Economics of Open and Distance Education in the University of Ibadan, Nigeria

Babatunde Kasim Oladele

Abstract—One of the major objectives of the Nigeria national policy on education is the provision of equal educational opportunities to all citizens at different levels of education. With regards to higher education, an aspect of the policy encourages distance learning to be organized and delivered by tertiary institutions in Nigeria. This study therefore, determines how much of the Government resources are committed, how the resources are utilized and what alternative sources of funding are available for this system of education. This study investigated the trends in recurrent costs between 2004/2005 and 2013/2014 at University of Ibadan Distance Learning Centre (DLC). A descriptive survey research design was employed for the study. Questionnaire was the research instrument used for the collection of data. The population of the study was 280 current distance learning education students, 70 academic staff and 50 administrative staff. Only 354 questionnaires were correctly filled and returned. Data collected were analyzed and coded using the frequencies, ratio, average and percentages were used to answer all the research questions. The study revealed that staff salaries and allowances of academic and non-academic staff represent the most important variable that influences the cost of education. About 55% of resources were allocated to this sector alone. The study also indicates that costs rise every year with increase in enrolment representing a situation of diseconomies of scale. This study recommends that Universities who operates distance learning program should strive to explore other internally generated revenue option to boost their revenue. University of Ibadan, being the premier university in Nigeria, should be given foreign aid and home support, both financially and materially, to enable the institute to run a formidable distance education program that would measure up in planning and implementation with those of developed nation.

Keywords—Open education, distance education, University of Ibadan, cost of education, Nigeria.

I. INTRODUCTION

THE provision of quality education to millions of people has been one of the struggles facing developing countries like Nigeria. This is because education has been regarded as the bedrock to social, cultural and economic development for a nation. Both the Federal and State Government emphasize the role of education as an agent of development. They therefore, see it as instrument for national consciousness, unity and development. The Federal Government has submitted that education is no more a private venture enterprises. It is a viable and tremendous Government venture that has witnessed a progressive evolution of complete and dynamic intervention and dynamic support. The government therefore, adopted it as an instrument of excellence for effective national

Babatunde K. Oladele is PhD student in the Institute of Education, University of Ibadan, Nigeria (phone: 08055264698, e-mail: oladelebatunde@gmail.com).

development.

Nigerian National According Empowerment and Development Strategy, NEEDS [1], all citizens are entitled to education. Yet, it is obvious that the spaces available in institutions of learning in Nigeria are inadequate to meet the demand for placements of prospective students. The concern for an educational framework in Nigeria that can take care of the large number of prospective candidates in relation to the three vectors of access, quality and cost has given the Nigeria government the interest to revitalize distance education so as to serve as a catalyst for the turnaround of education in Nigeria. Thus, education is widely interpreted by economists as a process through which "human capital" is developed. Both the student and the state are employing resources to produce an investment, which has a very long gestation period.

Distance learning has reemerged in this era of fiscal control as a cost effective artifice for reinventing the pedagogic structure of higher education. That is to say, that the driving force behind today's distance learning programs is an economic rationale designed to facilitate the corporate downsizing dogma that now influences academia. Regardless of the economic motivation, one should also recognize that based on historic applications, the distance learning program provides opportunities to advance the benefits of higher education to prospective people who are dislocated by time and place. Hence, demand for education outstrip available resources, because of population pressure combined with policies resulting in the liberalization of access is undoubtedly the principal factors burdening our education system. Open education is an aspect of distance education. In other words, open education is essentially a distance education, but distance education may not be open.

According to [9], the term open and distance learning represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners. Reference [8] states that distance education offers an alternative means of access to education for full-time or part-time workers and other private learners in an out-of-school education context. This will allow for enhancement of opportunities that support education for all (EFA) and lifelong learning, and also give avenues for the benefit of flexible and qualitative education for all categories of learning outcomes.

According to [6], open distance education has provided nations with opportunities for addressing the need for skills training and education in a cost effective and sustainable way.

Similarly, there are a lot of financial benefits from the organization of distance learning program for university. Many of the promises of distance learning are financial in nature [11]. Cost analysis is concerned with establishing cost functions which attempt to relate cost to some measure of output. In educational systems, student numbers are usual measures of output, but other measures (e.g., graduate, students' credit hours, courses) are sometime used. Most universities all over the world are faced with the challenge of inadequate space, which in turn inhibits greater access to educational opportunities, yet appropriation revenue for higher education is on the decline [12]. This situation, they observed, led universities to pay more attention to distance learning programs, which is a major development in the 21st century in both the developed and developing world. The available universities are grossly insufficient per population and on the basis of qualified applicants; only about 10% of those qualified are admitted.

