

Effects of Strategy of Teaching and School Location on Primary School Pupils' Achievement in English Language

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Abstract

English language is a very important language for both school and societal applications. It had been a stumbling block for most young people at both school and in business. Many scholars believe that poor mastery of English language contributes significantly to low level achievement that occurs regularly in both school and public examinations in the nation. This study therefore investigated the effect of modeling instruction and picture reading strategies as interventions for ameliorating poor learner achievement. The traditional strategy of teaching English grammar, literature and essay at separate times was used as control strategy. The three strategies were each mounted at both urban and peri-urban schools. Each strategy was operationalized by university graduate English education teacher. The sample which was purposive consisted of 300 primary three children, 100 in each treatment condition having equal gender representation. The treatment lasted eight weeks before the posttest. The instrument used for data collection was an English language achievement test, which was a multiple choice objective test having 40 items and four plausible options for each item. The results were subjected to the analysis of variance with the pretest as covariate of the posttest. Data analysis revealed that strategy of instruction was significant: $\{F_{(2,299)} = 58.357; p < .05\}$. School location was also significant: $\{F_{(1, 299)} = 11.710; p < .05\}$. Strategy X location interaction was equally significant: $\{F_{(2, 299)} = 19.571; p < .05\}$. These results were fully discussed and modeling instructional strategy was recommended for teaching pupils at the basic level of education in Nigeria.

Keywords: Modeling, English language, picture reading, conventional strategy, achievement

1. Introduction

English language is one of the most valuable subjects on the Nigerian school curriculum. It is a subject that every primary school pupil must study from the first day in school to the end of the primary school career. It is also a subject that must be studied to a high level of proficiency in order to be able to succeed in learning other school subjects, since instruction in other subjects must be in the medium of English language. Further still, English language derive added value because it is the language of most Nigerian school textbooks and also the legitimate language of business in the country. Researchers have found that proficiency in English language correlates highly with educational achievement as well as several other professional activities (Fakeye and Ogunsiji, 2009; Aina, Ogundele and Olanipekun, 2013). Aina et Al. 2013 had found that English language proficiency correlates highly with academic achievement of higher education students. These authors observed that proficiency in English language has been linked to high level performance in various higher education and professional activities and therefore suggested that English language should be better taught in schools. Although all the researches cited above used samples of school children from secondary schools, the problems of poor English language comprehension, proficiency and usage emanate from the nursery level, through the primary classes to the secondary school level (Iroegbu, 2012).

Other researchers had blamed poor level of achievement in public examinations by Nigerian students, on their poor mastery of English language arising from limited comprehension, poor vocabulary and structural forms (Ojerinde, 2011; Ezeokoli, and Onyekwere, 2012).

Aina et al. (2013) blamed the prevailing poor level of school achievement among Nigerian primary and secondary school leavers on the poor English language facility of practicing school teachers. These researchers are of the view that the teaching strategies employed by the teachers are not effective and that most practicing English language teachers lack adequate content knowledge to teach the subject profitably. It appears that the learners and their teachers constitute a significant group that require special treatment in order to reverse the ugly trend of Poor English language achievement both at the school level and in public examinations (Iroegbu, 2014). It is not practicable to send all practicing English language teachers back to school at this time, but immediate attention ought to be directed at enabling the early learners at preschool and basic levels of education to benefit from instruction by adequately equipping teacher trainees with sufficient content knowledge and teaching skills before they graduate from training. It is therefore necessary that a workable intervention should be identified and introduced so that the stigma of poor achievers may be removed from the characteristics of Nigerian school children.

The teachers of young pupils must be qualified to teach the content that they are employed to teach and they must use effective teaching strategies to teach their subjects. The learners on the other hand must be trained to adopt developmentally appropriate learning styles that involve them in practicing and using their learning in day to day interactions with others (Iroegbu, 2014). Although these researchers have not indicted the age at which children go to school, it appears that the confusion these little children are exposed to by ill prepared language teachers at the beginning and basic levels of education; tend to follow them through secondary school and beyond. This factor might be contributing significantly to the English language problems of Nigerian school children. The need appears to arise for teachers to adopt developmentally appropriate teaching strategies for teaching children at various levels of formal education, instead of employing the boring strategy of lecture method or “teacher talk” for early childhood and basic level learners.

