

Relationship between Teacher Attributes and the Use of ICT Facilities in the Language Classrooms in Osun State, Nigeria

LABO-POPOOLA S. Olubunmi

Adeleke University, Ede, Osun State, Nigeria
Email: shareefah717@yahoo.co.uk

Abstract

Information and Communication Technology (ICT) has become a profound phenomenon arising from the compelling urge and strive towards digitalization. The application of ICT to learning generally and in the classroom in particular has turned out to be a powerful means of communication and teaching. This century has witnessed a great deal of technological advancement, which has helped many teachers, especially language teachers, in reaching out to their students. The importance of this technology has made many stakeholders in the educational sector to recommend that teachers be ICT compliant. Despite this call, much is needed to be put in place for the language teachers, especially in Nigeria, to be ICT compliant, and to derive and share the limitless benefits of ICT.

This study investigated the readiness of language teachers for the use of ICT facilities in preparing for lessons and delivering of same. Three variables of concern in the study were teacher qualification, teacher age and teaching experience. The study employed a survey design that obtained data from secondary school English Language teachers through a structured questionnaire. Data were collected from 100 English Language teachers from public secondary schools in the Osun Central zone of Osun State. Using frequency counts and simple percentages to analyze the data, the study answered three research questions. The research questions focused on: relationship between teacher qualification and use of ICT facilities in language

classrooms; whether teachers with advanced age make use of ICT facilities; and the relationship between teaching experience and use of ICT facilities.

Higher educational qualification was found to positively influence the tendency to wish to use ICT facilities in the language classrooms. Teachers who were advanced in age and teaching experience were not enthusiastic in using the 'new' technology in their classes. These teachers preferred the traditional method of teaching. It is therefore recommended that all language teachers in the state be exposed to beginners and continued ICT training. Schools should also be equipped with ICT facilities to encourage teachers in using the technology.

Keywords: Teacher attributes, ICT-compliant, language classrooms

Introduction

Successful operation and guidance of the process of education is a major responsibility of the teacher. This means that so much depends on the quality of the teacher; hence good and effective teachers must be available in schools to implement the various curriculums. The English Language teacher is like a bridge between the student's mother tongue and the second language English, which is the official language in Nigeria. The English Language teacher has a close contact with the student since this subject is a compulsory one at all levels in secondary education.

As important as the subject is, students continually fail the subject in both internal and external examinations such as promotion examinations, the Senior School Certificate Examination, the Universal Tertiary Matriculation Examination, etc. The poor performance of students can be traced to many factors varying from teacher factors, student factors, school factors to societal factors. Truancy, poor attitude to learning, lack of textbooks, etc are traceable to students. However, some researchers Ayodele (1988) and Labo-Popoola, (2002) have observed that the classroom practitioner and classroom process should be looked at. One can infer from the researchers that teacher variables may be perceived as one of the major causes of students' poor performances.

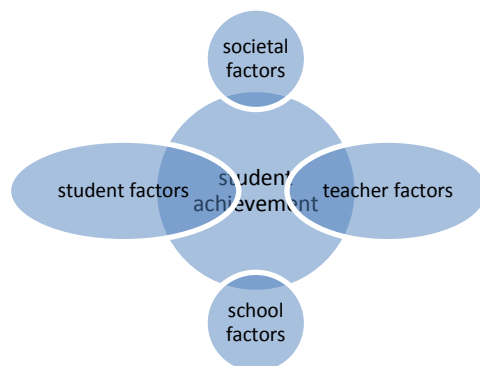


Figure 1: Student achievement and factors that may affect it

Figure 1 above indicates that student achievement can be influenced by as many as four factors – student, societal, school and teacher. These factors play one role or the other on the achievement of student at all levels. For this paper, teacher factor is the focus as it is believed that the teacher is supposed to be a role model for the student to emulate. The concern about the teaching profession is worldwide. Teachers are at the centre of the educational process and without them, all other innovations are likely to fail. In other words, teacher variables such as cognitive competence, experience, exposure and teaching style are likely to affect students’ performances. Therefore, teachers have to be conversant with modern and current teaching styles in order to teach with current methodologies and styles. Being current means waking up to the reality that the educational setting is changing technologically.

