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TEACHER VARIABLES AS DETERMINANTS OF MATHEMAGENIC BEHAVIOUR IN READING COMPREHENSION INSTRUCTION IN OGBOMOSO, NIGERIA

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Abstract

Reading is an indispensable tool through which a student can achieve a good academic pursuit and the teacher is a significant figure in achieving this through effective teaching. For a teacher to be effective and efficient at teaching, he needs to carefully plan, logically implement and evaluate adequately for feedback since it has been confirmed by language scholars that students are no more reading as they should. This study, however, examined the variable of teachers on their mathemagenic behaviour in reading comprehension instruction in Ogbomoso, Nigeria. The study is a descriptive survey of cross-sectional type and the population was all the senior secondary schools English language teacher, in both public and private schools, as well as urban and rural schools. Both quantitative and qualitative data were used to collect data from the sample. The research question was answered using the mean and standard deviation. Questions 2, 3, 5 and 6 with their corresponding hypotheses were tested using the t-test statistical method. One way ANOVA was used to test Research Question three together with the corresponding hypothesis at 0.5 level of significance. The study concluded that the sample did employ mathemagenic strategy in reading comprehension instructions. Also, Teacher Variables such as gender, educational qualification, teaching experience and school proprietorship did not pose any significant difference in the teachers' mathemagenic behaviour but that of the school location did. It was thereafter recommended that, teachers in rural areas should buckle up as their counterparts in the urban areas by employing the needed strategies in the reading comprehension instruction so as to bridge the gap in the performances of students in the rural and urban schools.

Keywords: Teacher Variables, Mathemagenic behaviour, Reading comprehension and Instruction.

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صفات المعلم كمحددات للسلوك الرياضياتي في تعليمات مادة الاستيعاب في أوغبوموسو، نيجيريا

أوييغوكي تئوو أديوالي أول رحيم أديبيو بللويقين

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الملخص

القراءة هي أداة لا غنى عنها يمكن للطالب عبرها تحقيق مسعى أكاديمي جيد والمعلم هو شخصية مهمة في تحقيق ذلك عبر التدريس الفعال. لكي يكون المعلم فعالاً وفعالاً في التدريس ، يحتاج إلى التخطيط بعناية والتنفيذ المنطقي والتقييم بشكل مناسب للحصول على التغذية الراجعة حيث أكد علماء اللغة أن الطلاب لم يعودوا يقرؤون كما ينبغي. ومع ذلك، فقد اختبرت هذه الدراسة متغير المعلمين في سلوكهم الرياضي في تعليم القراءة والفهم في أوغبوموسو، نيجيريا. الدراسة عبارة عن مسح وصفي للنوع المقطعي وكان السكان جميعهم مدرس اللغة الإنجليزية في المدارس الثانوية الثانوية ، في كل من المدارس العامة والخاصة ، وكذلك المدارس الحضرية والريفية. تم استخدام كل من البيانات الكمية والنوعية لجمع البيانات من العينة. تمت الإجابة على سؤال البحث باستخدام المتوسط والانحراف المعياري. تم استخدام الختبار سؤال البحث الثالث مع الفرضية المقابلة عند مستوى 0.5 من الأهمية. وخلصت الدراسة إلى أن العينة استخدمت إستراتيجية الرياضيات في تعليمات الفهم القرائي. أيضنا ، لم تشكل متغيرات المعلم مثل الجنس والمؤهلات التعليمية وخبرة التدريس وملكية المدرسة أي فرق كبير في السلوك الرياضي للمعلمين ولكن في المناطق الريفية بالتخل مثل نظرائهم في المناطق الحضرية عبر استخدام الاستراتيجيات اللازمة في تعليم القراءة والفهم من أجل سد الفجوة في أداء الطلاب في المناطق الحضرية والحضرية.

الكلمات الدالة: متغيرات المعلم ، السلوك الرياضياتي، مادة الاستيعاب.

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Introduction

Reading is an essential tool for academic excellence and life achievement. The success of a student in school is critically dependent on his reading behaviour. Reading plays an important role in education at all levels because it is the basic language skill that cuts across all school disciplines. It is expected that a student should have learnt to read before gaining admission to a secondary school because, what operates at secondary school is reading to learn. Smith and Thomas [1] opined that reading brings about a permanent change in behaviour and upon this, they encouraged schools to ensure that students learn and practice

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it because, it is by this they can use it to learn. The indispensability of reading to human development makes it the most researched among the four language skills namely; listening, speaking, reading and writing [2].

