# Assessment of Effective Utilization of Educational Research Findings in Nigerian Universities: Problems and Prospects

# Ifeakor, Amaechi C.\* and Anekwe, Josephine U.\*\*

\*Department Of Educational Foundations, Anambra State University, Uli Anambra State, Nigeria Phone: 08033382457

E-mail: <u>aceeifeakor@yahoo.com</u>

\*\*Department of Curriculum Studies/Educational Technology, University of Port Harcourt, Nigeria

E-mail: joeanekwe2k3@yahoo.co.uk Phone: 08063466132

#### **ABSTRACT**

The study assessed the extent of effective utilization of educational research findings by lecturers in federal and state universities in South East zone of Nigeria. A descriptive survey was used. The population comprised all education lecturers in the Faculty of Education of federal and state universities. 108 education lecturers from federal and 95 from state universities formed the sample. Stratified random sampling was used to select the universities while simple random sampling was used to select the subjects. The instrument was a 25-item questionnaire developed by the researcher. The instrument was validated and reliability coefficient was computed. Three research questions and three hypotheses guided the study. Data were analyzed using means, standard deviation and hypotheses were tested using z-test statistic at 0.05 level of significance. Results showed that educational research finding are underutilized. Problems and prospects of educational research findings were proffered. Strategies for achieving effective utilization of educational research findings were identified. Recommendations were made among which is, that federal and state governments should provide adequate fund to educational researchers to help in the development of self, institutions and the society.

**Key words:** Assessment, educational research, problems, prospects and effective utilization

#### INTRODUCTION

The history of man, right from creation is full of attempt by man to probe into the unknown aspects of his environment. Man has always searched, and will perhaps, continue to search, for means of overcoming the problems that hinder-the realization of his needs or answers to questions yet unanswered (solution to problems). And the means of providing solutions to the problems of man is research. Research may be defined as the application of the scientific method in the study of problems. Osegbo, Ifeakor and Enemuo (2009) defined research as a systematic attempt to obtain answers to meaningful questions about phenomena or events through the application of scientific procedures.

Furthermore, Ali (2006) pointed that for one to arrive at objective conclusions, the use of data to quality observations, events, statements, and verify their nature and scope, based on empirical evidence is very compelling about scientific procedures. When scientific procedures are applied to education, it is known as educational research. Educational research refers to a systematic approach to the solution of educational problems (Nworgu, 2006). It is an attempt to gain a better understanding of the educational process generally, with a view to improving its efficiency. According to Nwana (1992), educational research are those research activities from which the investigator derives or hopes to drive educational benefit, or to those research activities which are focused on the solution of an educational problem.

Since education is a behavioural science, the major concern of educational research is to understand, explain, and to some degree predict and control human behavior (Osegbo, Ifeakor & Enemuo, 2009). It is an activity directed towards the development of organized and useful body of scientific knowledge about the events with which educators are concerned. To this end, it could be deduced that educational research encompasses many different studies all of which attempt to better understand and improve the learning and educational process, as well as the nation. No wonder countries of the world that devote a lot of resources to the conduct of educational research and the utilization of findings are leading others in economic development today.

Indeed, there has been a growing strong national concern for improving the quality and variety of education as well as access to it. In some countries the emphasis is on providing education to adult citizens or mass literacy which is a question of access to education. In other countries the interest is on diversifying education so that it can cater for students of a broad spectrum and interest group. Whatever the focus or efforts are, each country is legitimately disposed to worry and show concern about its educational processes and products. This serves as an indication that the country's desire is to have a living, growing and responsive education. In most countries, these concerns have led to upsurge in research efforts at identifying viable alternative action among many options e.g. viable teaching methods, and

subsequent attempts at introducing research—based recommendations designed for improving education. At other times, such concerns have evoked new curricula, new programmes like Universal Basic Education (UBE), changes in actual learning e.g. child centered teaching; new caliber of teachers e.g. computer literate teachers and different resource provisions all in the bid to improve the educational system. The educational process is a very complex and evolving one whose every fact must be carefully and systematically investigated; understood and implemented toward achieving its objectives. This is where research in education comes into the picture (Ali, 2006). It is an undeniable fact that the improvements in the conditions of human existence today have been made possible by the application of the findings of scientific research. This has been made possible through the collective research efforts of various disciplines which include the field of education.