Many stakeholders in the education sector are interested in the open and distance education scheme because it allows greater access to educational opportunities. Thus, it is therefore keeping with the stated objectives of the National Policy on education [1], which detailed the goal of distance education as follows:

- a. Provide access to quality education and equality in educational opportunities for those who otherwise would have been denied.
- b. Meet special needs of employers by monitoring special certificate programs for their employees within and outside their work place.
- c. Encourage internationalization of knowledge learnt especially in tertiary education curricula.
- d. Ameliorate the effects of internal and external brain drain in tertiary institutions by utilizing Nigeria experts as teachers regardless of their locations or place of work.
- e. Acquire an objective view of the local and external stakeholders.

In order to accomplish these goals, it was stated that the Education Ministry in Nigeria shall also establish a distance education advisory body to advice government on distance education and liaise with the existing educational regulatory bodies and institutions offering distance education. It will also connect with the media establishment and encourage the efforts of government and other non-governmental organizations with provision of quality distance education, and to encourage participation in distance education programs at all levels of education and strengthen the capacity of existing institutions providing distance education [2].

Running distance learning in Nigeria has its many challenges, which range from technology deficit and low computer literacy, to general poor attitudes towards the mode of delivery. According to [7], student mode of learning, computer adoption, student support center and government, and the site or center facilitators' alertness to proffer immediate solutions to problems as soon as they are noticed, will help learners overcome their fear of isolation and reduce the probability of dropping out [10].

A comprehensive history of distance education in Nigeria can be traced to the emergence of correspondence education which serves as a means of preparing candidates for the General Certificate in Education. This then serves as a prerequisite for candidacy for the General Certificate in Education, and London Matriculation Examination. This practice was described by [5], with University of London being termed as the first Open University in the world and because of this, more students around the world were admitted, but principally those within the British Empire and its domains were considered when the parents were looking for tutorial support to supplement the bare syllabuses received on registration wherever they lived. Reference [3] argued that Nigerians were also quick at utilizing this opportunity. Similarly, [8] also reported that some Nigerians in 1887, enrolled for the first time in the University of London Matriculation Examination as external students studying through correspondence, enjoying many formalities with the educational institution. Reference [3] also mentioned that in 1925 several Nigerians, among them Eyo-Ifa and H.O Davis passed the London Matriculation Examination. Later, E.O. Ajayi, J.S. Ogunlesi and Alvan Ikoku obtained a University of London degree in Philosophy in 1927, 1929 and 1933, respectively.

Access to educational opportunities at a distance contributed immensely to individual's productivity, which they subsequently demonstrated in their teaching methodology at St. Andrews Teachers College, Oyo [13]. Despite of the establishment of the University College of Ibadan in 1948, many of the pioneer teaching staff of the university pursued their higher degrees through this distance learning program, with the combination of work and higher degree program [14]. The University of Ibadan also inaugurated its distance education program in 1988 in an attempt to meet the needs of the ever increasing number of applicants for a university education. The University of Ibadan Distance Learning Center (DLC) adopts Degree by Examination Model pioneered by the University of London as her faculties participating in the distance learning program are given the roles of defining the knowledge to be mastered by the learners and certifying the student's performance through constant assessment and evaluation. Students are provided with course modules as supplements to not less than six weeks of teaching-learning interaction before students sit for examination in proctored locations within the University of Ibadan campus walls.

II. STATEMENT OF THE PROBLEM

Distance learning has become an alternative means of education globally. In a country of continental dimensions such as Nigeria, distance educations has emerged as a mediated form of institution, and possess all the qualities to become a major noteworthy vehicle in overcoming the serious challenges faced by Nigerian society. These difficulties had culminated into the shape of education and economy, in which schooling and poor professional experience matter more than ever, is the most urgent. Education is the most important single factor for national-economic growth. The Nigeria

national objective may not be attained if the schooling process inputs, which include funds, students, buildings and teachers, are not well managed. Funds are required by those various distance education centers for teaching and learning to take place. Most of these distance and open learning centers are owned by the institutions and are expected to provide most of all the funds. Also, when the sources of funds and relative importance are known, it is still imperative to both decision makers and the education authorities to know the expenditure on each recipient. It is therefore the aim of this work to find out how much of our resources are used for maintaining open distance education in Nigeria in general, and at the University of Ibadan Distance Learning Center (UIDLC) in particular, as well as the constitutions of these costs.