Technology has made learning easier, a reality that no teacher can afford to overlook. For a language teacher to be relevant and current in today’s digitized and computer-mediated world, he/she has to be Information and Communication Technologically compliant (ICT-compliant). Being ICT compliant means having the capability to make use of technologies associated with computers, software, the internet, etc. in order to facilitate the processing, transmission and display of information by electronic means. No doubt, ICT has contributed immensely to the development of communication world over.

Based on the importance, spread and development of ICT, schools and classrooms are getting infested with the use of various facilities such as smart mobile phones, computers, laptops, videos, mp3 players, etc. Adomi and Kpangban (2010) observed that the education sector has developed

since the introduction of some level of ICT application in the schools. Realizing the importance of ICT, the Federal Government of Nigeria in its policy on education (FGN, 2004) Section 11 No 101 stipulates that “the government shall provide appropriate ICT facilities to ensure that the benefits of the virtual library permeates all levels of education in Nigeria”. Also, Section 102 (d) stipulates that “government shall provide facilities and necessary infrastructure for the promotion of ICT at all levels of education”.

For ICT to be properly integrated into schools, both teachers and learners have to accept the realities of the new dispensation. Casual observation reveals that learners are readily accepting the realities, when one considers the rate at which learners at all levels are being exposed to the use of phones, especially those regarded as ‘smart phones’, computer games, etc. However, what is the situation with our teachers, especially the language teachers, who are supposed to be a bridge between the world of children and adults? The main thrust of this study is to investigate the readiness of language teachers in using ICT facilities in preparing for their lessons. Looking at the readiness of the teachers in this paper, some teacher variables/attributes are considered. These are teachers’ qualifications, years of teaching and age.

The quality of the teacher is a reflection of what his/her education (professional) is. If a teacher’s level of competence (education) is sub-standard, his/her output as a teacher is better imagined. The education or preparation of a professional teacher should give him/her a general and liberal education through the knowledge of his teaching subject, skills and techniques in order to perform well. Researchers have found a positive relationship between teacher qualifications and students’ academic performance or development (Bajah, 1979; Omisade, 1985; Thomas, 1990; Obemeata, 1995; Labo-Popoola, 2002; etc.). This study investigated the relationship between teacher qualification and their readiness to use ICT facilities in preparing their lessons. It would be of interesting to find out if teachers with higher qualifications are inclined to using the internet to enhance their teaching.

Another variable of concern was teachers’ age. The study wished to find out if teachers of advanced age, that is those above 40 years, would be willing to learn how computers, printers, the Internet, etc. are used. Hence, there is the need to find out if there is any relationship between a teacher’s

age and their willingness to employ ICT facilities for their English Language classes.

The last variable studied in this paper was teachers' teaching experience. Experience, as they say, is the best teacher. However, this parlance has been modified to 'good experience' as some experience may not be good enough to be passed on to the next generation. Nevertheless, an experienced individual is expected to be better and superior to a novice as individuals get better at what they do as they garner experience. Berliner (1994) specified three levels or stages of development - a novice stage where errors are frequent; an intermediate level where some consolidation of learning takes place and automaticity is developed; and finally a stage where high levels of performance occur.

In secondary schools, teachers with many years of teaching experience are usually given senior classes to teach, especially the final year class. The belief is that such teachers would bring their experience to bear in preparing the students for the final examinations. At times, the experienced teacher is allowed to teach the first year learner, believing that such teachers would lay a good foundation at this level. From the foregoing, experience is considered an important variable in the teaching profession. This study therefore investigated the readiness of the experienced teachers, especially those who have spent close to thirty years in service, in making use of some ICT facilities in their language classes.

The research into this problem was prompted by the introduction of digital tablets into the senior secondary schools in Osun State. These tablets are expected to replace textbooks for the students. The tablets are tagged 'Opon Imo'. These have over 63 textbooks for about 17 subjects; past question papers and answers on UTME, SSCE, etc. There are games and puzzles on the tablets; however, they are not internet-ready. The question is how ready are the teachers in using this facility to teach the students?

It is to this end that this research sought to investigate the relationship between some teacher factors and the use of ICT facilities in language classrooms. The study is concerned with how ready some teachers are in terms of qualification, age and teaching experience in using ICT facilities in preparing for their lessons as well in their classes.

Research Questions

This research work is guided by three research questions: Is there any relationship between teacher qualification and use of ICT facilities in language classrooms? Do teachers with advanced age make use of ICT facilities in preparing their lessons? Does teaching experience have any relationship with their use of ICT facilities?

