria,
- (xi.) The Instability of socio-cultural factors distinct to the Nigerian society from where surveys are extracted.

These findings confirmed the opinion of Udegbe and Odigwe (2008) who lamented that lack of fund, "publish or perish syndrome", societal believe among other challenges possess treat to educational research findings.

In addition to the challenges facing educational research as explained above,

Etuk *et al.* (2010) also identified some factors responsible for low research capabilities of tertiary educational institutions in the third world countries, Nigeria inclusive. Some of the factors are similar to what has been discussed above, while some are entirely new. They are:

- (i.) Poor research methods: More often than not, methods used in carrying out some research in Nigeria are always wrong, obsolete, inefficient and not standardised. In such situations, the findings will be totally out of place. This will invariably make the efforts that have been put into research a nullity and therefore not contributing to any societal development.
- (ii.) No collaboration between fellow tertiary institutions, with research institutions and with overseas institutions. When this happens, it will make research results to be disjointed nationally. Collaboration in research is as important as research itself. This is because, it will give room for sharing experience, and whatever mistake a tertiary institution has made will not be repeated in another.
- (iii.) Poor dissemination of research results. Most times in Nigeria, research results end up in shelves and not introduced to people in the field for implementation. This invariably makes efforts put into research useless because the findings are not taken to those who need them for development.
- (iv.) No harmonized database.
- (v.) Low quality of education.
- (vi.) Lack of human and material resources.
- (vii.) Research efforts not in line with community needs.

Chukwu *et al.* (2016) also highlighted the points listed below as some of the problems facing social research in Nigeria:

- (i.) Absence of a clear cut philosophy of national development

- (ii.) Poor attention given to the development of human capacity
- (iii.) Absence of quality tertiary education
- (iv.) Poor funding
- (v.) Neo-colonialism:
- (vi.) Insufficient adjustment to the demands of Information and Communication Technology
- (vii.) Political atmosphere
- (viii.) Cultural and ethical issues.

Promoting Vocational Education in Nigeria Through Advancement in Educational Research

Ability to take research development to the next level in Nigeria will go a long way in directly and indirectly promoting vocational education. In the work of Etuk *et al.* (2010), they gave some insights on how best our educational research in the third world countries can be developed as follows: Exchange of trained/skilled work force. If for example Nigeria as a nation can afford to send some of her work force abroad to learn new ways of doing things/conducting research, it will seriously help by making the country to follow the current trend in carrying out research, thereby making the results to match the needs of the community. In the other way round, if expatriates in some fields like vocational education are welcomed from advanced countries of the world to train our work force, definitely, the country will witness pragmatic increase in the competent use of various machine that are lying fallow in our different institutions without being made use of (Orluwene and Opara, 2006).

Collaboration with world-class academic institutions in the industrial nations. Every industrial nation is well known for excellence in her level of vocational education among its citizenry (Willinsky, 2001). Therefore, if a country like Nigeria

can collaborate with the academic institutions in these industrial nations, then we stand a chance of not only getting exposed to how we can reposition our vocational education and fall among the industrial nations of the world, but also afford us the opportunity to learn how these nations tackled the problems that came their way in the course of educational advancement. Forming industry-academic collaboration through the development of in-house research development. Any country taking this step will be able to match research with industrial needs. That is, the researchers will find it very easy not only to find way out to the immediate community problems but globally. When this is taking place, vocational skills that are needed for technological advancement of a country will be discovered and provided accordingly (Orluwene and Opara, 2006).

Funding of industry-grade research in academic institutions. If our academic institutions that involve in vocational training are well funded to carry out researches that have direct impact on our industries, then the level of vocational education will increase drastically to bridge the existing gap (Ubogu, 2008; Okunamiri *et al.*, 2008). In an attempt to provide holistic approach to research development, Etuk *et al.*, (2010) pointed out some suggested initiatives for tertiary educational institutions as follows: Tertiary educational institutions in the Third World are expected to promote industry-related (entrepreneurial) education through their admission policies and practices. If these institutions can take this step, it will automatically promote vocational education in the sense that, nearly all vocational education programmes are entrepreneurial in nature. The reason being that, when admission policies are tailored towards industry-related education, more

candidates will be admitted to study vocational courses that will afford them learning skills needed in our different industries (Chiekem, 2008).