III. RESEARCH QUESTIONS

- 1. What are the sources of financing the UIDC
- 2. What are the proportions of cost that constitutes expenditures in the UIDLC?
- 3. What is the unit/average cost per?
- (a) Student
- (b) Academic staff
- (c) Non-academic staff
- 4. Is there adequate learning material for students?

IV. METHODOLOGY

The study adopted the descriptive survey research design with a target population of total population of 400 respondents consisting of 280 current distance learning education students, 70 academic staff and 50 administrative staff. Only 354 questionnaires were correctly filled and returned. A researcher designed instruments titled Distance Learning Student Questionnaire (DLSQ), Distance Learning Teaching Staff Questionnaire (DLTSQ), Distance Learning Non-Teaching Staff Questionnaire (DLNTSQ) and an inventory form on Social Cost of UIDLC designed by the researcher were used in the study. The student questionnaire and the staff questionnaire have three sections each with items on background information data, private cost and availability of physical facilities. Section C of the student questionnaire consisted of 15 item instrument structured on a four-point rating scale of Very Adequate (VA) - 4, Adequate (A) - 3, Hardly Adequate (HA) - 2 and Never Adequate (NA) -1 The instrument was face validated by two experts from the Department of Educational Management of the Faculty of Education, University of Ibadan, Ibadan. Their comments and criticism shaped the focus of the study and the instrument was validated through a pilot test with the Cronbach's alpha statistic and yielded r = 0.764. Data collected were analyzed using descriptive statistics such as mean and standard deviation for the research questions.

V.RESULTS

The results are presented according to the research questions that guided the study. Table I presents the responses on application of the inventory form providing the sources of

finance for the center. Table II presents the responses on inventory form for the percentage of expenditures which constitute the money incurred for the management of UIDLC. Table III presents the responses to the questionnaire administered on students and staff for the collection of information on cost of education and availability of physical facilities.

A. Research Question 1: What Are the Sources of Financing UIDLC?

	SOURCES OF FINANCE
S/N	Items
1	Tuition fees
2	Acceptance fees
3	Sales of course materials
4	Sales of application form
5	Examination fees
6	Professional practice fees
7	Project and teaching practice supervision levy
8	Income from training
9	Returns on investment income
10	Miscellaneous

Discussion

Table I illustrates the financing of recurrent expenditure of the center for the period under study. It was discovered that available funds for the financing of the DLC ranges between №47 million and №350 million. It is also clear that the major source of finance is through the internal sources comprising of the tuition fees, sales of application forms, sales of course materials, student's examination fees and other student's school fees items. However, it shows that the government is not contributing much into the finance of the centre. Reference [4] states that the sources of finance open to education are multifarious. In all, there are five possible avenues of funding government educational institution namely, grants (subvention), fees, donations and by voluntary agencies/organization/communities/individuals, loans revenue generating projects.

B. Research Question 2: What Are the Percentages of Cost that Constitutes Expenditures in the DLC?

The data presented on Tables II and III show that the amount spent on Non-academic staff salaries and allowances has the greatest percentages of the recurrent costs with the most significant part of the items that constitute the total social costs of the Centre. This recurrent expenditure is incurred in the provision of teaching and administrative services, in addition to the purchase of other educational goods such as teaching materials, laboratory equipment and other things essential for the smooth running of the DLC. An important observation from the study of these tables depicts Nonteaching staff salaries and allowances as constituting the bulk of the expenditure. This trend of salaries taking the larger percentage of recurrent cost has been the same over the years risen from one percentage to another. Apart from the expenditure on Non-teaching staff salaries and allowances, the

International Journal of Business, Human and Social Sciences

ISSN: 2517-9411 Vol:12, No:3, 2018

tables show an upward trend on the expenditure pattern of various items.