Some other scholars have argued that the teacher factor contributes highly to students’ poor achievement in English language generally, and to poor achievement in public examinations in other subjects involving the medium of English language (Fakeye and Ogunsiji, 2009; El-Oman, 2016). Fakeye and Ogunsiji (2009) correlated academic achievement with English language proficiency and obtained a high and significant correlation. They argued that if the teachers could improve on their teaching by adopting more modern and effective strategies that improved language proficiency will be achieved and higher achievement levels in public examination will be obtained. Iroegbu (2014) has reasoned similarly. It is apparent that Nigerian teachers of the English language are not performing optimally and again, they are not deploying current and effective language teaching strategies in doing their teaching. A strategy change is therefore needed at this time. Since it is not easy for practicing teachers to change the old teaching strategies they learnt at school, it may be more profitable to adopt periodic retraining to achieve the desired strategy change.

Further still, the mere location of a school, some of the time, plays important role in affording learners the opportunity required to master or comprehend what they are taught in school. For example, urban locations afford urban children greater chances of experiencing city life more than the children who live in rural villages. On the other hand, rural locations afford rural children greater opportunity of experiencing nature more than children who dwell in cities. It is also probable that children in urban schools will have greater opportunities or situations for expressive use of language than their rural counter parts. Isiugo-Abanihe and Labo-Popoola (2004) and Ovute (2015) had found that variables such as school location and type of school influence to a considerable extent learning outcomes in English language. This finding was corroborated by Owoye and Yara, (2011), who obtained location effects on students’ achievement at the Senior School Certificate Examinations of the West African School Certificate Examination Council in Ekiti State, Nigeria. These researchers had found that students in urban school performed better than their rural schools’ counterparts. El-Oman 2016 had found that students who use English language outside the school achieve better academic scores than those who use it only at school. El-Oman’s finding is an indication that English language learners ought to be encouraged to use the medium more regularly, in speaking, writing and reading. More regular usage of the language will assist learners to improve their English language proficiency (Fakeye and Ogunsiji, 2009).

In addition, Nakpodia (2011) and Civil Society Coalition on Education for All (CSCEFA) (2013) had found that rural schools tend to have less teaching materials and qualified teachers, functional laboratory facilities and fewer full-time counselors than urban schools. For this reason of shortages in teaching staff in rural schools, teachers in rural schools teach higher number of different classes than their urban counterparts.

These authors found that teachers generally prefer to live in cities and urban centers where social amenities are available in greater abundance for doing their work. There is a high probability that the extra teaching load imposed on most rural school teachers might contribute to their level of productivity. The advantages enjoyed by urban or city pupils could be responsible for the achievement differential observed between rural and urban school children. While considering the advantages of urban or city life, one should not forget that there are also distractions of city or urban life which may not be present in rural habitat. The literature reviewed in this study has tended to indicate a need for proper and adequate teacher preparation for the task of English language teaching. The review requires the reexamination of the appropriateness of teacher training programs and adequacy of content and strategy knowledge. These are considered serious problems that must be addressed in order to ameliorate the problem of poor learner achievement in English language. In addition, the use of non-effective teaching strategies to teach English language to young learners needs to be addressed too. What researchers cannot do is to change the location of the schools in order to overcome the problem of poor achievement level ascribed to rural school location. In this intervention study, it is therefore reasonable to investigate the effect of using adequately qualified teachers, who are empowered with age-appropriate teaching strategies, to teach in both urban and rural schools and then compare obtained learning outcomes.

1.2 Statement of the Problem

Nigerian children had been found to be deficient in their written and spoken English language. Their low proficiency in English language has been attributed to lack of comprehension, poor structural forms, and poor disposition to reading and very limited good examples for the children to follow, both in and out of school. The problem of this study therefore was to investigate the effect of active learning instructional strategy and school location on the achievement of early English language learners in English language at the basic three level of school education.

1.3 Research Questions

The following three research questions were posed to guide the development of this study:

- I. Does the strategy employed in teaching affect the achievement of basic education children in English language?
- II. Does school location affect the achievement of basic education children in English language?
- III. Is there a significant interaction between teaching strategy and school location for achievement in English language?

2. Method of the Study

This study was a quasi-experiment that utilized pretest, posttest control group design in investigating the effect of teaching strategy and school location, on the achievement of basic level school children in English language. A purposive sample of 300 basic three school children, with equal gender representation were purposively selected from six equivalent basic schools, three from urban and three from peri-urban locations for the study. Three treatment conditions adopted for the study were: active modeling strategy; picture –story reading strategy, and conventional teaching strategy. The three treatment conditions were randomized for the three schools in each location, such that one school in urban and one school in peri-urban locations belonged to one treatment condition.

