Effects Of Neurological Bimodal Teaching Approach (NBTA) On Learner Achievement In English Language In County Public Secondary Schools In Kericho County, Kenya

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Abstract: In Kenya, English is the language of instruction in schools as well as one of the official languages. Despite this, the performance of students in the subject at the secondary school level has not been satisfactory. This may be attributed to traditional instructional methods used in the teaching of the subject. An effective instructional method is critical for learner motivation which leads to higher achievement scores in a subject of study. The Neurological Bimodal teaching approach which entails the use and adaptation of current knowledge about the functionality of the human brain to the teaching of a second language has been used elsewhere with promising results.

This study investigated the effects on learner achievement when Neurological Bimodal Teaching Approach is utilized in English language teaching and learning at the secondary school level. The study was guided by Danesi's (1987) Neurological Bimodal Teaching Approach to language acquisition. A quasi-experimental research design, the Solomon-Four-non-equivalent Group design was used. The study focused on creative composition writing. The target population for the study was 1080 Form Two secondary school learners. Purposive sampling was used to select the four schools for the study, all co-educational. An accessible population of 184 Form Two students was involved. Piloting of the instruments was carried out to find out the content validity of the items. The reliability coefficient of 0.7 and above was established for the instruments for acceptance. Data was analyzed using t-test, one-way ANOVA, ANCOVA, and Pearson correlation coefficient. The level of significance for acceptance and rejection of the hypothesis was determined at $\alpha = 0.05$. The findings of the study indicated that NBTA promoted learner achievement in English language learning more than the conventional teaching approaches. The findings of the study may lead to well- informed decision making at all levels of education planning and development of the curriculum, instructional materials for language education; making decisions on the training of teachers; and making choices for classroom teaching activities and techniques.

Keywords: Neurological, Bimodal, R-mode, L-mode

I. INTRODUCTION

English is one of the languages that enjoy a wide global spread. Barski (2013) reports that according to a study conducted by the Summer Institute for Linguistics in 1999, 27% of the world population speaks the English language in more than 60 countries across the globe, making it one of the most widely spread languages on earth. Barski further observes that people doing business across the globe communicate primarily in English. Manu (2011) states that the English language is the de facto national language of India, a country that is one of the most expansive and densely populated in the world. UNESCO (2010) lists twenty-four African countries as having adopted English as an official language.

English language has played a central role in Kenya's social, political, economic and academic life since its introduction to the country by the British colonialists towards

the beginning of the 19th century. It has since been taught to Kenyan students at all levels of education as a second language. The Constitution of Kenya (2010) recognizes the English language as an official language in the country together with Kiswahili. The Kenya Institute of Education (KIE) syllabus (2002) documents English language as one of the three compulsory subjects taught and examined by the Kenya National Examination Council (KNEC) at both primary and secondary schools. All subjects in the Kenyan curriculum, except Kiswahili, are taught in the English language. It is not in doubt, therefore, that performance in other subjects can be negatively or positively affected by a student's mastery of the English language. Consequently, a good achievement in the English language may positively affect achievement in other subjects. At both the national and local levels in Kenya, achievement in the English language, like in the other two compulsory subjects (Mathematics and Kiswahili), is of key interest to the government as well as to other stakeholders, including educationists and linguists.

Although the English language is an important subject, many students do not perform well in it in national examinations in Kenya. Various reports by KNEC on the performance of candidates in the English language paper up to as late as the year 2014 indicate unsatisfactory achievement by learners. A KNEC report of the year 2015 shows unsatisfactory performance in the language with a pass rate of 38.84%. Any attempt to bring about a positive turn around on learner achievement would be welcome since traditional methodologies of teaching the English language have not produced satisfactory results. Neurological Bimodal teaching approach (NBTA) is one of the new methods of teaching which has been refined from extensive scientific research on human behaviour and learning (Danesi, 1987. It is a teaching method whose strategies are designed to appeal to both brain hemispheres of the learner for wholesome and effective language learning. There is a possibility that the perpetual unsatisfactory performance in the English language is contributed to by teachers' inadequate appeal to the two cerebral hemispheres of their learners.