 $\label{thm:table II} TABLE~II\\ Proportion~of~Expenses~of~Social~Costs~of~UIDLC~from~2004/2005~to~2008/2009~Session$

		2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
S/N	Item of Costs	Percentage of Funds	Percentage of Funds	Percentage of Funds	Percentage of	Percentage of
		Incurred	Incurred	Incurred	Funds Incurred	Funds Incurred
1	Academic staff honorarium	1.14	3.14	7.11	5.78	2.07
2	Non- academic staff salaries	45.83	28.93	13.12	10.26	13.43
3	Students service	9.76	7.19	15.11	6.34	18.48
4	Job Printing and stationary	6.22	4.69	3.41	1.68	1.85
5	Office and General	2.51	1.57	1.11	0.32	0.24
6	Utilities e.g. PHCN bill		0.74	1.25	0.08	0.17
7	General expenses	2.57	0.89	0.92	0.14	0.19
8	Vehicle Running Expenses	0.67	1.15	3.06	0.21	3,65
9	Entertainment	2.44	2.94	2.24	0.53	0.64
10	Course Material Production	5.77	0.41	3.56	1.85	1.87
11	Teaching Practice	3.52	4.96	3.96	1.03	0.97
12	Advertisement and Publication	3.13	2.53	2.79	0.99	3.28
13	Examination and Invigilation	8.58	9.54	4.12	7.96	5.29
14	Traveling and Transport	3.74	1.16	14.17	4.27	18.69
15	Other Academic Expenses	2.16	18.86	22.35	7.17	12.20
16	Other Expenditure	1.96	1.24	11.73	49.37	15.01
	Recurrent Costs Subtotal	100	100	100	100	100
17	Building and Construction		-	46.01	48.78	74.96
18	Maintenance of Building Premise	72	45.02	37.42	15.85	1.12
19	Furniture and Fittings	28	54.98	16.57	35.37	23.92
	Capital Costs Subtotal	100	100	100	100	100

 $\label{eq:table} TABLE~III\\ Social Costs~of~UIDLC~for~2009/2010~to~2013/2014~Sessions$

S/N	Item of Costs	2009/2010 Proportion of Funds Incurred	2010/2011 Proportion of Funds Incurred	2011/2012 Proportion of Funds Incurred	2012/2013 Proportion of Funds Incurred	2013/2014 Proportion of Funds Incurred
1	Academic staff honorarium	2.15	3.24	8.12	5.51	1.07
2	Non- academic staff salaries	46.81	28.91	26.12	40.26	13.43
3	Students service	9.76	7.19	14.21	6.34	18.48
4	Job Printing and stationary	6.22	4.69	3.41	1.68	1.75
5	Office and General	2.37	1.57	1.64	0.32	0.34
6	Utilities e.g. PHCN bill	1.58	0.78	1.25	0.08	0.17
7	General Expenses	1.52	0.91	0.93	0.17	0.23
8	Vehicle Running Expenses	0.56	0.95	2.96	0.61	2.93
9	Entertainment	2.22	2.94	2.24	0.53	0.64
10	Course Material Production	4.70	0.42	3.33	1.33	1.89
11	Teaching Practice	2.51	3.92	3.86	1.08	0.98
12	Advertisement and Publication	3.19	2.53	2.67	0.74	3.11
13	Examination and Invigilation	7.59	8.55	5.10	8.54	6.12
14	Traveling and Transport	4.70	3.16	0.17	4.27	18.66
15	Other Academic Expenses	2.16	28.86	12.35	9.17	14.20
16	Other Expenditure	1.96	1.24	11.73	19.37	15.01
	Recurrent Costs Subtotal	100	100	100	100	100
17	Building and Construction	12	22	41.01	42.70	55.10
18	Maintenance of Building Premise	50	46.05	32.42	25	33
19	Furniture and Fittings	38	31.95	10.5	32.30	11.90
	Capital Costs Subtotal	100	100	100	100	100

C. Research Question 3: What Is the Unit/Average Cost per?

- (a) Student
- (b) Academic staff

(c) Non-academic staff.

The results presented in Table IV regarding cost per student shows that the unit/average cost for a student on the average for 10 years is ¥100,007.38. Recurrent expenditures of the

UIDLC ranges between N25, 695,610.37 and expenditure for each academic session. N542,234,233.11 depending on the costs of item on

TABLE IV Unit Cost per Student of UIDLC from 2004/2005 to 2013/2014 Academic Sessions