Nevertheless, the relevance of educational research for academic excellence and its utilization for improvement cannot be overemphasized. It should be noted that effective utilization of research findings has many prospects to both academic staff and the educational system as a whole. Through assessment of the utilization of educational research findings, it has been proved that educational research findings have been utilized in the various ways:

- Much of what is known today about how children learn, the optimal conditions for learning, the qualities of a good measuring instrument, how to modify behaviour, various innovative assessment techniques and best method of teaching and learning were derived from the accumulated results of scientific investigations in the field of education and psychology over many years (Nworgu, 2006).
- Educational research findings provide training in problem solving like evaluation of instructional outcomes, administration of educational programmes, curriculum materials, and test construction techniques and so on.
- The results of findings aid in providing valid and dependable information which could be very useful in making decision about educational theories and practices-e.g. by exposing students to different instructional techniques like cooperative learning, concept mapping, one would be better guided into concluding that one technique tended to be superior to the other
- Educational research findings enable us to evaluate educational programmes like UBE, Continuous Assessment, School-Based Assessment.
- Results of educational research have created awareness among Nigerians. For instance, awareness has been instilled in the mind of the public that intelligence can be measured (Orluwene & Opara, 2008).
- Through research findings interactions are made during the presentation of the findings in professional conferences of other researchers within the nation. This promotes national communication, unity,

understanding and progress thereby developing the society as a whole (FRN, 2004).

- Another influence of educational research findings on the society is the introduction of information and communication technology (ICT).
- Educational research had contributed greatly to the development and progress of self and the society in the physical, mental, moral, social and economic aspects.

Furthermore, Nwangwu (2007) stated that the development of a society depends largely on the creative capacity of the citizens to be capable of effectively exploring and exploiting the country's natural resources and transforming them into finished products and services so as to enhance the standard of living of the society. FRN (2004) stressed that education fosters the worth and development for the individual, for each individual's sake and for the general development of the society.

Educational research findings have been utilized in many ways as we have seen above but how effective is the utilization? Research in education and its effective usage in developing countries like Nigeria are facing a lot of problems/challenges which include:

- Research processes consume energy, time and cost-effective. Inadequate publicity of research findings due to printing cost results in dumping of some valuable research findings.
- Research findings are hardly utilized in Nigeria, due to the inability to disseminate the studies to make the findings generalizable and acceptable. (Udegbe & Odigwe (2008).
- Publish or perish syndrome in tertiary institutions make some researchers to embark on non-problematic issues thereby coming out with non-conclusive and meaningless contributions which if followed would not make any impact on our national development.
- Accurate data are indispensable to real research work but Nigerian libraries do not stock up-to-date existing journals.
- Impatience makes most researchers to always use survey research design and small sample size even in studies that would obviously require experimental research design.
- Government and educational policy makers politicize research findings by not making use of them-especially if they have not commissioned the researcher to carry out the research. This makes most valuable research findings to end up on the pages of journals, periodicals and conference proceedings; hence the development of the nation is hindered.

However, there seems to be solutions to these problems of effective utilization of research findings in education. As the saying goes, the identification of the causes of a problem is half the solution of the problem. Therefore certain things should be put in place for effective utilization of educational research findings. Such things are:

• Adequate provision of fund for research by federal and state governments.

- The society should be educated on the importance of research work for positive responses when they are used as respondents.
- The researchers should be computer literate so as to connect to the world of information easily.
- Government and educational policy makers should realize the qualities of research and apply the knowledge to practical problems of the developing society.
- Promotions of academic staff of higher institutions should not be limited to only publish or perish syndrome.