Methodology

This study made use of the descriptive survey design. It had its focus on English Language teachers in the Osun Central Zone of Osun State. In collecting data for the study, the researcher met with stiff opposition from teachers and school principals on the premise that the research might have been ordered by the state government in an attempt to reduce the work force. Nevertheless, about one hundred English Language teachers from the public secondary schools in the zone took part in the study. The respondents cut across twenty secondary schools (junior and senior schools) in the zone. The questionnaire used was titled Language Teachers' Perception of ICT and had three sections. Section A sought information on demographic data of respondents; Section B requested respondents to provide information on the availability or otherwise of ICT facilities in their schools; and Section C dealt with teachers' acceptance of ICT facilities in their classes.

Data analysis: The data collected was analyzed using frequency counts and simple percentages.

Results and Discussion

Respondents' Demographic information

Table presents the demographic information on the respondents in the research work. Table 1 shows that there were thirty-five (35) males and sixty-five (65) females indicating that there were more females in the teaching profession in the study area. Table 1 showed that 32% of the respondents were Nigeria Certificate in Education (NCE) holders, while 63% of them had a first degree i.e. BA/HND/B. Ed/BA.ED. Four percent of the respondents have master's degree in Education (M. Ed).

Another variable of concern in the study was teacher’s experience, which is determined by the number of years that the teacher has put in. The study revealed that majority of the respondents, 77% have been on the job for 20 years or less. Seventeen percent of the respondents have put in a length of service of twenty one to thirty years, while 5% have been in service for over thirty years. Again, one of the respondents did not give his/her length of service (See Table 1).

Table 1 also presents the age distribution pattern of the respondents. Forty percent of the respondents were above 40 years while 51% fell under the age group of 41-50 years. However, 36% of them belonged to the age bracket of 41-50 years. Just as some did not indicate their length of service and qualification, 4% of the respondents did not disclose their age.

Table 1: Demographic Information of Respondents

Items	Frequency	Percent	Cumulative percent
Male	35	35	35
Female	65	65	100
NCE	32	32	32
BA/HND/ BED/BA.ED	17	17	49
MED and above	46	46	95
Non-response	4	4	99
	1	1	100
1-10 years	48	48	48
11 – 20 years	29	29	77
21 – 30 years	17	17	94
Above 30 years	5	5	99
Non-response	1	1	100
Below 25 years	4	4	4
25 – 30 years	16	16	20
31 – 40 years	31	31	51
41 – 50 years	36	36	87
Above 50 years	9	9	96
Non-response	4	4	100

For ease of calculation, the categories of BA/HND and BA.Ed/B.ED were collapsed into one group. Thus, the table below, Table 2 was used in calculating the values on teacher qualification and use of ICT facilities in classroom.

Table 2: Teaching Qualifications of Respondents

Qualification	Frequency	Percent	Cumulative Percent
NCE	32	32	32
BA/HND/BED/BA.ED	63	63	95
MED and above	4	4	99
Missing Value	1	1	100
Total	100	100	

In answering the three research questions, the following factors were considered in relation to teacher qualification, age, and experience. The factors were: Ability to operate a computer; possession of a smart phone i.e. a phone that can browse; ability to use a phone to browse; ability to use internet for lesson preparation; use of laptop in classroom; use of power point to teach; use of search engines; and obtaining information online.

Research Question One: *Is there any relationship between teacher qualification and use of ICT facilities in language classroom?*

The findings showed that the higher the qualification, the higher the average value of the teachers' ability to use ICT facilities in their language classrooms. For the NCE holders, the average value was 22.26%; the first degree holders have a value of 28.96%, while the master's degree holders have 43.75%. Considering each of the factors, the study revealed that though majority of the respondents have smart phones (70.17%), only 54.43% actually used the phone to browse; the holders of master's degree having the highest percentage (75%). Also, only 10.43% of the respondents used the internet to prepare their lessons. Again, the Master degree holders led in this category with 50% of them obtaining information from the internet. None of the respondents made use of laptop to teach in their classes. Perhaps this might not be the respondents' faults as none of the schools is properly equipped with ICT facilities. Again, the respondents with master's degree showed the relevance of their qualifications by indicating that recording 25.61% of them use the search engines. This corroborated the findings in the category of respondents' use of internet for lesson preparation. All these values pointed to a positive relationship between teacher qualification and use of ICT in the classrooms. Though the overall percentage is below average, 31.65%, the fact remains that it has an impact on the use of ICT facilities.