Researches across Kenya confirm unsatisfactory performance in the English language. Investigating the influence of teaching methods on students' achievement in KCSE English in public secondary schools in Kasipul Division, Rachuonyo South District, Kenya, Ogweno (2010) found that text book reading, demonstration and homework assignments were the most used methods. This resulted in low learner achievement in English language. The investigation also revealed that the methods most used by the teachers were not the most liked by the learners. The study also found out that teachers who were highly experienced were identified by the methods which had more activities and that allowed teacher-learner interaction. The study noted that teachers who utilized methods with hands-on had better results from their students. On their part, Nuessel and Cicogna (1991) note that a wide range of learning activities during a regular classroom period is recommended for better language achievement. Wright (2000) also notes that diversification activities would range from L-mode (Left hemisphere of the brain) structural exercises to R-mode (Right hemisphere of the brain) problem solving activities. Young and Danesi (2001) state that the R-mode activities must be used during the initial learning stages when new input needs to be assimilated. These R-mode activities include observation, induction, role-playing, simulation, oral tasks, and various kinds of interactive activities. L-Mode procedures must follow these stages, since it has been found that control of structure does not emerge spontaneously. Some L-mode activities include formal explanations and drills.

Researching on factors affecting performance in the Kenya Certificate of Secondary Education (KCSE) English language examinations in Nyamache Division, Gucha District, Kenya Ouma (2010) found that teachers used methods of teaching which were seemingly focused on achieving lower level cognitive objectives. For example, 79.4% used the lecture method of teaching. The study further revealed that lack of teaching and learning materials resulted into poor performance in English language. For example, 64.7% of teachers argued that they did not have teachers' reference books and guides. Additionally, a majority of the teachers (85.3%) and 73.6% of students reported that they had inadequate audio resources while 91.2% of the teachers and 73.6% students observed that they had inadequate visual resources. Schiffler (2002) notes that pedagogical researches on foreign language learning recommend mental visualization, learning with gestures, and learning with relaxation. Borsook, Higginbotham and Wheat (1992) agree with this by arguing that the more sensory modes in which mental representation is stored by students, the more likely they will be remembered. This is in line with NBTA principles of language learning. Other studies have found that learner performance can be enhanced through improved social relations between the students, which can be done through interactive group-work (Kenny, 1994); Franke and Kaul, 1978). Pietro (1987) also lauds Strategic Interaction as an approach in which students are assigned roles that oblige them to work out and implement personal game plans through dialogues with other role players. NBTA terms collaborative learning as one way of diversifying learning.

Contextualization, as one of the principles of Neurological Bimodal teaching approach, is described by Danesi (1987) as the creation of an environment in which an activity may be situated – the avoidance of structure-based pattern drills that focus on linguistic forms rather than the context in which conversation takes place. In addition, Schiffer (2000), Shrum and Glisan (2010) Kumaravadivelu (2003), and Jahelnabi (2012) have variously described contextualization as not learning vocabulary in isolation, ensuring that tasks are purposeful and meaningful, and using realia in teaching. This technique also enhances learner achievement in language learning.

Learner achievement in English language in the study area has persistently been below average. This study sought to determine the effect on learner achievement in English language when NBTA is used in the teaching of the language.

II. METHODOLOGY

The study adopted a quasi-experimental research design, Solomon Four, non-equivalent control group design. The

researchers carried out a pre-test to determine the entry level of the respondents before the experiment was started. The study was carried out in Roret Division of Bureti Sub-county of Kericho County of Kenya.

The target population was 1080 Form two students in the Division. The accessible population was 184 Form Two students from the four experimental schools of the study. Simple random sampling technique was used to sample 184 Form Two learners, for the experiment, from the target population of 1080 Form Two learners in the Division.

The researchers developed an instructional manual for teachers' use during the treatment period. The study also utilized the Students' Motivation Questionnaire (SMQ) and the English Language Writing Achievement Test (ELWAT) instruments for data collection.