2.1 Active Modeling Strategy

This group adopted a novel teaching strategy of modeling instruction in both urban and peri-urban schools, involving active learner participation. The children (boys and girls) in each class followed the example of the expert teacher in their speaking, reading and writing in a whole language situation. The children used newspapers, story books, advertisements, teachers' handouts, extracts from books, magazines and other media to study English language. They kept class journal and submitted hand written short story on selected topics or events each week.

2.2 Picture Reading Strategy

A second study group which had two schools, one in urban and the other in peri-urban environment were taught their English language with the help of picture story reading books. The teacher first led the class to study the picture story, and then asked the children to tell the story in the picture series. They were made to watch short video clips, and other recorded events periodically as focus events for learning English. After reading, they wrote brief summaries about what they read or observed, following their teacher's questions.

They also studied English grammar which was based on the content of their reading material and their verbal outputs. New words and phrases encountered each day were recorded in the children's class dairies and used to construct sentences. Reading, writing, speaking and grammar were taught together for this group.

2.3 Conventional Teaching Strategy

A third study condition which was adopted in a different set of equivalent urban and peri-urban schools was the conventional teaching strategy of teaching grammar, reading, essay and literature in English differently. The teacher in this group taught the classes English language, English literature and grammar separately at different scheduled times as practiced in most state schools. The children were given weekly assignment in one or more aspects of the lessons for the week. Reading, writing and grammar assignments were taken from set books for the class level.

Under each of the three treatment conditions, university graduate English education teachers were trained to implement the teaching strategy at both urban and peri-urban schools. Six teachers were trained, two for each strategy, but only one teacher was finally selected for each treatment condition based on the result of inter rater agreement by three education specialists. The study lasted eight weeks and the last day of the eighth week was used for assessment. All the children in the selected class levels took part in the lessons, but only those who attended all classes and completed all tests were selected for analysis.

2.4 Instrument

The instrument used for data collection was a researcher constructed English Language Assessment Test (ELAT). The instrument was a multiple choice objective test having 40 items. Each item had four options with only one correct option per item. The test retest reliability of the instrument is .78. The pretest was a revised version of ELAT with only 25 items and it was administered on the first day of treatment. The information collected from the pretest bio-data were used to monitor pupils' attendance and progress throughout the study. The posttest lasted forty minutes and was administered by the researcher and research assistants on the last day of the study. Correct response to an item attracted one mark.

3. Method of Data Analysis

The data collected from this study were analyzed by computing mean scores and analysis of covariance.

4. Results

The results for this experiment are presented on the basis of the order of research questions. The descriptive statistics of English language achievement for treatment groups and location are presented first. The descriptive statistics are presented in.

Table: 4. 1: Descriptive Statistics of Achievement Mean Scores by Treatment Groups and Location.

| Strategy | Sch. Location | Mean | Std. Dev. | Number of cases |
|------------------------|---------------|---------|-----------|-----------------|
| Modeling | Urban | 19.6200 | 4.0147 | 50 |
| | Peri-Urban | 22.4400 | 3.2461 | 50 |
| | Total | 21.0300 | 3.8988 | 100 |
| Picture reading | Urban | 15.1600 | 4.9913 | 50 |
| | Peri-Urban | 12.9800 | 4.312 | 50 |
| | Total | 14.0700 | 4.7679 | 100 |
| Conventional | Urban | 13.9400 | 3.9144 | 50 |
| | Peri-Urban | 18.4800 | 4.5096 | 50 |
| | Total | 16.2100 | 4.7806 | 100 |
| Total | Urban | 16.2400 | 4.9530 | 150 |
| | Peri-Urban | 17.9667 | 5.6049 | 150 |
| | Total | 17.1033 | 5.3505 | 300 |

Table: 4.1 data show that English language achievement mean scores varied between strategies of teaching and also between school locations. In order to find out the significance of the observed mean score differences, the English language scores of the pupils were subjected to the analysis of variance, using pretest scores as covariates.