Universities should see it as part of their obligations to in-still their students to embrace soft skills, technical skills, writing and presentation skills. Not only universities, when all our tertiary institutions that involve in vocational training put this into practice, within short time vocational skills acquisition will be improved (Bako, 2005). Universities should bring up courses on technological innovation management in form of exchange of faculty and students with tertiary institutions in developed countries and should on merit admit students into those courses (Ogbulogo *et al.*, 2012). Curricula should be adjusted to repackage their products and give them some level of competencies. This is with a view to improving outcomes both in terms of the quality of graduates produced and in terms of improved research capacities to sustain any emergent industry (Odia and Omofonmwan, 2013). They are expected to conduct periodic market surveys locally, regionally and globally and to incorporate the findings into re-designing the curriculum to enable them keep abreast of the rapidly-changing market needs. When critically looked into, all the above mentioned strategies to enhance research development are in one way or the other promoting vocational education.

CONCLUSION

Having realized that research development is sine qua non to a progressive educational system. And having linked the attempts to promote educational research to the promotion of vocational education, the researcher is now of the opinion that all the stakeholders in the educational sector: the

government, the managements of our various institutions, the NGOs and the private sectors, the lecturers and the instructors, and the students themselves should all play active roles to see that all the problems facing educational research become things of the past. When we achieve this, vocational education will directly or indirectly be improved, and as such our youths will be graduating with saleable skills needed by our different industries. This eventually transforms us to a nation that will be able to secure the uncertain future for its citizenry.

Future Perspective

Now that the paper has identified the challenges facing educational research in Nigeria, the following suggestions are hereby made which if well implemented will not only push us forward in terms of research capabilities, but also reposition our level of vocational education: (i.) National Orientation Agency (NOA) and Non Governmental Organizations (NGOs) should intensify efforts to promote continuity in government policy or programmes by educating the politicians on the reasons why government policies should not suddenly change whenever there is a change in administration in Nigeria. (ii.) The funding of educational research should not just be left for government alone, the private sectors should be encouraged to participate fully in funding the programme as a means of discharging their social responsibilities to the host country, Nigeria. (iii.) Nigeria tertiary institutions should liaise with national and international bodies to attract research grants to staff in their institutions. (iv.) The researchers should be made to know by the managements of our different tertiary institutions that the purpose of conducting research should not just be limited to having more publications to their

credit, but the benefits accruable to the country should also be taken seriously. (v.) Nigeria anti-corruption agencies like Economic and Financial Crimes Commission (EFCC) and Independent Corrupt Practices and other related offences Commission (ICPC) should be headed by trustworthy persons and made to work freely without government interference to be able to stamp out corrupt practices in our country. (vi.) Lecturers and instructors in our different institutions should be always and adequately sponsored to advanced countries of the world for either further studies or international conference participation for them to be exposed to new ways of carrying out research. (vii.) Nigeria tertiary institutions should establish contact with fellow research institutes and industries both within and abroad for the exchange of information, ideas and human resources for training in research. (viii.) Nigeria tertiary institutions should make sure that research results are made available in relatively low cost to end users for consumption and implementation. (ix.) Employment of lecturers and instructors into Nigeria tertiary institutions should always be based on merit, and not whom you know.

REFERENCES

- Abdullahi, M. (2008). Realizing the Millenium Development Goals and the Concern for Science Vocational and Technical Education in Nigeria. A paper presented at the National Conference, School of Science, Isa Kaita College of Education, Katsina State.
- Adeosun, T. A. (2012). Vocational and Technical Education: Panacea to a Depressed Economy. *Journal of Vocational and Technical Educators (JOVTED)*, 3(3): 35-38.
- Adeosun, T. A. (2014). Vocational and Technical Education as a Panacea to Rising Crime and Declining Societal Value. *Bichi Journal of Technology Education*, 3(1): 114-122.
- Adeshina, T. J. (2007). Understanding Business Education, Zaria: ESONAJ Publishers.
- Aina, J. K. (2013). Importance of Science Education to National Development and Problems militating against its Development. *American Journal of Educational Research*, 1(7), 225-229.
- Akanbi, A. A. (2002). Research Methods for Business Students, 2nd Edition; Kano: Bolade Press and Publishers.
- Aliyu, M. M. (2006). Business Education in Nigeria: Trends and Issues, Revised Edition; Ilorin: Goshen Print Media Limited.
- Bako, S. (2005). Globalization and African Universities: Towards an Equitable Production of World Knowledge Economics, Paper presented for CODESRIA globalization studies network, (second international conference on globalization; overcoming exclusion, strengthening in conclusion, 29th to 31st August, Dakar, Senegal.
- Biesta, G. (2007). Why “What works” won’t work: Evidence-based Practice and the Democratic Deficit in Educational Research. *Educational Theory*, 57, 1-22.
- Chiekem, E. (2008). Assessment of users and researchers perception of educational research and evaluation for national development, Nigeria *Journal of Educational Research-Evaluation*.8 (1), 40-46.
- Chukwu, N., Ebue, M., Obikeguna, C., Arionu, N., Agbawodikeizu, P. and Agwu, P. (2016). Problems of Social Research in Nigeria. *Research on*