Sessions	Recurrent Expenditure Amount (N)	Student Enrolment	Unit/Average cost Per Student (N)
2004/2005	25,695,610.37	345	74,480.03
2005/2006	41,663,357.92	398	104,681.80
2006/2007	145,234,560.20	609	238,480.39
2007/2008	200,252,588.73	1008	198,663.28
2008/2009	251,092,046.20	1227	204,638.99
2009/2010	350,695,004.21	1857	188,850.30
2010/2011	373,601,555.56	2322	160,896.45
2011/2012	466,442,233.22	4234	110,165.86
2012/2013	440,556,434.00	5423	81,238.51
2013/2014	542,234,233.11	6443	84,158.58
Total	2,386,776.125.00	23866	100,007.38

From Table IV the unit cost for the 10 years were 4.74,480.03 for 2004/2005 session, 4.104,681.80 for 2005/06, N238,480.39 for 2006/07, N198,663.28 for 2007/08, N204,638.99 for 2008/09, N188,850.30 for 2009/2010, N160,896.45 for 2010/2011, N110,165.86 for 2011/2012, N81,238.51 for 2012/2013 and N84,158.58 the for 2013/2014 session. These unit costs were calculated dividing the recurrent expenditure (cost) by the number of students. The numbers of students vary with expenditure items in some cases. This is particularly so in higher educational institutions, where in the provision of goods and services, some are allocated to a specific group and some are for the benefit of the total student population. Reference [9] revealed in a research report that the cost of an average student of distance education is more expensive than that of the traditional setting. Also, the centre spends money on the salaries and allowances of the central administration staff and other supporting units for the general benefit of all students. Generally, unit in unit costs means the total number of learners enrolled in a course in a particular year. Unit cost of education means costs per unit i.e. per students, per graduate, per credit, etc. They are calculated per year.

TABLE V
UNIT/AVERAGE COST PER ACADEMIC STAFF AND NON ACADEMIC STAFF OF

CIDEC FOR 2013/2014 SESSION				
Staff	Salary and Allowances	Number	Unit/Average Cost	
Stair	Amount (N)	of staff	Amount(N)	
Academic Staff	14,522,764.56	96	151,278.80	
Non Academic Staff	15,761,324.18	105	150,107.84	
Total	30,284,088.74	201	150,667.11	

The total expenditure on salary allowances of staff both academic and non-academic in UIDLC, as indicated in the table above, shows that it ranged between \$\text{N}14,522,764.56 and \$\text{N}15,761,324.18, with an average unit cost of \$\text{N}150,667.11.}

The study reveals that the salaries of academic and non-academic staff shows that the unit cost per academic staff for the session is ¥151,278.80, which is greater than the unit cost per non-academic staff of ¥150,107.84 with a difference of ¥1,170.96. The academic staff salary accounted for 47.95%

and non-academic staff salary accounted for 52.04% of the total recurrent incurred by the DLC. This cost per staff member revealed that the recurrent expenses incurred for staff are very significant and must be put into consideration in the budget of the center.

D.Research Question 4: Are There Adequate Learning Materials for Students?

TABLE VI ADEOUACY OF LEARNING MATERIALS

Learning Material	Positive Response %	Negative Response
I. Textbooks	154 (61.11)	98 (38.89)
II. Modules (Course books)	117 (46.43)	135 (53.57)
III. Journals	63 (25) (75)	189 (75)
IV. Self learning Materials	71 (28.17) (61.83)	181 (71.83)
V. Magazine	56 (22.22)	196 (77.78)
VI. Stationary	63 (25)	189 (75)
VII. Audio - Visual Materials	66 (26.19)	186 (73.81)
VIII. Video- tapes	50 (19.84)	202 (80.64)
IX. Radio program series	53 (21.03)	199 (78.97)
X Television program series	58 (23.02)	194 (76.98)
XI. Power point	49 (19.44)	203 (80.56)
XII. projectors	46 (18.25)	206 (81.75)
XIII. Internet facilities	66 (26.19)	186 (73.81)
XIV. Electronic board	77 (30.56)	175 (69.44)
XV. Computer assisted learning	73 (28.97)	179 (71.03)
XVI Materials e.g. CDs	60 (33.81)	192 (76.19)
XVII. Lecture rooms	69 (23.78)	183 (72.62)
XVIII Library	80 (31.75)	172 (68.25)
XIX Rest periods	93 (36.90)	159 (63.10)
XX Lecture theatre	24 (9.52)	228 (90.42)

Table VI shows that out of 20 learning materials listed, only textbooks were fairly adequate in the DLC. This is based on 61.11% of positive responses, while other learning materials scored below 50% positive response. This implies inadequacy of learning material in the DLC.