However, language scholars had opined that, reading is not for academic purpose alone. For example, Babatunde [3] discussed that every reading is based upon human needs such as personality development, vocabulary building and to banish boredom. Lawal [4] highlighted that reading has linguistic, educational, didactic therapeutic, aesthetic and heuristic values.

It was observed by Adeniji and Omale [5] that one of the causes of mass failure in various examinations among candidates is their inability to imbibe good reading habits. UBEC [6] pointed out that many Nigerian learners are poor readers from two points: they are slow learners and comprehend less of what is read. According to Akande and Oyedepo [7], many Nigerian school children have poor reading habit which has effect on them when they sit for certificate examinations like West African Senior Secondary School Certificate Examinations (WASSCE) and its equivalent. For instance, the Chief Examiners Report of West African Examination Council [8] lamented that "it is sad that after six years in secondary school, and given a paper that conformed to standard, many of the candidates still performed poorly" (p 12).

The teacher is of considerable importance towards achieving any educational goal and no educational system can rise above the level of its teachers (Federal Republic of Nigeria, [9]. While commenting on the importance of teachers, Mkpa [10] described teachers as the heart and soul of the educational enterprise and the prime mover in the development of optimum condition for learning. Gravoa, Pasa, Labra and Mori [11] elucidated in their description of who a teacher is; they submitted that a teacher is a manager of knowledge, mediator of learning, disciplinarian, socialite, supervisor, model, examiner, leader, second parent, organizer, coach, captain, manager and master of classrooms, potential developer, strategist and nurturer of minds. Lawal [12] Obowo [13] identified the three basic phases an intending successful teaching must cover namely; the planning stage, the implementation stage and the evaluation stage. It goes beyond doubt that if a teacher painstakingly plans, skillfully implements and professionally evaluates for feedback, the teaching is going to be successful in a reading comprehension instruction; and this is what mathemagenic behaviour is all about. Mathemagenic behaviour, simply defined, are those activities of both teacher and students that make teaching objectives achieved.

Statement of the Problem

It is not a secret that students across secondary schools in the United Kingdom [14] and in Nigeria, [7] are falling below the expected reading level for their age. This in turn, makes them fail in their external examinations. As a matter of fact, many studies have been carried out on the variables that enhance effective and efficient learning activities. According to Akiri [15], variables like language of instruction, quality of teachers and students learning

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method are of utmost importance. Other factors that had been identified are teacher related; such as age, sex, attitude, qualification, methodology, school type, among others. Oladej [16] investigates the factors that affected students' performance in English language and identified those of teachers. He therefore concludes that although, the majority of the teachers have a degree in English as a foreign language, their professional practice reflected lack of training, low English level and inappropriate use of pedagogical and technological teaching resources which badly influence learning. Tella [17], Lawal [18] and Orimogunje [19] have conducted researchers about variables and mathemagenic behaviour of teachers, none of them has been able to see the effect of one on the other. This has thus created a research gap that this project is out to fill. Specifically, this study is to find out if teacher variables determine their mathemagenic behaviour in the reading comprehension institution.

Aims of the Study

The study aims to:

- 1. analyse whether teacher variables determine their mathemagenic behaviour in reading comprehension instruction.
- 2. analyse whether gender determines teachers' mathemagenic behaviour in reading comprehension instructions.
- 3. analyse whether qualification determines teachers' mathemagenic behavior in reading comprehension instructions.
- 4. analyse whether teaching experience determines teachers' mathemagenic behavior in reading comprehension instructions.
- 5. analyse whether school location determines teachers' mathemagenic behavior in reading comprehension instructions.
- 6. analyse whether school proprietorship determines teachers' mathemagenic behavior in reading comprehension instructions.

Research Questions

- 1. Which of the teachers' mathemagenic behaviour is the most prevalent?
- 2. What is the influence of teachers' sex on their mathemagenic behaviour in the reading comprehension instruction?
- 3. What is the influence of teachers' qualification on their mathemagenic behaviour in the reading comprehension instruction?
- 4. What is the influence of teachers' teaching experience on their mathemagenic behavior in the reading comprehension instruction?
- 5. What is the influence of school location on the mathemagenic behaviour of teachers in the reading comprehension class?