- Humanities and Social Sciences*, 6(12): 52-59.
- Davies, P. (1999). What is Evidence-Based Education? *British Journal of Educational Studies*, 47:108-121.
- Egbri, J. N. and Olufunwa, A. S. (2014). Research and Technological Innovations in Business Education. *Nigerian Journal of Education, Health and Technology Research (NJEHETR)*, 5:192-198.
- Eruh, A. B. (2007). Challenges of Globalization on Vocational and Technical Education in Nigeria. Paper presented at the 3rd National Conference of School of Vocational and Technical Education, College of Education, Oju, Benue State.
- Etuk, G. K., Etudor-Eyo, E. and Emah, I. E. (2010). Towards Improving Research Capabilities of Tertiary Educational Institutions in the Third World Countries for Sustainable Development: A Review Summary of Research. *Review of Higher Education in Africa*, 2(1).
- Fashola, T. (2013). Education, Research and National Development-Bridging the Gap Between Town and Gown.
- Field, K. (2011). The Importance of Research for Education's Future.
- Ibrahim, A. I., Landu, B. F. and Opadokun, O. A. (2002). Introduction to Educational Research Methods. Ilorin: Tajudeen Printing Press and Computer Centre.
- Jimoh, S. A. (1998). Educational Research in Nigeria: Some Local Forces Inhibiting Progress and the Way Forward.
- Kennedy, M. (1999). A test of some Contentions about Educational Research. *American Educational Research Journal*, 36, 511-541.
- Nwoka, N. and Thom-Otuya, V. C. (2008). Contemporary challenges of educational research and evaluation in Nigeria: The way forward. *Journal of Creativity and Scientific Studies*, 3(1): 103-107.
- Odetunde, C. (2004). The State of Higher Education in Nigeria.
- Odia, O. L. and Omofonmwan, S. I. (2013). Research and development initiatives in Nigeria: Challenges and prospects. *Mediterranean Journal of Social Sciences*, 4 (2): 257 – 265.
- Ogbulogo, C., Kolawole, M. E., Omolara, D and Iyere, T. O. (2012). Research methods. Lagos: National Open University.
- Ogu, E. (2008). Challenges facing Nigerian Universities.
- Okebukola, P. (2002). The State of University Education in Nigeria. National University Commission, Abuja, Nigeria.
- Okunamiri, P. O., Okoli, E. C and Okunamiri, M. C. (2008). Implications of poor funding of tertiary education in Nigeria. *International Journal of Educational Management (IJEM)*, 5 (6).
- Oranu, R. N. (2010). Vocational and Technical Education in Nigeria.
- Orluwene, G. W., Opara, I. M. (2006). Utilization of Educational Research Findings in Nigeria: Implication for National Development. *Nigerian Journal of Educational Research and Evaluation*. 8(2), 27-35.
- Ubogu, R. (2008). Funding of Educational Research and Evaluation for National development. *Nigerian Journal of Educational Research and Evaluation*. 8 (2), 19-26.
- Ubogu, R. (2019). Challenges Affecting Educational Research in Delta State,



- Nigeria. *Makerere Journal of Higher Education*, 10 (2): 191 – 199.
- Udegbe, G. I. and Odigwe, E. E. (2008). Challenges of educational research and evaluation in Nigeria: The Way Out. *Nigerian Journal of Educational Research and Evaluation*. 8(2), 46-53.
- Willinsky, J. (2001). The strategic educational program and the public value of research. *Educational Researcher*. 30(1), 5-14.
- Wiltshier, J. (2007). Evidence-based Education: Benefits and Challenges. Proceedings of the 6th Annual JALT Pan-SIG Conference, Sendai, Japan.