Table: 4. 2: Analysis of English Language Post Test Scores According to Treatment Groups and Location, Using Pretest Scores as Covariates.

| Source of Variation | Type III sum of sq. | DF. | Mean sq. | F | Sig. |
|---------------------|-----------------------|-----|----------|---------|------|
| Corrected Model | 3557.188 ^a | 6 | 592.865 | 34.724 | .000 |
| Intercept | 9814.498 | 1 | 9814.498 | 574.829 | .000 |
| Pretest | 182.491 | 1 | 182.491 | 10.688 | .001 |
| Strategy | 1992.744 | 2 | 996.372 | 58.357 | .000 |
| Location | 199.927 | 1 | 199.927 | 11.710 | .001 |
| Strategy X Location | 668.300 | 2 | 334.150 | 19.571 | .000 |
| Error | 5002.609 | 293 | 17.074 | | |
| Total | 96317.000 | 300 | | | |
| Corrected total | 8559.797 | 299 | | | |

$$a = R^2 = .416; (\text{adjusted } R^2 = .404)$$

Research Question 1.3.i: Does the strategy employed in teaching English language affect the achievement of basic education children in English language? The data in Table: 4.2 reveals that the strategy of teaching affected pupils' achievement in English language significantly: [$F_{(2, 299)} = 58.357; p < .05$]. The strategy of teaching is therefore a significant factor in the achievement of basic education level pupils in English language. In order to find out the treatment groups that differed significantly in their mean achievement scores, the treatment groups mean achievement scores were compared in pairs.

Table: 4.3 Comparison of English language achievements means scores of treatment groups.

| (I) Strategy of Instruction | (J) Strategy of Instruction | Mean difference I – J | Standard error | Sig. |
|-------------------------------|-------------------------------|-----------------------|----------------|------|
| Modeling | Picture books | 6.522* | .601 | .000 |
| | Conventional | 3.787* | .665 | .000 |
| Picture reading | Modeling | -6.522* | .601 | .000 |
| | Conventional | -2.736* | .611 | .000 |
| Conventional | Modeling | -3.787* | .665 | .000 |
| | Picture books | 2.736* | .611 | .000 |

*= the mean difference is significant at $p < .05$

The data in Table: 4.3 show that modeling strategy was significantly better than picture book reading strategy and also significantly better than conventional strategy in promoting the achievement of the children in English language. Conventional teaching was significantly better than picture book reading strategy in promoting the achievement of pupils in English language. Picture book reading strategy was therefore significantly less effective than either modeling strategy or conventional strategy in this experiment. The order of increasing significant effect is: Picture book strategy < Conventional strategy < Modeling strategy.

Research question 1.3.ii: Does school location affect the achievement of basic education children in English language?

The answer to this research question is contained in the data on Table: 4. 2. The data on the table show that school location significantly influenced the achievement of basic education children in English language: [$F_{(1, 299)} = 11.710; p < .05$]. Since there were only two school locations involved in this study (urban and peri urban), the need for pair- wise comparison of mean scores has been reduced to examining the location mean achievement scores for the two locations. Since location effect is significant, the location that produced the higher achievement mean score is significantly more enhancing for English language achievement.

Table: 4.1 shows that urban location produced a mean achievement score of 16.24, with a standard deviation of 4.953; while peri urban location produced a mean score of 17.97, with a standard deviation of 5.35. It therefore implies that peri urban location is significantly better than urban location in enhancing English language achievement in this study.

Research question 1.3iii: Is two-way interaction between teaching strategy and school location significant for the achievement of pupils in English language?

The answer to this research question is contained in the data in Table: 4. 2. The data contained in the table reveals that there is a significant interaction between strategy of teaching and school location in the pupils' achievement in English language: [$F_{(2,299)} = 19.571$; $p < .05$]. Since there is strategy X location interaction, line graphs of mean achievement scores at each location for the different strategies are drawn to disentangle the interactions.

Fig 1: Graph of Strategy X Location Interaction for English Language Achievement.