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6. What is the influence of school proprietorship on the mathemagenic behaviour in the reading comprehension instruction?

Research Hypotheses

Ho_{1:} No significant difference exists in teachers' mathemagenic behaviour in reading comprehension instruction based on gender.

Ho₂: No significant difference exists in the teachers' mathemagenic behaviour in reading comprehension instruction based on qualification.

Ho₃: No significant difference exists in the mathemagenic behaviour of teachers in reading comprehension instruction based on teaching experience.

Ho₄: No significant difference exists in the mathemagenic behaviour of teachers in reading comprehension instruction based on school location.

Ho₅: No significant difference exists in teachers' mathemagenic behaviour in reading comprehension instruction based on school proprietorship.

Methodology

This study is a descriptive survey of cross-sectional type which employed mixed method of quantitative and qualitative research approach in analysing teacher variables as determinants of mathemagenic behaviour in the reading comprehension instruction in Ogbomoso, Oyo State, Nigeria. The target population included all the English Language teachers in the Senior Secondary Schools in both urban and rural areas as well as public and private schools. The random and convenience sampling techniques were used to select a total of sixty-three schools. A total of one hundred and fifty-seven English Language teachers were chosen as the sample for this study.

An adapted version of Lawal's [12] questionnaire was the instrument for this study. Underneath it was the researcher's designed qualitative data which was entitled *Questionnaire on Teacher Variables as Determinants of Mathemagenic Behaviour in Reading Comprehension Instruction (TVDMBRCI)*. It was used to elicit information from the respondents. The first part of the questionnaire contained the demographic information about the respondents. The second part contained items on specific variables of teachers' mathemagenic behaviour in reading comprehension instruction in terms of how often a teacher employs each aspect of this behaviour. Always was rated 4, sometimes was rated 3, occasionally was rated 2, while rarely was rated 1. The mean equation and the Standard Deviation were used to answer research question one while research questions 2,4,5 and 6 with their corresponding hypotheses were tested using the t-test statistical method. One way ANOVA was used to test research question three together with the corresponding hypothesis at 0.5 level of significance. The critical ranges of scores on a four-level scale were used in other to draw inference from the mean score on the research questions. The inference are shown in Table 1:

Table 1: Inferences from the Mean Score

Critical Range	Inference
0.0 - 0.49	Rarely
0.5 - 1.49	Occasionally
1.5 - 2.49	Sometimes
2.5 - 4.00	Always

The research questions were answered using:

Results

Table 2: Demographic Information of the Respondent

Gender Male	70	
Male	70	
Male	70	44.6
	87	55.4
Female	157	100.0
Total		
Educational Qualification		
NCE	34	21.7
BA in English	16	10.2
B A (Ed). in English	87	55.4
MA Ed. in English	11	7.0
MA in English	2	1.3
Others	7	4.5
Total	157	100.0
Qualification		
Qualified	98	62.4
Jnqualified	59	37.6
Total	157	100.0

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	46	29.3
Less Experienced	39	24.8
Experienced	72	45.9
•	157	100.0
Very Experienced		

School Proprietorship		
P 11:	93	59.2
Public	64	40.8
Private	157	100.0
Total		
School location		
TT 1	115	73.2
Urban	42	26.8
Rural	157	100.0
Total		

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Total

Research Question 1

Table 3: Which of the teachers' mathemagenic behaviour is the most prevalent?

S/N	Mathemagenic Behaviour	Mean	Std. D.	Inferred mean	Rank
1	Setting a Purpose for Reading	8.82	2.43	2.94	1 st
2	Treatment of Difficult Words	16.67	1.91	2.78	2 nd
3	Model Oral Reading	5.18	4.55	2.59	3 rd
4	Supplementary Activities	7.03	1.16	2.34	4 th
5	Pre-Reading Assistance	10.88	4.59	2.174	5 th
6	Evaluation Strategies	14.62	1.79	2.09	6 th

