

# Funding Research: A Trend analysis of Four Federal Universities in South-South Nigeria (2008 – 2013)

#### Itoro Moses IKOH\*

Department of Banking and Finance, University of Uyo, Akwa Ibom State, Nigeria

#### **ABSTRACT**

The role of research in the expansion of frontier of knowledge has been acknowledged by scholars. However, the extent to which the government and the educational institutions support such acknowledgement through funding of research has not been assessed. The study selected four federal Universities from the south-south Nigeria, viz: University of Benin, Calabar, Port Harcourt, and Uyo to provide a trend analysis of their expenses on research using a scope of five years (2008/2009 – 2012/2013) academic sessions. The study adopted historical and descriptive design, and relied on secondary data (existing financial records of capital and recurrent expenditure) for analysis. The finding revealed disparities in funding between the universities. Although the component of research in the education cost revealed remarkable improvement during the years, the University of Calabar was slightly more likely than other universities in the South-South geo-political zone to spend on research. The study recommended among other things, a serious commitment towards the funding of educational research.

Key Words: Funding research, South-South Nigeria, Trend analysis, University

#### **ABSTRAIT**

Le rôle de la recherche dans l'expansion de la frontière de la connaissance a été reconnu par les chercheurs. Cependant, la mesure dans laquelle le gouvernement et les établissements d'enseignement soutiennent cette reconnaissance par le financement de la recherche n'a pas été évaluée. L'étude a sélectionné quatre universités fédérales du sud-sud du Nigéria, à savoir: l'Université du Bénin, Calabar, Port Harcourt et Uyo pour fournir une analyse des tendances de leurs dépenses de recherche sur une période de cinq ans (2008/2009 - 2012/2013) sessions académiques. L'étude a adopté une conception historique et descriptive et s'est appuyée sur des données secondaires (registres financiers existants des dépenses en capital et des dépenses récurrentes) pour l'analyse. Les résultats ont révélé des disparités de financement entre les universités. Bien que la composante de la recherche dans le coût de l'éducation ait révélé une amélioration remarquable au cours des années, l'Université de Calabar était légèrement plus susceptible que les autres universités de la zone géopolitique Sud-Sud de consacrer à la recherche. L'étude recommandait entre autres un engagement sérieux en faveur du financement de la recherche pédagogique.

Mots clés: Recherche de financement, Nigéria Sud-Sud, Analyse des tendances, Université

<sup>\*</sup> Address of correspondence: Dr. Itoro Moses Ikoh, Department of Banking and Finance, University of Uyo, Akwa Ibom State, Nigeria, Email: itoroikoh@yahoo.com; Phone: 08032921941



#### INTRODUCTION

Several scholars have written on the usefulness of education, including its role in inculcating knowledge, imparting values and skills acquisition (Ade-Ajayi, 2002; Adeyemi & Osunde, 2005; Asiya, 2015). In the Universities, teaching and research functions have important roles to play in expanding the frontiers of knowledge and imparting skills as well as national development, particularly in the development of high-level manpower. Unfortunately, the continuous realization of these objectives is not without constraints. Poor funding has been roundly blamed by stake holders in the University (Ajayi & Ekundayo, 2006; Akinyemi, Ofem & Adebisi, 2012). Poor funding is not without consequences; not only on the provision of educational facilities, but also on materials, staff training, and research. As Best and Kahn (1998) rightly observed, research involves a process that includes planning and systematically collecting, analysing and interpretation of data. In this context, research helps scholars to arrive at dependable solution. In the University setting, researches have enhance significant progress in curriculum development and reform, and so doing enables break-through in inventions, strengthen empirical findings and correcting errors of finding. Research is the anchor of knowledge creation and expansion of the frontier of knowledge. It helps in bridging the gap between what is existing and what is expected. It is in this context that research should be pursued by universities, both for their inherent value and in order to produce a stock of useful knowledge that might be applied elsewhere for the benefit of society. While this available in the advanced and developed counties, it is not easily achievable in the developing world's universities (Hountondji, 2006).