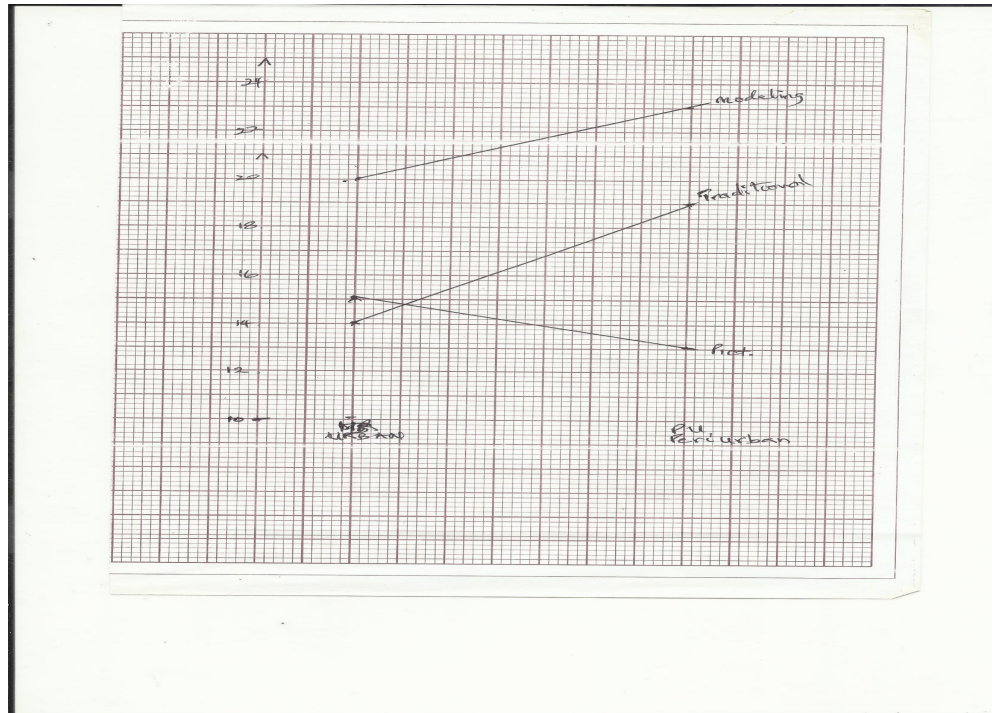


Fig. 1: Graph of strategy X location interaction for English language achievement. The interaction of strategy of instruction and school location as shown in Figure 1 is disordinal in nature. This is to say that the three strategies in this experiment were dissimilar in their effects. While modeling strategy was most enhancing in every location in this study, producing strategy mean scores of 19.62 marks and 22.4 marks in urban and peri – urban environments respectively, Picture reading strategy and the traditional teaching strategy produced dissimilar effects as depicted in the interaction graph in Figure 1.

Picture books reading strategy was more effective than traditional strategy at urban location, producing strategy mean scores of 15.16 and 13.94 marks at urban and peri - urban centers respectively. At peri urban schools, picture reading strategy proved to be much less effective than traditional strategy, with picture reading depressing strategy mean achievement to 12.98 marks; while traditional strategy enhanced strategy mean score to 18.48 marks.

The effects of the three strategies of instruction may be seen to be markedly different if the slopes or gradient of strategy effect straight line joining urban mean achievement score position to peri urban mean score position in the graphs are examined: Modeling strategy produced a slope of 0.43; Picture reading strategy produced a negative slope of -0.29; and the traditional strategy produced a positive slope of 0.71. The dissimilar values of these slopes for the line graphs, give credence to the disordinal nature of the interaction graphs.

5. Discussion

This study was mounted as an intervention experiment with the hope raising the level of achievement scores above what is currently obtainable with traditional instructional technique in Nigerian primary schools. It was found that the strategy of teaching affected English language achievement of pupils in this study. Modeling instructional strategy produced the most outstanding effect and was particularly more enhancing of pupils' achievement in both urban and peri - urban locations.

This result is a pointer to the possibility that modeling instructional strategy could be employed to teach children at the basic level of education with the hope of obtaining improved achievements. The traditional strategy of lecture method was not as good as modeling but could be used to produce acceptable results, if the strategy is implemented by adequately trained and qualified motivated graduate teachers who are equipped with sufficient levels of strategic knowledge. This submission is supported by the works of Rubin, (2011), Fakeye and Ogunsiji, (2009) and Isiugo-Abanihe and Labo-Popoola, (2004). All the teachers used for implementing the strategies were graduate education teachers who majored in English. Even when all the teachers used for this study had equivalent qualification and teaching experience and was similarly prepared to implement the strategies, picture reading strategy depressed the mean achievement of peri-urban pupils below the mean achievement of their urban counterparts. This particular effect differed considerably from what obtained for the other two strategies. Picture reading strategy as implemented in this study was not very helpful in enhancing pupils' achievement in English language. The strategy needs to be tried with other pupils and in other schools in order to identify causes of this observed effect and then modified for improved results.