Knowing fully well the contributions and advancement of knowledge gained through educational research findings to a developing nation like Nigeria, the main preoccupation of the researchers is to assess the extent to which educational research findings are utilized in Nigeria universities with a view to identify their problems, prospects and probably suggest strategies for achieving effective utilization of educational research findings. Hence, the problem of this study posed as a question would be: what problems and prospects are envisaged in our Universities with respect to effective utilization of educational research findings?

## **Purpose of the study**

The general purpose of the study is to assess the extent of utilization of education research findings in federal and state universities in South-East Zone of Nigeria. Specifically the study sought to:

- 1. Identify the problems that hinder effective utilization of educational research findings.
- 2. Assess the prospects of educational research findings to academic staff of Nigeria universities.
- 3. Identify possible strategies for achieving effective utilization educational research findings.

# Research questions

The following questions guided the study

- 1. What are the problems that hinder effective utilization of educational research findings?
- 2. What are the prospects of educational research findings to academic staff of universities and to the society?
- 3. What are the strategies for achieving effective utilization of educational research findings?

# **Null hypotheses**

The following null hypotheses were formulated and tested at 0.05 level of significance:

H<sub>01</sub>: The mean responses of lecturers of federal and state universities on the problem that hinder effective utilization of educational research findings will not differ significantly

 $H_{02}$ : There is no significant difference in the mean responses of lecturers of federal and state universities on the prospects of educational research findings.

 $H_{03}$ : The mean responses of lecturers of federal and state universities on the strategies for achieving utilization of educational research findings will not differ significantly.

#### METHODOLOGY

#### Design

The study was a descriptive survey. A descriptive survey research is one which attempt to collect data and describe the data systematically on the characteristic facts regarding a particular population (Osegbo, Ifeakor & Enemuo, 2009).

# Area of the study

This study was carried out in seven universities (two federal government owned and five state government owned universities) that have faculty of education in five states in South-East Zone of Nigeria. The two federal universities are: Nnamdi Azikiwe University, Awka and University of Nigeria, Nsukka while the five state universities are: Anambra State University, Uli, Imo State University, Owerri, Abia State University, Utulu, Enugu State University of Science and Technology, Enugu and Ebonyi State University, Abakaliki.

# Population of the study

The target population comprised all lecturers in the faculty of education of the seven universities. The number of lecturers in each university is as follows;

Nnamdi Azikiwe University, Awka = 63 University of Nigeria, Nsukka = 71 Anambra State University, Uli = 12 Imo State University, Owerri = 57 Abia State University, Utulu = 73

Enugu State University of Science and Technology, Enugu = 58

Ebonyi State University, Abakaliki = 64

Given a total of 134 lecturers from federal universities and 264 lecturers from state universities.

## Sample and sampling techniques

95 education lecturers from federal and 108 from state universities formed the sample. The two federal universities were selected while stratified random sampling was used to select three state universities. Simple random sampling was used to select the subjects.

#### Instrumentation

The instrument for data collection was a 25- item questionnaire development by the researchers. The instrument was structured to elicit information from the subjects on the extent of utilization of educational research findings based on a 5-point scale of Very High Extent (VHE) = 5; High Extent (HE) = 4; Moderate Extent (ME) = 3; Low Extent (LE) = 2; Very Low Extent (VLE) = 1.

# Validation of instrument

The instrument, purpose of the study and research question were given to two measurement and evaluation expert at Delta State University, Abraka in South-South zone of Nigeria. They were asked to validate the instrument based on ambiguity of statement, comprehensiveness, adequacy and relevance to the set objectives of the study. The comments and suggestions of these experts were incorporated in the final draft.

#### Reliability of instrument

The instrument was trial-tested to 24 lecturers in the faculty of education of the same university. Data collected were used to compute a reliability of internal consistency of 0.81 using split-half method and a correction factor for the full instrument by Spearman Brown prophecy formula.