Policy makers and officials in the Education Ministry are often credited with the argument that educational funding in the area of research is being given top priority (Afolayan, 2015). In many instances, government officials had also argued that the Universities are autonomous and so should endeavour to generate fund through internally generated revenue (Agboola & Adeyemi, 2012; Babalola, 2010). But how adequate is government funding vis-à-vis the cost inquired by the Universities to meet its capital and recurrent costs? And how much are the Universities generating to fund research? The absence of such data with analytical details affects proper understanding of research cost. Even among the Federal Universities, disparity may exist in education cost channelled to research, but the extent of such disparities remains unknown without availability of trend data. Even data are available with respect to Tetfund sponsorship of research, it is also often on individual Universities basis. In particular, there is no data on trend study on research cost as observed in Federal Universities in South-South Nigeria. This is indeed a gap in knowledge that should be filled. This study is designed to achieve that objective by analyzing research cost in Federal Universities in South-South Nigeria between 2008 and 2013.

The study has significance for both the Universities, the government, as well as the policy-makers. For the Universities, it could help to identify the shortfall in funding and the priority that each university has given to research funding. For the government, the findings may help to justify the several calls by scholars and public commentators for increase in the funding of research. This is because by mere allocation of fund to research, the adequacy of such allocation of fund is not usually taken into consideration. In order for research to be meaningful, funding must be adequate to be able to yield findings that can significantly contribute to expanding the frontier of knowledge. It is also hoped that the study will spur up



the interest of other researcher in finding out the extent to which research funding has help to meet the expectation of educational development in the universities, especially in the study area.

Beside policy-makers and government, researcher on educational financing, investment and administration stand to benefit as the findings of this study may open window to areas of educational investment that needs further enquiry and clarifications. In this context this work provides needed materials to begin with. It may also provide a motivation for the study of education costs in other geo-political zones of the country, and perhaps a comparative analysis of education cost on the six geo-political zones. The society at large therefore stands to benefit at the end of the day.

# **AREA OF STUDY**

The South-South geo-political zone of the country was chosen as the study area. The zone, which consists of six states, usually referred to as the BRACED states, include Bayelsa, Rivers, Akwa Ibom, Cross River, Edo, and Delta states. The states lay contiguously along the southern coast of Nigeria and share similar cultural history. In attempt to turn the geo-political zone into an economic viable arrangement, the then South-South Economic Summit (SSEM) had referred to the zone as "braced states" (an acronym coined form the names of the states in the zone). It resulted in the emergence of the BRACED Commission (Ukpong & Ikoh, 2014). There are six federal universities in the South-South geopolitical zone. These include the University of Calabar, University of Uyo, University of Port Harcourt, University of Benin, Federal University Utuoke, and the Petroleum University, Efurrun. Although the overall objective of Nigerian tertiary institutions is the training of medium and high level man-power, each of the South=South universities is autonomous, with different institutional structures, vision and mission. Except for the fact that all of them are regulated by the NUC, the universities run different courses, with different academic calendar.

#### POPULATION OF STUDY

The six federal universities constituted the population of the study. Although they have autonomous entity their location in the same geo-political zone gave them a unique history. They are all located in the heart of the Niger Delta region. Two of the universities, Port Harcourt and Benin, are among the ten most populated universities in Nigeria.

The University of Calabar (UNICAL) and the University of Port Harcourt (UNIPORT) are the two second generation universities located in the South-South, Nigeria. The UNICAL was established in 1975 to encourage the advancement of knowledge of learning and to hold out to all persons without distinctions of race, creed, sex or political conviction the opportunity of acquiring liberal education, among other missions. From an initial student population of 896 in 1976, the student population has increased to about 40,645 2003/2004 academic session when this collected as the data was (http://www.unical.edu.ng/unical/about.php. The university has ten faculties and three institutes as at the time of this study. The faculties include Agriculture, Art, Education, Law, management Science, Social Sciences, Allied Medical Science, Basic Medical Science, and clinical Science. The institute consists of the institutes of Education, Oceanography, the



institute of Policy and Administration Studies. The total staff strength as at the time of the survey was 6,566, consisting of 1,743 academic and 4,823 non-academic staff.

The University of Port Harcourt (UNIPORT) was established in 1975 as a University College. In 1977, it was accorded a full-fledged university status. Today, the university is listed among the ten most populated Universities in Nigeria, along with the universities of Lagos, Ahmadu Bello University, Ekiti State University, Lagos State University and the University of Jos. Others include the University of Abuja, Benin, the University of Maiduguri, and the National Open University of Nigeria (NOUN) (NUC, 2017). As at 2016, the University of Port Harcourt, had about 53, 288 students, with academic staff strength of 1,992 and a non-academic staff strength of 4,644.