This study has revealed that operating an educational centre such as the UIDLC requires sufficient and increasing levels of capital to be successful. The trend in costs over the time shown by the study brings the researcher to conclusion that the

recurrent costs of education will continue to rise since the cost of labor, materials and equipment keep rising. The teaching resources, both material and non-material, need to be made available and constantly updated; more so, adequate funds should be allocated to educational institutions operating distance learning programs. Also, the management of any system of education requires an adequate knowledge of planning, estimate expenditure and distribution of resources. The outcome of this finding is grounded in the desire of the Federal Government of Nigeria to improve the quantity and quality of providing access to basic and tertiary education for Nigerians. The National Policy on Education [2] detailed the goal of distance education to "Provide access to quality education and equally in educational opportunities for those who otherwise would have been denied".

VI. RECOMMENDATION

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

- The universities that operate a distance learning centre should strive to explore other internally generated revenue options to boost their income.
- 2. The Federal government is advised to make adequate provision for the smooth running of distance education program that takes care of learner's needs in the annual budget of distance learning centers and institutions.
- Institutions that include distance education in their curriculum should consider cost-benefit effectiveness and enough funds should be provided to create an administrative unit responsible for student welfare.
- 4. Student tuition fees should be subsidized to enable students from underprivileged backgrounds or self-sponsoring students to meet with the financial implications that relate to tuition and course materials.
- 5. Presently in Nigeria, the mode of instructing distance learners is basically through printing. Instructional modules should be adequately reviewed and sufficiently provided on time for learners in their categories at affordable costs so that they may have materials to interact with before they are invited for their annual interactive session.

ACKNOWLEDGMENT

The author deeply appreciates the Management of the Distance Learning Centre, University of Ibadan for the support.

REFERENCES

- Federal Republic of Nigeria (FRN) National Economic Empowerment and Development, 2004.
- Federal Republic on Nigeria, National policy in education (4th edition). Lagos: NERDC Press 2, 2004.
- [3] R. A. Aderinoye, "Alternative to teacher training" in H.Perraton (Ed).Cost Effectiveness in Teacher Training. Paris-UNESCO Aderinoye, R and Ojokheta, K 2003. Open and Distance Education as a mechanism for Sustainable Development. Reflections on the Nigeria Experience. International Review of Research in Open and Distance learning, 2001.
- [4] J. B. Ajayi, Public Financing of Education in Nigeria. Ife Journal of Educational Studies, 2001.4(1): 86-90.

- [5] R. Bell and M. Tight, "Open Universities: A British Tradition? Society for Research into Higher Education. Birmingham," UK: Open University Press, 1999.
- [6] F. O. Egbokhare, "An Address by the Director of the Distance Learning Centre on the Occasion of the Stakeholder's Consultative Forum, at the Conference Centre" on the 5th of April, 2006.
- [7] P. Navarro and J. Schoemaker, "Performance and Perceptions of Distance Learners in Cyberspace. The American Journal of Distance Education", 2000. 14(2), 15-35.
- [8] M. Omolewa, "Directory of Distance Education Institutions in Africa". (Ed). Abuja: UNESCO, 2000.
- [9] United Nations Educational, Scientific, and Cultural Organisation (UNESCO). Education Digest: Comparing education statistics across the world, 2000.
- [10] N. B. Pityana, "Open distance learning in Africa: Access, quality, success", 2004. Retrieved from www.unisa.ac.za/contents/about/principle/odl_africa.pdf.
- [11] Jomo Kenya and N. O. Oddilla "Investigate Factors Affecting the Performance of Students on Distance Learning Mode' Journal of Information Engineering and Applications ISSN 224-5782(ISSN 2225-0566 online print. Vol.3 No 10, 2013.
- [12] A. L. Oboegbulem "Application of Knowledge and Learning Management by Principal in the Administration of Secondary Schools in Enugu State, Nigeria. Research on Humanities and Social Sciences. ISSN222-1719 (paper) ISS2222-2863(online). Vol. 3 No.16 2013.
- [13] M. O. Yusuf "Problems and Prospects of Open and Distance Education in Nigeria" Turkish Online Journal of Distance Education.ISSN 1302-648 Vol 7 No 1.2005
- [14] T. N. Ambe-Uva "National Open University of Nigeria (NOUN): A Historical Perspective and Challenges. Turkish Online Journal of Distance Education- TOJDE.ISSN 1302-6488, Vol. 8 No 1 Article 6 2007