#### Procedure for data collection

The researchers sought for 5 research assistants who helped in the administration of the instrument. Each of the research assistant was assigned to a university. The researchers were supervising and collating the data collection. At the end, all the 203 questionnaires were returned fully filled.

# Procedure for data analysis

Mean scores and standard deviation (SD) were used to answer the research questions. The acceptance level of mean score was 3.00 and above while 2.99 a mean of below 3.00 was the rejection level. The null hypotheses were tested using z-test statistics at 0.05 level of significance.

# **RESULTS**

The results are presented in the tables below.

Table 1: Mean and SD on the problems facing the utilization of education research

Findings.

S/N	The following are problems facing the utilization of educational research findings	Federal		State	
		Mean	SD	Mean	SD
1	Research processes are cost effective but no adequate funding.	3.62	0.90	3.25	0.66
2	Research findings are hardly utilized in Nigeria due to poor system of dissemination of information	3.14	0.81	3.00	0.73
3	Inadequate publicity due to printing cost results in dumping of some valuable research findings	3.85	0.96	3.51	0.63
4	Publish or perish syndrome in tertiary institutions make some researchers to embark on non problematic issues	4.31	1.13	3.82	0.64
5	Accurate data are indispensable to real research work but Nigerian libraries do not stock up-to-date	3.75	0.61	3.61	0.71
6	existing journals  Government and educational policy makers politicize research findings by not making use of	3.73	0.61	5.01	0.71
	them especially if they have not commissioned the researcher to carry out the research	3.73	0.69	3.46	0.71
	Total	3.733	0.86	3.441	0.68

In table 1, the mean responses of lecturers from Federal and State universities scored up to the acceptance level of 3.00 and above. This shows that all the respondents are in congruent that all the listed items are problems facing the utilization of educational research findings in Nigerian universities. Tables 2 revealed that the mean responses of both lecturers from Federal and State Universities were above 3.00 in all items on prospects of the utilization of educational research findings.

Table 3 revealed that the mean responses of all the respondents reached up to the acceptance level of 3.00 and above. This is an indication that the strategies should be adopted for effective utilization of educational research findings.

# ${\it If eakor, Amaechi~C.~and~Anekwe, Josephine~U.}$

**Table 2:** Mean and SD of Federal and State Universities Lecturers on the prospects of effective utilization of educational research findings.

S/N	Effective utilization of educational research findings could be seen in.	Fee	leral	State	
		Mean	SD	Mean	SD
7	Promoting effective teaching which results to good study habits by				
	learners	4.25	1.10	4.10	1.05
8	Improvement of educational practices such as best practices in evaluation procedures.	4.40	0.99	4.28	0.75
9	Solving educational problems are ameliorated through feedbacks from educational research findings	3.99	0.88	3.81	0.85
10	Creation of awareness among Nigerians on issues like Information Technology (IT).	4.08	0.97	3.95	0.93
11	Improvement of adequate decision – making on educational matters based on educational research findings.	3.78	1.18	3.68	1.00
12	Development and progress of self and the society in various aspects of				
	life e.g. promotions of academic staff of universities	4.33	0.83	4.39	1.07
13	Educational research findings improve the educational process through the refinement and extension of knowledge	3.92	0.88	3.85	0.75
14	Educational research findings provides training in problem solving	3.84	0.70	3.81	0.75
15 16	The result in educational research aid in providing valid and dependable information which could be very useful in making decisions about educational theories and practices Educational research findings enables us to evaluate educational	4.27	0.98	4.05	0.83
	programmes like UBE	4.51	0.94	3.95	0.91
17	Results of educational research has created awareness among Nigerians in areas of students performance and inherent consequences	4.16	0.84	4.10	0.72
18	Interactions are made during the presentation of research findings both in national and international conferences	4.35	0.77	4.16	0.75
19	Educational research findings on ICT has provided a remarkable boost for empirical, quantitative and qualitative research into educational problems	4.61	0.81	4.19	0.79
	Total	4.164	0.915	4.024	0.854