The University of Uyo was established in 1991 by the federal government of Nigeria. It inherited the staff, facilities and academic programmes of the former University of Cross River State (UNICROSS). The University has about 13 faculties, including Administration, Agriculture, Art, Education, Engineering, Technology, Environmental Sciences, Law, Medicine, Pharmacy, Health Science, Science, and Social Sciences. The staff strength as at the time of the survey was 1,405 (academic staff), and 2,393 (Non-academic staff).

Among all the Universities in the South-South geo-political zone, the University of Benin is the oldest, having been established in 1970 after the Nigerian civil war as Institute of Technology. It was given the status of a full-fledged university in 1971. The student population of the UNIBEN as at the time of the survey was 56, 501, with academic staff strength of 1,800 and non-academic staff strength of 5,450.

The Federal University of Petroleum Resources (FUPRE) located at Efurun, and the Federal University, Otuoke, are the youngest federal universities in the South-South zone, for now. FUPRE was established in 2007 as a specialized university for oil and gas studies, while the Federal University Otuoke, was established in 2011, along with other nine universities in Nigeria.

#### **METHODOLOGY**

The study adopted historical and descriptive design, and relied on existing financial records (capital and recurrent) for analysis. In this context, the study involved the techniques of trend studies, whereby federal government annual budget allocated for the Universities between 2008 - 2013, and the subsequent amount released, as well as internally generated revenue, are collated and analysed.

# Sampling technique

Six federal universities are located in the South-South geo-political zones. Out of these six, the University of Benin is the oldest, while the universities of Calabar, Port Harcourt and Uyo are regarded as the second-generation institutions. The Federal University of Petroleum Resources (FUPRE) and the Federal University, Otuoke, are among the newly established ones. In order to assess the cost of funding research in the South-South Universities, it was necessary to use four out of the six federal universities (Benin, Port Harcourt, Calabar, and Uyo) as sample. The choice was therefore deliberate; to see how the older universities in the geo-political zones have fared in terms of expenditure on research under the years 2008 - 2013. Records of federal funding as well as internal generated revenue exist in the four



chosen Universities for the years under review. It is not likely that statistics would have been gotten from the Federal University of Petroleum Resources (FUPRE) and the Federal University, Otuoke; moreso, these two universities are yet to stand on their own. For instance, FUPRE is yet to completely wean herself from the Petroleum Training Institute, Efurun; while Otouke, established in 2011 would not have gotten the data that meet the scope of the study (2008 - 2013).

#### **LITERATURE**

## The Concept of Education Cost, Literature, and Theory

The meaning of 'cost' has received many tinkering over the years, especially by the economists. Etymologically, the word 'cost' comes from the Latin term, "costus" and the Greek "kostos", meaning "the amount that should be give or pay in exchange for one thing" (Hanushek, 2015). In this context the concept of cost applies to everything that must be sacrificed for something immaterial or material that meets human needs. Such observation influenced Hallak's (2010, p. 13) argument, that the concept of cost should be linked with the "production of goods or services". The author explained 'cost' in terms of (a) money or in non-monetary; that affects specific economic transactor acknowledged as producer, seller, buyer, and or consumer. Relating this to the educational sector as the producer of educational service, Hallak (2010, p. 14) identified three difficulties associated with the definition of the concept of 'education cost' to include "the definition of the production of education; the identification of the economic transactors concerned with education; and the fact that education has the character of a public service". In my analysis the cost born by the producer of education and the consumer become fused when the producer is public institution rather than private.

Many scholars (Cohn & Gesker, 2010; Bridge, Charles & Moock, 2009) have agreed that educational institutions produce services that can be explicitly defined by reference to the aims of the education system. For instance, preservation and enlargement of the sum of human knowledge through research are acknowledged as products of education (Hallak, 2010). University education in particular, is acknowledged as "veritable tool for the realization of national development; the development of cultured citizens and the promotion of basic research" (Aina, 2007, cited in Ogbogu, 2011, p. 75). Education is also acknowledged for its role in the expansion through research, the reserves of human resources (Bridge, Charles & Monk, 2009). In a summary provided by Chamber (2008, pp. 271 – 272), the production of education is lauded in the "transmitting or ensuring the assimilation of a body of knowledge, values, norms and a behaviour pattern that can be transmitted from generation to generation.