Table 3: Teacher Qualifications and Use of ICT facilities in classroom

Factor	NCE		BA/HND/B.ED		M.ED		Average	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Can operate a computer	59.3	40.6	69.8	28.5	75	25	68.03	31.37
Has a phone that browses	62.5	37.5	73.01	26.98	75	25	70.17	29.82
Use of phone to browse	37.5	62.5	50.79	49.21	75	25	54.43	45.57
Obtains information from the internet	6.25	93.7	15.87	84.12	50	50	24.04	75.94
Use of internet for lesson preparation	3.12	96.8	3.17	96.82	25	75	10.43	89.53
Use of laptop to teach in class	0	100	0	100	0	100	0	100
Use of power point to teach	0	100	1.58	98.41	0	100	0.52	99.47
Use of search engines	9.37	90.62	17.46	82.53	50	50	25.61	74.38
Average	22.26	77.72	28.96	70.82	43.75	56.25	31.65	68.26

Research Question Two: Do teachers with advanced age make use of ICT facilities in preparing their lessons?

Answer: Though 100 respondents were used for the study, only 96% of them gave responses as regards their age. Hence, the data presented was based on the responses of the 96% (See Table 4). To answer the research question, focus was placed on the respondents who were above 40 years. This group represented 46.87% of the respondents, which translates to the fact that quite a large number of teachers in the study area are advanced in age.

Table 4: Teachers' Age Group

S/N	Age Group	Frequency	Percent	Cumulative Percent
1	Below 25 years	4	4.16	4.16
2	25 -30 years	16	16.66	20.82
3	31 – 40 years	31	32.29	53.11
4	41 – 50 years	36	37.5	90.61
5	Above 50 years	9	9.37	99.98
6	Total	96	99.98	

Table 5 shows the responses in relation to teachers' age and use of ICT facilities.

Table 5: Teacher Age and Use of ICT facilities in classroom

Factor	Below 25yrs		25 - 30 years		31-40		41-50		Above 50years		Average	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Can operate computer	100	0	87.5	12.5	70.9	29	61.1	38.9	22.2	77.8	68.4	31.6
Has a phone that browses	50	50	75	25	70.9	29	69.44	30.6	55.6	44.4	64.2	35.8
Use of phone to browse	50	50	62.5	37.5	51.6	48.4	44.4	55.6	22.2	77.8	46.2	53.8
Obtains information from the internet	25	75	31.3	68.7	16.1	83.9	5.6	94.4	11.1	88.9	17.8	82.2
Use of internet for lesson preparation	25	75	12.5	87.5	3.2	96.8	0	100	0	100	8.2	91.8
Use of laptop to teach in class	0	100	0	100	0	100	0	100	0	100	0	100
Use of power point to teach	0	100	6.2	93.7	0	100	0	100	0	100	1.3	98.7
Use of search engines	25	75	31.3	68.7	19.4	80.6	5.6	94.4	11.1	88.9	18.4	81.6
Average	34.4	65.6	38.3	61.7	29.	70.9	23.3	76.7	15.3	84.7		

From the table above, the following deductions were made: None of the age groups has a value above 50% under the positive response. This refers to the overall (average) of positive responses and not all positive responses to all the questions. However, the respondents within the 25-30 years age group had the highest average value, 38.28%, followed by the age group below 25 years, having 34.4%. This tells us that respondents below 30 years of age are more conversant with ICT facilities and are likely to use these in the preparation of their lessons. As mentioned earlier the focus of this research was to investigate if teachers with advanced age (respondents above 40 years) make use of ICT facilities. Figure 1 shows that majority of the respondents in this category do not use ICT facilities (78.3%) in their classrooms. Though 40% of them have phones that browse, only 6.6% actually make use of the facility on their phones.