Experts drawn from Egerton University validated the research instruments. Pilot testing of the instruments was carried out in two schools in Bureti sub-county. The reliability of the written tests was measured by calculating the reliability of the marking. This was done by several ways, including inter-rater reliability and intra-rater reliability. Inter-rater reliability refers to the degree of similarity between different examiners: can two or more examiners, without influencing one another, give the same marks to the same set of scripts (Wang, 2009). To estimate the reliability of the (SMQ), Cronbach Alpha coefficient was used. Cronbach Alpha coefficient was found to be .839, suggesting that the items had relatively high internal consistency.

A. DATA ANALYSIS

The hypothesis of the study sought to determine if there was any statistically significant difference in achievement between learners taught English using NBTA and those taught using the traditional methods of teaching. Descriptive and inferential statistics were also be used to analyze data. The mean and standard deviation were used to describe and compare students' achievement in English language between the experimental and control groups. The hypothesis was tested using t-test, ANOVA, and ANCOVA. The post-test results were correlated using KCPE results as the covariate. The level of significance was set at $\alpha = 0.05$ to guide in the rejection or acceptance of the null hypothesis.

II. RESULTS AND DISCUSSION

PRETEST ANALYSIS

Two groups E1 and C1 were pretested before the commencement of the study to determine if they had similar characteristics and same entry level before the administration of the treatment (Mugenda & Mugenda, 1999). Gerard (2012) also adds that the knowledge gathered during the pretest helps the researcher to come up with valid and objective conclusions about the population after the treatment. The t-test results of the comparison of the pretest mean scores in achievement by learning approach were as shown on Table 1.

Scale	Groups	N	Mean	SD	df	t-value	p-value
Achievement	E1	42	6.33	1.46	91	1.015	0.313
	C1	51	6.02	1.50	88.526	1.018	0.312

Table 1: Comparison of Pretest Mean Scores on Achievement by Learning Approach

The results on Table 1 show that at the beginning of the study, E1 had an achievement mean score of 6.33 (SD = 1.46) while C1 had a mean score of 6.02 (SD=1.50). The t-test results reveal that the difference between the two means was not statistically significantly different at the 0.05 level, t(91) = 1.015, p= 0.313, $\rho > 0.05$. The results were an indication that the two groups, C1 and E1, were similar in achievement in the learning of English at the commencement of the study. Therefore, it was appropriate to use them to examine the effectiveness of NBTA and the conventional teaching methodologies in the teaching and learning of English language composition writing. According to Cohen and Manion (1989), groups that are homogeneous are most appropriate for experimental studies since any post-treatment changes could be attributed to treatment.

The hypothesis of the study sought to determine if there was any statistically significant difference in achievement between learners taught using the Neurological Bimodal Teaching approach and those taught using the conventional approaches. The effect of NBTA approach was determined in two ways: one, a post-test analysis which compared the means of groups E1, E2, C1 and C2. Secondly, was the determination of the gain difference between the pretest and the posttest means of groups E1, E2, C1 and C2.

Table 2 presents the posttest achievement mean scores of the experimental and control groups.

Group	N	Mean	SD
E1	42	12.67	1.36
E2	49	12.14	1.44
C1	51	7.12	1.66
C2	42	7.48	1.35

Table 2: ELWAT post-test means and SD of the four groups

Based on the mean scores, it can be observed on Table 4 that the groups that received the treatment (E1 and E2) outperformed the control groups C1 and C2 by a great margin with mean scores above 12 and below 7 respectively. This implied that learners in the treatment groups, E1 and E2 learned better and achieved more in English composition writing than their counterparts taught using the conventional teaching approaches. This good performance by the experimental groups could be attributed to their exposure to the Neurological Bimodal Teaching approach. From the results, it can be deduced that NBTA was a better teaching approach than the conventional teaching methodology. To find out if there was any statistically significant difference in the mean scores among the groups, one way ANOVA test was carried out and the results were as presented on Table 3.

Scale	Sum of Squares	df	Mean Square	F-ratio	p-value
Between Groups	1207.853	3	402.618	187.214	.000*
Within Groups	387.104	180	2.151		
Total	1594.957	183			

* Statistically significant at α=0.05 significance level (ρ < 0.05)

Table 3: Comparison of Posttest Achievement Scores by Learning Approach using ANOVA

Table 3 shows that the results of the post-test ELWAT mean scores among the four groups were found to be statistically significantly different F (3, 180) = 187.214, p-value=000. The ANOVA test results, therefore, indicated that there was a statistically significant difference in achievement between learners taught English language composition writing using Neurological Bimodal Teaching approach and those taught using the conventional approaches. This implied that the NBTA approach improved the quality of learning, leading to a higher achievement among the learners in the experimental groups.