Scholars have also identified the role of research in diagnosing different problems prevalent in our society. The problems include insecurity, poverty, unemployment, terrorism, banditry, social and economic inequality, and even gender inequality (Stewart, 1985; Nayyar, 2006). Through research, the nature and dimension of these problems can be diagnosed and analysed. It is in this context, that research leads to the identification of appropriate remedial and permanent solutions to problem. Research also provide the needed tools to investigate and assess latest needs of the people as well as the level of advancement.



In Hallak's (2010, p. 15) analysis, the producers of education consist of "the education institution, the teacher, and the ministry of education", while the consumers are the students and families, (which in a sense are buyers of education for their children). The cost for families is expressed in school fees and levies, while the cost for school (universities) are seen in budgets and expenses for salaries, upkeep and maintenance charges, supplies, depreciation, etc. In this context, therefore, any rethinking of research cost must involve a balanced view of the government funding, institutional contribution in terms of internally generated revenue, and the critical role of good management of fund within the universities.

When the educational institution is a public one (just as the Universities in the South-South included in this study), the production cost is sponsored by the government, while the consuming cost is borne by the parents of the students. Even when the public Universities are 'tuition fee', the parents still need to pay for the clothing, feeding and upkeep of their children in the Universities; and most importantly pay taxes to government which are used to finance education. To the extent that tuition in the public Universities is free suggests that the activity of education has the character of a public service. However, the recognition that the budgets of the education authorities are essentially financed by parents through payment of taxes and school fees, suggest "a broad equality between the money cost to the producer and consumer of education" (Hallak, 2010, p. 16). In this context therefore education cost may be regarded as the 'the cost to the community for the expansion and functioning of the education system' (Wachiye & Epari, 2014). The producers, sellers and consumers of education can therefore be seen as one and the same economic transactor.

The problems of effectiveness of educational research begin with the political-partisan nature of education. Public education is a social construction that responds and is regulated by the government. It is difficult to investigate the social and political ideals that are embedded in educational systems in the form of educational objectives or standards (Best & Kahn, 1998). However, the political involvement in education affects research funding, such that even lecturers have positive positive attitude towards research, their participation and contribution may be low (Pramodini & Sophia, 2012). This is because the politics of research funding may affect the training of lecturers for research skills acquisition, and insufficient research training programmes for lecturers have negative effect on their their research skills as well as analysis.

Studies in the ASEAN context have shown challenges faced by lecturers in research ti be near similar (Norasmah & Chia (2016; Ellis & Loughland, 2016). In the studies, the scholars revealed that teachers in their localities, though holding positive views about research, were also confronted with the same issues of lack of time, resources, and support with regards to doing research. In some instances, scholars who were willing to do research on identified social problem could not access funding from their institutions. Lecturers need support from the Universities' Management and Authority in order to start doing research.

Research is considered as significant contributions towards professional development for lecturers. In this context, adequate research budgets, research training, workshops, and other support should be given to lecturers to motivate them to conduct research studies. As Bughio (2015) and Ade- Ajayi (2001) have argued, lecturer who are active in doing research at their different universities are able to study, evaluate, and assess their teaching pedagogies and practices. In this context, acquisition of research skills enable teachers to change and



improve their methods of teaching, which would have an impact on students' learning and success.

Despite the reported challenges and issues faced by a number of researchers in the University because of lack of funding, studies by Vogrinc and Zuljan (2009), reported that University lecturers who engages in researches expressed positive benefits towards doing research. Some of these benefits include: became a better teacher (Cain & Milovic, 2010); improved teaching styles and strategies (Mahani, 2012); better understood the learning needs of their students; and enriched their professional experiences (Morales, 2016). In the findings of Ulla (2018), teachers who are engaged in research will be able to share with their fellow teachers some best teaching and learning practices that are essentials for improving student learning.

# **HUMAN CAPITAL THEORY (HTC)**

The Human Capital Theory was propounded by Gary Becker in 1964. According to the theorist, a person's education is an investment which involves costs, in terms of direct spending on education and the opportunity costs of student time in her/his human capital. This is akin to investment by a firm in physical capital, which makes the individual more productive and accrues to him/her a future stream of benefits in terms of superior productivity, higher wages and other non-monetary benefits to the individual and the society. Human capital therefore, is defined as the accumulated knowledge and skills that make a workforce productive (Becker, 1994). In economics, HCT is said to be the abilities and skills of any individual, especially those acquired through investment in education and training that enhance potential income earning. The theory is predicated on the assumption that:

(i), For any given economic enterprises, regardless of what is being produced and where, how and under what conditions it is being produced, more educated workers will always be more productive than the less educated counterpart. (ii). Differences in workers earning are due entirely to differences in their human capital investment.