The location of schools has proved to be an important variable that affected the achievement of pupils in this study. The result is similar to that documented by Isiugo-Abanihe and Labo-Popoola, (2004). It is therefore needful that teachers of young children should bear in mind that the location of their school confers some learning advantages and disadvantages on children at their school. They should therefore endeavour to minimize adverse effects and maximize advantageous conditions for greater impactful learning. The interaction of teaching strategy with school location in this study is a pointer to teachers to bear in mind the possibilities that may be consequent upon their school teaching.

5.1 Conclusion

This study has shown that modeling strategy could be used in school teaching at the basic education level. The study has also demonstrated that modeling could produce improved achievement level, higher than what is obtainable with the traditional method of teaching. Teachers may therefore use modeling as an effective alternative to the traditional technique of lecture method which is considered to be over 2000 years old. Although the traditional strategy is considered very old, it proved to be more facilitating than picture reading in enhancing the level of achievement of peri-urban pupils. Basic level teachers should therefore consider the advantages and disadvantages of the teaching strategy they hope to use.

5.2 Recommendation

Based on the results of this study, It is recommended that basic level education teacher in Nigeria should adopt modeling teaching as an alternative to the traditional teaching technique in order to obtain improved achievement levels in English language. The teachers should also bear in mind that school location may influence the level of achievement of the children in English language. They should also realize that their teaching strategies may not produce the same effect at different school locations. This researcher therefore call for further research with the variables of this study; and replication of the study at other locations if possible.

References

- Aina, J. K., Ogundele, A. G., & Olanipekun, S. S. (2013). Students' proficiency in English language; relationship with academic performance in science and technical education. *American Journal of Educational Research*, Vol.1, No.9; pp. 355 – 358. Retrieved, April, 6, 2017 from: doi: 10.12691/education-1-9-2.
- Civil Society Action Coalition of Education for All (CSACEFA) (2013): Every child needs a teacher. Retrieved on 28 October, 2013 from: <http://www.vsointernational.org/images/vso-nigeria-csacefa-kwara-every-child-needs-a-teacher-research-report-2013tcm76-39158.pdf>.
- El – Oman, A. H. (2016) Factors affecting students' achievement in English language learning; *Journal of Education and Social Research MCSER Publication, Rome, Italy*, Vol. 6 No. 2, Pdf 9143-35524 PB_2.pdf.
- Ezeokoli, F. N., & Onyekwere, G. C. (2012) Evaluation of the level of implementation of Nigeria's language policy in primary schools in Niger State, Nigeria; *West African Journal of Education (WAJE)* Vol. 32; pp. 142 – 156.
- Fakeye, D. O. & Ogunsiji, Y. (2009) English language proficiency as a predictor of academic achievement among EFL students in Nigeria; *European Journal of Scientific Research* vol. 37, No. 1; pp 490 –495.
- Iroegbu, V. I. (2014) Whole language strategies as catalyst to development of reading culture and skills among Nigerian school children: Literacy and Reading in Nigeria; *A Journal of the Reading Association of Nigeria (RAN)*, Vol. 15 No. 2, pp93 – 100.
- Iroegbu, V. I. (2012) Exploring serial picture and direct word reading strategies on comprehension abilities of primary school children in English language; *KIU Journal of Education*, Vol. 6, pp89 - 99.
- Isiugo-Abanihe, I. M., & Labo-Popoola, O. S. (2004) School type and location as environmental factors in learning English as a second language; *West African Journal of Education*, Vol. 24 (1), pp. 55 – 63
- Nakpodia, E. D. (2011) Philosophy as a tool for sustainable development: a contemporary issue in Nigeria educational system; *African Journal of Social Sciences (IJRASS)*, Vol. 1, No. 1; pp 333 - 340.
- Ojerinde, D. (2011) *Contemporary Issues in Nigeria*; India: Melrose Books and Publishing Ltd.
- Ovute, A. O. (2015) Meta-Analysis of research on influence of school location on students' achievement in mathematics; *American-Eurasian Journal of Scientific Research*, Vol. 10, No. 1; pp. 18 – 21. Doi: 10.5829/idosi.aejr.2015.10.1144.
- Owoeye, J. S., & Yara, P. O. (2011) School location and academic achievement of secondary school agriculture science in Ekiti State Nigeria; *Asian Social Science* Vol. 7 No. 4, pp. 64 - 74.
- Rubin, J. (2011). A review of second language listening comprehension research; *The Modern Language Journal*, Vol. 78, Issue 2, pp 199 – 221.