Because the results on Table 3 did not show where the difference lay, the Scheffe post-hoc multiple comparisons test on ELWAT mean scores was run to determine where the differences occurred among the four groups. The results of the Scheffe post hoc multiple comparisons were as presented on Table 4.

Groups	Mean Difference	p-value
E1 vs E2	0.52	0.091
E1 vs C1	5.55	0.000*
E1 vs C2	5.19	0.000*
E2 vs C1	5.03	0.000
E2 vs C2	4.67	0.000*
C1 vs C2	-0.36	0.242

* Statistically significant at α=0.05 significance level (ρ < 0.05)

Table 4: Multiple Comparisons of ELWAT Post-test Means by Learning Approach

From Table 4, it can be observed that Experimental Group 1 had a statistically significant difference with Control Groups 1 and 2; and Experimental Group 2 also showed statistically significant difference with Control Groups 1 and 2. These results reveal that the posttest achievement difference for the experimental and control groups were indeed statistically significantly different. This further confirmed the superiority of NBTA in producing better student results in English language composition over the conventional teaching methodology.

Between the Control Groups 1 and 2, it can be observed on Table 4 that the mean score difference was not statistically different; and Experimental Groups 1 and 2 were also not statistically significantly different. To determine if the significant difference of the posttest mean scores of the groups did not only result from the differences of the groups other than the treatment, an analysis of covariance test was undertaken to adjust the posttest mean scores. The learners' Kenya Certificate of Primary Education (KCPE) and the pretest were used as covariates. Coolican (1999) argues that

this test is aimed at reducing the effects of the initial group differences. ANCOVA adjusts the means before conducting the comparison. The ANCOVA results were as shown on Table 5.

	Sum of Squares	df	Mean Square	F	p-value
Contrast	1001.576	3	333.859	154.972	.000*
Total	385.623	179	2.154		

* The difference is significant at α = 0.05 significance level (p<0.05)

Table 5: Test of difference of ELWAT Posttest using ANCOVA

Table 5 indicates that there was a statistically significant difference in the ELWAT post-test mean scores of the four groups F (3, 179) = 154.972, p = 0.000; thus confirming that the differences between the post-test means were statistically different at 0.05 α- level in favour of the experimental groups. This could be attributed to treatment. Consequently, it may be concluded from the results on Table 5 that NBTA enhanced learner achievement in English composition writing than the conventional teaching approaches. Since Table 5 did not show where the differences lay, multiple comparison test was carried out using the Scheffe post hoc procedure. The results of the Scheffe post hoc test were as presented on Table 6.

Group	Mean Difference	p-value
E1 vs E2	.487	.120
E1 vs C1	5.627	.000*
E1 vs C2	5.257	.000*
E2 vs C2	4.770	.000*
C1 vs E2	-5.140	.000*
C1 vs C2	-.369	.678

* The difference is significant at α = 0.05 significance level (p<0.05)

Table 6: ELWAT post-test multiple comparison using ANCOVA

From Table 6, the Scheffe post hoc test results confirmed that indeed the results of the posttest were due to the treatment and not the differences that existed because of the variations in KCPE results. Again, these results confirmed the superiority of NBTA over the conventional teaching approaches in enhancing student achievement in English language composition writing.

To further confirm the achievement difference between the experimental and the control groups by learning approach, it was necessary to determine the post-test achievement mean score gain. The ELWAT mean scores were computed for E1 and C1. This was meant to determine the effect of NBTA on students' achievement in language learning. The pretest and post-test mean scores on ELWAT for E1 and C1 were compared to establish the mean score gain between the two groups. The results were as indicated on Table 7.