Human Capital theory therefore is the formation of human resources to aid production. The theory predicts that increases in the overall level of education can benefit society in ways that are not fully reflected in the 'private returns' of educated workers, what is otherwise referred to as the 'externalities of education' (Telford, & Musson, 2005, p.24).

Much later authors such as Schultz (1961, cited in Lundvall, 1996) has contributed to the assumptions of the HCT by empirically confirming that time and money spent on education builds human capital hence one should be able to estimate the rate of return (RoR) on such investment, in a way similar to investment in physical capital. Human capital therefore assumes a positive link between education and national development. The theory is adopted in this study as it may help to justify expenses on research in the Universities, and may encourage South-South University education cost managers on their drives towards producing educated manpower despite the attendant financial cost (Romer, 1990).

#### **RESULT**

## Trend of Research Cost in Federal Universities in South-South Nigeria

Research remains one major source of producing knowledge in the university; and its outcome is acknowledged in the expansion of the frontier of knowledge (Imoke, 2011).



Given this understanding, we sought to find out the importance given this sub-head by Universities in the South-South geo-political zone of Nigeria, in terms of expenditure. Table 1 provides a summary of the data collected from the four universities during the study.

**Table** 1: Summary of Research cost in Federal Universities in South-South Nigeria (2008 – 2013)

University						
	2008/2009	2009/2010	20102011	2011/2012	2012/2013	Total
UNIBEN	26,458,023	357,770,295	642,174,792	106,954,926	386,999,636	1,520,357,672
UNIPORT	239,004,730	11,733,673	9,588,250	364,451,285	481,470,923	1,106,248,861
UNICAL	242,904,131	440,383,944	488,574,610	633,314,842	466,957,390	2,272,134,917
UNIUYO	105,715,800	59,720,757	446,867,000	280,129,000	206,828,000	1,099,260,557

**Source:** Field data

As shown in the table, there was not much variation over the years in the funding of research, except in the University of Port Harcourt during 2009/2010 and 2010/2011 academic session. The University of Uyo experienced a sharp decline in research funding in 2009/2010, but overcome that decline through a sharp increase in 2010/2011. In all, the University of Calabar was slightly more likely than other universities in the South-South geopolitical zone to spend more on research during the years which this study cover.

A trend in the cost of funding research exists across the universities, but it was all positive (Table 2). All the universities exhibited similar pattern with the University of Benin having more than a thousand percentage change (1,362.69%) when the total expenses of 2008/2009 was used as a base year. The University of Port Harcourt recorded 101.45%, followed by the University of Uyo (95.65% and the University of Calabar (92.24%). This finding suggests increasing research activities in the Sooth-South universities, especially in the University of Benin.

Table 2: Trend of Research cost in Federal Universities in South-South Nigeria, 2008 - 2009

Year							% change 2008/2009
University	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2012/2013	to 2012/2013
UNIBEN	26,458,023	357,770,295	642,174,792	106,954,926	386,999,636	+360,541,613	1,362.69%
UNIPORT	239,004,730	11,733,673	9,588,250	364,451,285	481,470,923	+242,466,193	101.45%
UNICAL	242,904,131	440,383,944	488,574,610	633,314,842	466,957,390	+224,053,259	92.24%
UNIUYO	105,715,800	59,720,757	446,867,000	280,129,000	206,828,000	+101,112,200	95.65%

Source: Researcher's analysis of field data

Although the trend analysis revealed a positive change in all the Universities (and the differences were significant), we attempted to use the trend observed to predict the future of 'research cost' in the South-South Universities. Figure 1 shows a line graph constructed from Table 2 with standard error seeking to explain the extent to which deviation is possible (assuming the present level of funding is maintained, and the universities are keen on



continuing with the present pattern of spending on the research sub-head). The graph shows four segments of charts, each demarcated by the 'error bar', marking increase and decline in funding. It suggests that since the base year (2008) the University of Calabar has shown remarkable improvement in funding research, but using the fourth segment of the chart, the cost does not seem to have positive trend any longer, whereas both Universities of Port Harcourt and Benin are gearing up. Whereas the University of Port Harcourt shows a remarkable positive trend in the funding of research (segment 3 and 4 of chart), the University of Uyo revealed a decline throughout segments three and four of the chart.