Table 3 shows that setting a purpose for reading was the most commonly employed mathemagenic strategy used in teaching reading comprehension. It has the mean score and average mean score of 8.82 and 2.94 respectively. It is followed by Treatment of Difficult Words with the mean score of 16.67 and average mean score of 2, 78. Model Oral Reading ranked third in the mathemagenic behaviour teachers employed in teaching reading comprehension. It has the mean and average mean score of 5.18 and 2.59 respectively. Supplementary Activities ranked fourth in the mathemagenic behaviour of teachers in reading comprehension instruction. It has the mean and average mean score of 7.03 and 2.34 respectively. Pre-Reading Assistance ranked fifth in the mathemagenic behaviour teachers employed in reading comprehension instruction. It has the mean score and average mean score of 10.18 and 2.17 respectively. Evaluation Strategies ranked sixth in the mathemagenic behaviour of teachers in reading comprehension instruction. It has the mean score of 7.03 and average mean score of 2.34. This implied that setting a purpose for reading was the most employed mathemagenic behaviour by teachers in reading comprehension instruction while Supplementary Activities was the least employed.

Hypotheses Testing

Five research hypotheses were formulated for this study. Hypotheses one, two, four and five were tested using the independent t-test statistical technique, while hypothesis three was tested using the One-Way Analysis of Variance (ANOVA), at 0.05 level of significance.

Hypothesis One: No significant difference exists in the male and female teachers' mathemagenic behaviour in reading comprehension instruction.

Table 4:t-test Statistics Showing Difference in the Male and Female Teachers' Mathemagenic Behaviour in Reading Comprehension Instruction

Gender	N	Mean	Std. D	Df	t-value	Sig	Decision
Male	70	64.76	9.29				
				155	1.92	.35	NS
Female	87	61.67	10.47				

^{*}Insignificant @0.05

From Table 4, it can be deduced that no significant difference exists in the male and female teachers' mathemagenic behaviour in reading comprehension instruction. This is reflected in the result: df(155) = 1.92, p > 0.05. Since the calculated Sig. (.35) was greater than 0.05, the hypothesis was accepted. This implies that male and female teachers give similar reading comprehension instructions to their students

Hypothesis Two: There is no significant difference in the qualified and unqualified teachers' mathemagenic behaviour in reading comprehension instruction.

Table 5:t-test Statistics Showing Difference in the Qualified and Unqualified Teachers'

Mathemagenic Behaviour in Reading Comprehension Instruction

Qualification	N	Mean	Std. D	Df	t-value	Sig	Decision
Qualified	98	62.87	10.13				
				155	.31	.76	NS
Unqualified	59	63.37	9.30				

^{*}Insignificant@0.05



From Table 5, it can be deduced that there is no significant difference in the qualified and unqualified teachers' mathemagenic behaviour in reading comprehension instruction. This is reflected in the result: df(155) = 0.31, p > 0.05. Since the calculated Sig. (.76) is greater than 0.05, the hypothesis is accepted. This implies qualified and unqualified teachers give similar reading comprehension lessons to their students

Hypothesis Three: There is no significant difference in the mathemagenic behaviour of very experienced, experienced and less experienced teachers' reading comprehension instruction.

Table 6:One Way ANOVA Showing Difference in the Mathemagenic Behaviour of Very Experienced, Experienced and Less Experienced Teachers' Reading Comprehension Instruction

Experienced	Sum of Squares	Df	Mean Square	F	Sig.	Decision
Between Groups	45.33	2	22.67			
Within Groups	39.287	153	101.90	.22	.801	NS
Total	46.236	155				

^{*}Insignificant@0.05

Table 6 shows that there is no significant difference in the mathemagenic behaviour of very experienced, experienced and less experienced teachers' reading comprehension instruction. This is reflected in the result F (.22), p > 0.05 since calculated sig. (.801) is greater than 0.05. This means that the hypothesis is accepted. This implies that very experienced, experienced and less experienced teachers give similar reading comprehension instruction to their students.

Hypothesis Four: There is no difference in teachers' mathemagenic behaviour in reading comprehension instruction based on school proprietorship.

Table 7: t-test Statistics Showing Difference in the Private and Public Teachers'
Mathemagenic Behaviour in Reading Comprehension Instruction

School	N	Mean	Std.	Df	t-value	Sig	Decision
Proprietorship			D				
Private	64	63.34	10.12				
				155	.296	.434	NS
Public	93	62.86	10.04				

^{*}Insignificant@0.05



Table 7 reveals that there is no significant difference in the private and public teachers' mathemagenic behaviour in reading comprehension instruction. This is reflected in the result: Df (155) t= .296, p> 0.05. Since the calculated Sig. (.434) is greater than 0.05, the hypothesis is retained. This indicates that private and public teachers give similar reading comprehension instruction.