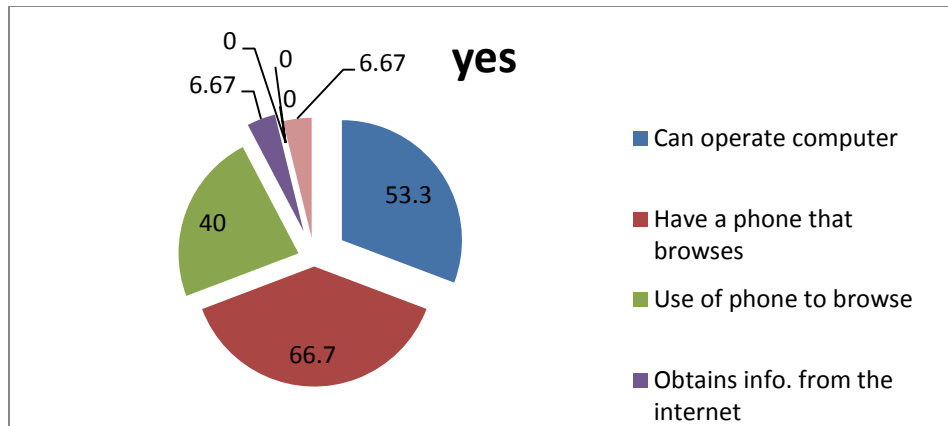


Figure 1:

None of the respondents in this category attempted using the internet to prepare their lessons or use the laptop to teach in their classes. Only 6.6% endeavored to obtain information from the internet by either using their phones or using the search engines. One may conclude that the few who used the search engines belonged to the respondents with masters degree qualification.

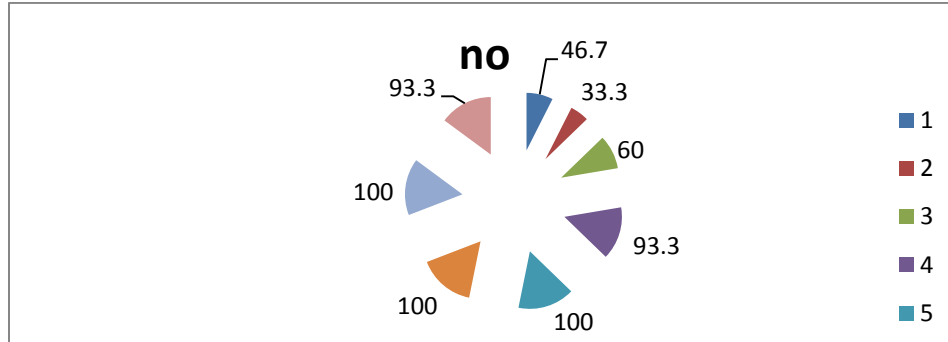


Figure 2:

Figure 2 above shows the data on the respondents who are above 40 years of age. This figure showed that the respondents in this group did not in any way wish to use the ICT facilities.

Research Question Three: Does teaching experience have any relationship with the use of ICT facilities?

Answer: The data used in answering this question is presented in Table 6. From the table, all respondents who had taught for above thirty years showed that their experience did not reflect any relationship with the use of ICT facilities. Actually, it was found that the higher the teaching experience, the less the wish or the ability to use these facilities. The respondents with fewer years of teaching experience recorded the highest value (28.9%) in the use if the facilities. The respondents who have put in more years (30 years) were not willing to use ICT in their classes (80%).

Table 6: Teaching Experience and Use of ICT facilities in classroom

Factor	1 - 10 yrs		11 - 20 yrs		21 - 30 yrs		Above 30 yrs		Average	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Can operate computer	70.8	29.1	62.1	37.9	70.6	29.4	60	40	65.9	34.1
Have a phone that browses	66.6	33.9	72.9	27.6	76.5	23.5	60	40	68.9	31.1
Use of phone to browse	50	50	44.8	55.2	47.1	52.9	40	60	68.9	31.1
Obtains information from the internet	16.7	83.3	13.8	86.2	11.8	88.2	0	100	10.6	89.4
Use of internet for lesson preparation	6.2	93.8	3.5	96.5	0	100	0	100	2.4	97.6
Use of laptop to teach in class	0	100	0	100	0	100	0	100	0	100
Use of power point to teach	2.1	97.9	0	100	0	100	0	100	0.5	99.5
Use of search engines	18.7	81.3	13.8	86.2	11.8	88.2	0	100	11.1	88.9
Average	28.9	71.1	26.3	73.7	27.2	72.8	20	80		

The reasons for no relationship between teaching experience and use of ICT may not be far-fetched. Table 7 showed the data on preference for traditional method of teaching and reliance on textbooks as revealed by the study.