**Table 3:** Mean and SD on strategies for effective utilization of education research findings.

S/N	Items on strategies for effective utilization of educational research findings	Federal		State	
		Mean	SD	Mean	SD
20	Adequate fund should be provided by Federal and state governments for research work and publication of research findings	4.32	0.91	4.12	0.84
21	The society should be educated on the importance of research work for positive response when they are used as respondents	3.94	0.84	3.77	0.69
22	The researchers should be computer literate so as to connect to the world of information easily	4.42	0.88	3.99	0.78
23	Government and educational policy makers should apply the knowledge from good quality research to practical problems of the developing society.	4.00	0.83	4.10	0.78
24	Researchers should be encouraged to carry out more quality research work.	4.38	0.82	4.13	0.90
25	Promotions of academic staff of higher institutions should include, to a greater extent, their publications of very high quality research				
	works.	3.99	0.67	3.94	0.71
	Total		0.82		
		4.175	5	4.00	0.783

**Table 4:** z-test statistics on the mean responses of lecturers of Federal and State Universities on the problems facing effective utilization of educational research findings.

Source of variation	N	X	SD	Df	z-cal	z-crit	Decision
Federal University	108	3.733	0.86	201	0.189	1.96	Not Significant
State University	95	3.441	0.68				

Table 4 indicated that z-calculated is 0.189 against z-critical which is 1.96 at 201 df and 0.05 alpha level. This showed that z-calculated is less than z-critical and as such the null hypothesis of no significant difference was not rejected.

**Table 5:** z-test statistics on the mean responses of lecturers of Federal and State Universities on prospects of effective utilization of education research findings.

Source of variation	N	X	SD	Df	z-cal	Z-	Decision
						crit	
Federal University	108	4.164	0.915	201	0.079	1.96	Not Significant
State University	95	4.024	0.854				_

Table 5 showed that z-calculated is 0.079 while z-critical is 1.96 at 201 df and 0.05 level of significance. The z-calculated is less than z-critical. Therefore the null hypothesis of no significant difference on the prospects of effective utilization of educational research findings was not rejected.

**Table 6:** z-test statistics on the mean responses of lecturers of Federal and State Universities on the Strategies for effective utilization of educational research findings.

	-						
Source of variation	N	X	SD	Df	z-cal	z-crit	Decision
Federal University	108	4.175	0.825	201	0.108	1.96	Not Significant
State University	95	4.00	0.783				

In table 6, the z-calculated is 0.108 while the z-critical is 1.96 at 201 df and 0.05 level of significance. When z-calculated (0.108) was less than z-critical (1.96), the decision was to reject the null hypothesis of no significant difference.

#### DISCUSSION

The result from this study showed that federal and state universities agreed that all the listed items are the problems facing effective utilization of

research findings in Nigerian universities. The z-test statistics also revealed no significant difference in the mean responses of lecturers from federal and state universities on the problems facing effective utilization of educational research findings. Actually there are many problems facing utilization of educational research findings. Among these problems as identified by Udegbe & Odigwe (2008) are: energy and time consumption of research process; cost-effectiveness of research materials; poor system of dissemination of information; unavailability of adequate equipment; inadequate specialized manpower to make research findings available to policy makers; hoarding of up-to-date information needed for research work and inadequate funding for research works. Supporting the above problems of effective utilization of educational research findings, Ali (2006) and Nworgu (2006) stressed that research institutes and universities are starved of funds to embark on meaningful research and also to publish and disseminated most valuable research findings hence they end up on the pages of journals, periodicals and conference proceedings thereby hindering development of the nation.