Hypothesis Five: No significant difference exists in the mathemagenic behaviour of teachers in reading comprehension instruction based on school location.

Table 8: t-test Statistics Showing Difference in the Private and Public Teachers'
Mathemagenic Behaviour in Reading Comprehension Instruction

School Location	N	Mean	Std.	Df	t-value	Sig	Decision
			D				
Urban	114	64.03	10.62				
				155	.004	.044	S
Rural	42	60.43	7.81				

*Significant@0.05

From Table 8, it can be deduced that there was a significant difference in the urban and rural teachers' mathemagenic behaviour in reading comprehension instruction in favour of urban school teachers. This is reflected in the result: Df(155) t= .004, p < 0.05. Since the calculated Sig. (.044) is less than 0.05, the hypothesis is rejected. This means that the hypothesis was rejected, an indicative of similar mathemagenic behaviour in reading comprehension instruction by urban and rural teachers.

Discussion of Findings

As regards reading comprehension instruction in senior secondary schools, the results indicated that teachers sometimes or occasionally employed mathemagenic behaviour. The results also revealed that the most commonly employed mathemagenic behaviour by teachers in reading comprehension instruction was "setting a purpose for reading". It has the mean score of 8.82 and highest average mean score of 2.94. This made it to rank first over other behaviours which were scored in the following order: "Treatment of Difficult Words", "Model Oral Reading", "Supplementary Activities", 'Pre-reading Assistance" and 'Evaluation Strategies". This finding was in line with the postulation of Cox [20] that setting a purpose for reading is needful in reading comprehension instruction because it makes the readers fix both the eye and the mind intently on what is being read as they search for certain information prescribed by the instructor or demanded by the author. Setting a purpose for reading makes readers gain more from the text.

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Additionally, the findings revealed that gender was not a differential factor that determined teacher's mathemagenic behaviour. This result supported those of Adebileje [21] and Kareem [22] who had earlier concluded that teachers' gender did not have any influence on lesson delivery. Furthermore, the outcome of the study pointed out that teachers' qualifications did not show any significant difference in the mathemagenic behaviour of both qualified and unqualified teachers of English Language. In other words, both qualified and unqualified teachers employed mathemagenic strategy adequately in the reading comprehension instruction. This negated the earlier postulation of Hanushek [23] that a dedicated qualified teacher can be effective in the job as those certified. Moreover, the study revealed that there was no significant difference in the mathemagenic behaviour of the very experienced, experienced and less experienced teachers in reading comprehension instruction. This corroborated those of Joshua [24] and Tella [17] that very well-prepared or certified beginning teachers are as highly effective in teaching as senior teachers. From the study also, it was concluded that no significant difference existed in the mathemagenic behaviour of teachers in government and private schools when it comes to reading comprehension instruction. This means that teachers who taught in private schools employed mathemagenic behaviour adequately as their peers in the government service.

However, there was highly significant difference in the practice of mathemagenic behaviour of teachers in the urban and rural school. The study concluded that teachers in urban schools employed mathemagenic behaviour more adequately than their peers in the rural schools.

Conclusion

Findings from this study showed that teacher variables do not determine their mathemagenic behaviour in reading comprehension instructions. Apart from the mathemagenic strategy, the qualitative data revealed that teachers employed certain mathemagenic strategies in the "Pre-reading Assistance", "Model Oral Reading", "Treatment and Difficult words", Setting a Purpose for Reading, 'Evaluation Strategies" and "Supplementary Activities".

Recommendation

Arising from the findings of this study, the following recommendations are proffered:

- 1. Teachers should adequately plan, carefully implement and strategically evaluate their reading comprehension lessons.
- 2. Students should be ready to participate maximally in both silent and reading aloud. They should participate fully in evaluation and supplementary activities as may be given by the teacher.
- 3. Enough comprehension passages from various fields should be in each publisher's books. Author's note that would serve as pre-reading assistance should be included while questions to evaluate should be set in cognitive hierarchy.