Looking at the charts, possible reason for emerging negative trend in research cost in the Universities of Calabar and Uyo can be suggested. These include inability to access funding from Tetfund as in previous years, poor funding of that sub-head from federal allocation, and inability to raise funding support from other organizations.

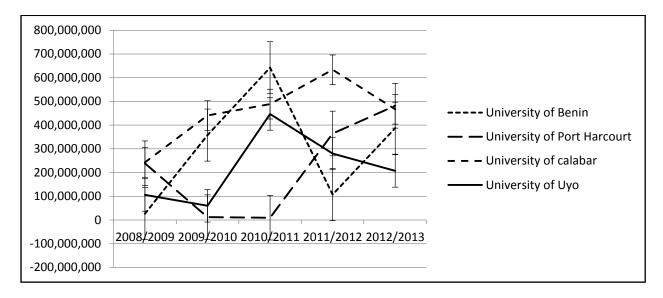


Fig. 1: Graphic presentation of research cost in funding based on table 2

#### **DISCUSSION OF FINDINGS**

## Research and Training costs in Federal Universities in South-South Nigeria

The findings of many scholars elsewhere are that the impact of any educational system can only be as powerful and effective as the teachers or the educational leaders who actually perform this profession (Doyran, 2012; Logan, 2012; Nischithaa & Rao, 2014). In this context the lives of all learners are shaped by the teachers. And researches have helped teachers to develop their skills, in order to impact positively on themselves and the students. The realization of the role of research has made the university system to go all out to encourage research. But it remains to be seen to what extent these universities have actually encouraged researches through expenditure on the sub-head.

In the twenty first century the need for training and research on education becomes very compelling when one thought of effect of globalization, new technology, economic change, linkage, and attracting and retaining talent. Over the years, the Tertiary Education



Trust fund (tetfund) has done so munch to encourage research at the tertiary institutions in Nigeria. And universities have been called upon to seize the opportunity to encourage research for the purpose of solving existing problems and creating knowledge. Our findings have revealed that funding research will not be limited to giving out money to do researches, but would also include the training of lecturers to acquire knowledge for the purpose of embarking on research.

Training is concerned with imparting specific skills for a particular purpose. It is an act of increasing the skills of an employee for doing a particular job (Nischithaa & Rao, 2014). In this context training provides academic staff with the knowledge and the skills required to operate within the university system and the academic standards set by the NUC. Training and research have a nexus. Research helps to boost the design, structure and content of teacher education programmes. Good training exerts positive impact on performance appraisal, which in turn has a multiplier effect on employee satisfaction, and even engagement. In Obieluman's (2009) argument, a "well trained staff is not without high self-esteems) and can exhibit job satisfaction through renewing and refreshing his memory of skills. This is more so when skills become obsolete due to the emergence of new technology, which is necessary in the education industry.

Our finding also revealed remarkable improvement on the research components of education cost. There was a positive trend when we compared the expenses on research as at 2013 using 2008 as the base year. Each of the Universities experienced more funding. The University of Benin was most favoured followed by the University of Port Harcourt. As Bamiro (2012) observed funding was based on ability to retired previous release, and meeting other conditions prescribed by Tetfund. This suggests that universities may have accumulated years fund waiting for release. This finding strikes common cord with the finding of Famade, et al (2015), that the introduction of Tetfund has breathe life into education research in the tertiary institutions in the country.

However, the need to complement the research components with training has received acknowledgement by many educational experts (Fullman, 2009; Ogbogu, 2011). As technology evolves with a strong focus on the use of data to inform teaching and instruction, there is need for workshops and conferences that can sustained emphasis on creating 'research-rich' and 'evidence-rich' (rather than simply 'data-rich') schools and classrooms (Doyran, 2012). Trainings that can equip teachers to interrogate data and evidence from different sources, rather than just describing the data or trends on reports are needed.

#### RECOMMENDATIONS

- I. The research component of education cost showed remarkable improvement over the years. This has been attributed to Tetfund intervention. There is need to keep this up and improve upon it, just like what is happening in the University of Benin.
- II. There is a nexus between continuous training and acquisition of research skills. Over the years training costs have either been declining or not increasing at all. This can have a negative effect on research. There is need therefore to increase funding for the training sub-head as well as prompt release for staff training in the Universities.



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