Also it was revealed that effective utilization of educational/research findings found credence in areas like effective teaching and good study habits, improvement in educational practices such as best practices in evaluation procedures and creation of awareness among Nigeria through ICT. The z-test result showed that there was no significant difference on the responses of lecturers of federal and state universities on the prospects of effective utilization of educational research findings. Nworgu (2006) and Orluwene & Opara (2008) buttressed these points, when they stated that the introduction of ICT has provided a remarkable boost for empirical, quantitative and qualitative research into educational problems. Again, Nwangwu (2007) reinterated that the development of a society depends largely in the ability of its citizens to transform the country's natural resources into finished products and this cold be explored from results of educational research findings.

Furthermore, the study revealed that the respondents agreed that all the stipulated strategies would be adopted to ensure effective utilization of educational research findings. The z-test statistics also revealed no significant difference. One could therefore conclude that if all the stated strategies would be adopted, no doubt, there must be effective utilization of educational research findings in all spheres of education. This belief is in line with the views of Anekwe and Ifeakor (2009) who advocated that promotions of academic staff of higher institutions should include to a greater extent, their publications of very high quality research works. Moreover, government and all stakeholders should provide adequate fund to educational research work and publication of research findings. This would help in the development of self, institutions and the nation at large.

#### CONCLUSION

The glaring challenge in Nigeria universities is that educational research findings are underutilized by the institutions, government and policy makers Educational research, we all know, is an indispensable tool for the development of education especially a developing nation like Nigeria when it is effectively utilized. One thing is to conduct research while another is to make effective use of the findings. Research efforts would be wasted if only the research findings are not effectively utilized. This study found out that educational research findings in Nigerian universities are not effectively utilized due to logistic problems in education sector.

#### RECOMMENDATIONS

Based on the findings of this study, the following recommendations were made:

- 1. Government and all stakeholders of education should provide adequate fund to educational researchers for research work and publications of educational research findings.
- 2. Government and policy makers should apply the knowledge from educational research findings to practical problems of the developing society.
- 3. Researchers should be encouraged to carry out more quality research works.
- 4. The researchers should be computer literate in order to connect to the world of information easily
- 5. The society should be educated on the importance of research work for positive responses when they are used as respondents.
- 6. Promotions of academic staff of higher institutions should include to a greater extent their publication of very high quality research works.
- 7. Nigerian universities should encourage academic staff in research works by giving them the support they need.

# REFERENCES

- Ali, A. (2006). Conducting Research in Education and the Social Sciences. Enugu: Tashiwa Network Ltd.
- Anekwe, J. U. and A.C. Ifeakor (2009). Attitude of Academic Staff of Nigerian Colleges of Education Towards Educational Research: Implications for Sustainable Development. Journal of Sociology and Education in Africa (JOSEA). Special Edition. Uganda: Kampala.

- Federal Republic of Nigeria (2004). National Policy on Education. Lagos: Nigerian Educational Research and Development Council NERDC.
- Nwana, O. C. (1992). Introduction to Educational Research: Ibadan: Heinemann Educational Books (Nig.) Ltd.
- Nwangwu, I. O. (2007). Higher Education for Self-Reliance: An Imperative for the Nigerian Economy. Journal of Access, Equity and Quality in Higher Education, 1-8.
- Nworgu, B. G. (2006). Educational Research: Basic Issues and Methodology. (2<sup>nd</sup> Ed.) Nsukka: University trust publishers.
- Orluwene, G. W. and I. M. Opara (2008). Utilization of Educational Research findings in Nigeria: Implication for National Development. Nigerian Journal of Educational Research and Evaluation, 8 (2), 27-35.
- Osegbo, I. E., A. C. Ifeakor and J. O. Enemuo (2009). Research Methodology in Education: Basic Issues and Techniques. Onitsha: Folmech Printing and Publishing Co. Ltd.
- Udegbe, G. I. and E. E.Odigwe (2008). Challenges of Educational Research and Evaluation in Nigeria: The Way Out. Nigeria Journal of Educational Research and Evaluation, 8 (2): 46-53.