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References

- [1] Smith, M. & Thomas, L. (1994). Reading to Learn. London: Methuel.
- [2] Dean, G. (2000). *Teaching reading in senior secondary Schools*. Great Britain: David Fulton Publishers.
- [3] Babatunde, S.T. (1996). Extensive reading for MESTA students. In E. Adegbija & A. Ofuya (eds), *English Language and Communication skills for MESTA Students*. Nigeria, University of Ilorin.81-88.
- [4] Lawal, R.A.(2005). Cultivating the culture of reading in Nigeria. Distinguished Lecture series; University of Ilorin, Ilorin, Nigeria.
- [5] Adeniji, M.A.& Omale O.A. (2010). Teaching reading comprehension in selected primary schools in Oyo State, Nigeria. Library philosophy. Retrieved from http://www.webpases.uidaho.edw/mbolin/adeniji.omalehtm- on 26th July, 2016.
- [6] Universal Basic Education Commission (2010). Manual on phonics and oral English. (Unpublished mimeograph).
- [7] Akande, S.O. & Oyedapo, R.O. (2018). Developing the reading habits of secondary school students in Nigeria: The way forward. *Scientific and academic publishing:* 1-6.
- [8] West African Examination Council (2005). Chief Examiners' Reports on English Language. Nigeria: Yaba.
- [9] National Policy on Education (NPE). (2013). *National education policy* (6th Edition). https://educatetolead.files.wordpress.com/2016/02/national-education-policy-2013.pdf
- [10] Mkpa, M.A. (2002). The teacher preparation for successful UBE in Nigeria. *In the Nigeria Searchlight on Senior Secondary education. Research papers from ANCORPS*. Ado Ekiti: Bombaboyer and Co Publications.
- [11] Gravoa, R.S., Pasa, A.E, Labra, J.B, Mori, T.(2008). Design and use of instructional materials for student-centred learning: a case in learning ecological concepts: *the Asio Pacific Education Research*, 17, 109-120
- [12] Lawal, R.A. (1994). Mathemagenic behaviour in Nigerian reading comprehension class: *A paper presented at the 6th Biennial conference of the Reading Association of Nigeria(RAN)*. University of Ilorin, 23-25 November, 1994
- [13] Obowo, E. C. (2015). Relationship between teachers' character and senior secondary school students' performance in English, Imo, Nigeria. (Unpublished M.Ed Project). University of Ilorin, Ilorin, Nigeria.
- [14] Quezada, P.A. (2018).Teacher-student factors in teaching EFL. Iberian conference on information system and technologies. Retrieved from http://aduick.g.doubleclick.net/pcs/click on 16th Jan, 2018.
- [15] Akiri, A.A. (2009) Teachers effectiveness and students' academic performance in public secondary schools in Delta state, Nigeria. *Study home communication science*, 3,107-113
- [16] Oladejo, T.S. (1991). The relationship between resource use and productivity in secondary school students' performance in Oyo State, Nigeria. (Unpublished M.Ed Project). University of Ibadan, Ibadan, Nigeria.

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- [17] Tella, A. (2004): Teacher variables as predictors of academic achievement of primary school Pupils in Mathematics. International Electronic Journal of Elementary Education, 16-23.
- [18] Lawal, R.A.(2004) Meaning Without Mean-ness: An Inaugural Lecture. University of Ilorin, Nigeria.
- [19] Orimogunje, T.O. (2012). Effects of mathemagenic activities and the learning of chemistry by secondary school students in Ondo State, Nigeria. IOSR Journal of Humanities and Social Sciences (IOSR-JHSS), 8, 3, ISSN 2279 0845:10-14.
- [20] Cox, J. (2017). Note taking in non-academic settings: A review. *Applied Cognitive Psychology*, 16, 559 574.
- [21] Adebileje, A.O.(1995). *Influence of sex-role perception on literature-in-English*. (Unpublished M.Ed Thesis). University of Ilorin, Ilorin, Nigeria.
- [22] Kareem B.S. (2001). Comparative influence of selected textbooks on secondary school students' performance in English language. (Unpublished M.Ed. project) University of Ilorin, Ilorin, Nigeria.
- [23] Hanushek, E.A.(1997). Assessing the effects of school resources on students performance: an update educational evaluation and policy analysis, 19, 2, 141-164.
- [24] Joshua, S.A. (2005). Models of reading comprehension for elementary school students. Downloaded from www.brainbetty.com on 5th July,2017.