Table 7: Teaching Experience in relation to textbooks and traditional method

Factor	1- 10 yrs		11-20 yrs		21-30 yrs		Above 30 yrs		Average	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Prefers traditional method of teaching	41.7	58.3	37.9	62.1	64.7	35.3	60	40	51	49
Reliance on textbook	72.9	27.1	82.8	17.2	88.2	11.8	80	20	81	19
Average	57.3	42.7	60.3	39.7	76.4	23.6	70	30	66	34

Reviewing the values on the average row and column, it is noted that majority of the respondents 81% have total reliance on textbooks in teaching or preparing for their lessons, while only 19% may make use of some other means. Also, 51% of them preferred to use the traditional method in teaching their subjects. On the average, the table revealed that 66% of the respondents will go the traditional way in their teaching method as well as rely solely on textbooks in their classrooms.

Findings of the study

There tends to be a relationship between teacher qualification and the use of ICT facilities in language classrooms. Respondents with master’s degree showed readiness in using these facilities, both for the preparation of their lessons for the delivery of their lessons. It was found that the higher the qualification, the higher the tendency to want to use ICT in the language classrooms.

The classes were not fully equipped with ICT facilities, even if the teachers were willing to use them. Teachers who are advanced in age (above 40 years) did not show that they were willing to use ICT in their classes. Actually, younger teachers (30 years and below) presented higher values i.e. they were more conversant with the use of ICT facilities. Majority of the respondents in this group made use of smart phones as expected of them.

Older teachers (above 40 years) were not willing to make use of ICT facilities such as browsing, power point presentation or laptops. Teachers with more years of teaching experience (30 years and above) did not use ICT, either in their classes or in preparing their lessons. This group of teachers (30 years and above) preferred using textbooks to going online to search for information. Teaching experience that enhances students' performance is possessed by those who know little about ICT. ICT facilities are therefore not relevant.

Conclusion and Recommendations

Based on the findings of this study, it is concluded that the language teachers are not likely to be armed with current information. Most likely, old ideas and points may be re-cycled over the years by these teachers. The students being taught are likely to be more exposed than their teachers as the students are known to be more conversant with ICT.

Language teachers must be exposed to the state-of-the-art method of teaching. Seminars/workshops that will expose the teachers, especially those who have spent over ten years in service, to modern methods of teaching should be conducted. All language teachers must be encouraged to go for computer training and be certified. The state government can get the Computer Science Department of the State University involved in empowering the teachers. All public secondary schools should be adequately equipped with ICT facilities such as computers, educational software, laptops, projectors, internet facilities, etc. Language teachers must be taught how to make use of the internet and all its applications. They should be trained on how to make use of power point presentations in their classes. This will no doubt make their classes interesting and active. Being experienced in the art of teaching is good, the experience should be updated regularly as this will enrich the teacher and make him/her a better teacher.

References

- Adomi, E.E. and E. Kpangban (2010). *Application of ICTs in Nigerian Secondary schools*. Library Philosophy and Practice. ISSN 1522 - 0222. Accessed from <http://digitalcommons.unl.edu/libphilprac/345>.

- Bajah, S. T. (1979). Correlates of students' extrinsic school environmental factors with levels of attainment in a standard test in Chemistry. *Journal of Science Teachers' Association of Nigeria*, *STAN 18* (1): 49 -62.
- Berliner, D.C. (1994). 'Teacher Expertise'. In *International Encyclopedia of Education*. Vol. 10 pp 6020 - 6026.
- Federal Government of Nigeria (2004) National Policy on Education
- Labo-Popoola, S. O. (2002). Teacher and School Variables as Determinants of Students' Achievement in Comprehension and Summary Writing Aspects of English Language. An unpublished Ph.D. Thesis, University of Ibadan, Ibadan.
- Obemeata, J. O. (1995). Education: An Unprofitable Industry in Nigeria. A Postgraduate School Interdisciplinary Research Discourse.
- Omisade, Y. O. (1985). Impact of school management environment on students output in Oyo State Secondary Schools. An unpublished Ph.D. Thesis, University of Ibadan.
- Thomas, H. (1990). Education costs and Performance: A Cost Effectiveness Analysis. London: Cassel Education Limited.