		E1	C1
Pretest	N	42	51
	Mean	6.33	6.02
	SD	1.46	1.50
Post-test	N	42	51
	Mean	12.67	7.12
	SD	1.36	1.66
Mean gain		6.34	1.10

Table 7: ELWAT Pre-test, Post-test Mean Scores and Mean Gain of E1 and C1

Table 7 indicates that there was a post-test achievement mean score gain of 6.34 by the experimental group E1 taught using Neurological Bimodal Teaching approach; and an achievement mean gain score of 1.10 by the control group C1 taught using conventional teaching approaches. The difference in achievement gain can be attributed to the NBTA teaching approach. These findings suggested that NBTA was a more superior teaching approach than the conventional teaching approaches, and should therefore be used more often in English language instruction. The results on Table 7 do not show if the mean gain score of E1 and C1 were statistically significantly different. Therefore, it was necessary to perform a t-test to determine this. The results of the t-test were as shown on Table 8.

Group	N	Mean gain	df	t-value	p-value
E1	42	6.34	73	15.14	0.000*
C1	51	1.10			

* The mean difference is significant at α = 0.05 significance level (p<0.05)

Table 8: Comparison of ELWAT means gain between E1 and C1

Table 8 reveals that the mean score gain of E1 (6.34) was statistically significantly different from that of C1 (1.10) since t (73) = 15.14, p-value 0.000 (p<0.05). Therefore, it can be concluded that the treatment of E1 and E2 groups using NBTA increased learner achievement in English language composition writing than the conventional teaching approaches on the control groups C1 and C2.

The findings presented and discussed showed that the learners taught using NBTA had statistically significant higher achievement mean scores on the ELWAT than those taught using conventional teaching approaches. Therefore, the null hypothesis that stated that there is no significant difference in achievement between learners taught English language composition writing using NBTA and those taught using the traditional methods was rejected.

The ANOVA and ANCOVA posttest results presented on the Tables imply that Neurological Bimodal Teaching approach (NBTA) promoted better achievement in language learning than the conventional teaching approaches.

In this study, improved achievement among learners taught using NBTA was attributed to the application of Danesi's (1987) bimodality theory. Caine and Caine (1994)

have noted that one vital aspect of Danesi's bimodal model of second-language acquisition is the incorporation of instructional activities and strategies in the language classroom that access and stimulate both hemispheres of the brain, thereby, complementing and reinforcing the acquisition of the target language by all learners. This ultimately leads to improved language achievement among learners. Nuessel and Cicogna (1991) note that since the 1980s, researchers on second-language instruction have increasingly advocated for the employment of multi-channeled sensory stimulation to assist in achievement of pedagogical objectives. Further, there have been sustained attempts to consider some pedagogical strategies to access the learner bi-modally. These authors further observe that these attempts have led to a shift from a simple rendition of grammar rules to a wide array of supporting auditory and visual technological components through the use of newer methods of teaching, such as NBTA. Caine and Caine (1994) describe Brain Based Learning (BBL) as involving accepting the rules of how the brain processes information, and then organizing instruction bearing these rules in mind to achieve meaningful learning. The objectives of brain research studies include teaching to cater for individual differences, diversifying teaching strategies, and maximizing the brain's natural learning processes (Tileston, 2005). Caine and Caine (1994) further argue that meaningful contexts should always be provided not only for new input, but also for focusing purposes. This allows the R-Mode to complement and strengthen the intake operations of the L-Mode, especially during more mechanically- oriented focusing tasks (Young & Danesi, 2001). When these principles of NBTA are applied, the objectives will be to utilize brain research studies to teach catering for individual differences, diversifying teaching strategies, and maximizing the brain's natural learning processes (Tileston, 2005).

The teaching module used during the treatment was designed around the principles of the bimodality theory to cater for individual differences. The teaching learning activities were diversified, meaningful contexts were provided, visualization and personalization were ensured. When these strategies were applied during treatment, individual differences that resulted from hemispheric preference (Sonnier, 1991), were leveled out among the learners in the treatment groups, leading to an overall good performance among them. Since the control groups were not exposed to the NBTA principles, they were not accessed bimodally, leading to their comparatively low achievement in English language composition writing.

Similarly, Myhill et al (2011) carried out a study which confirmed that contextualization (which is an element of Neurological Bimodal Teaching approach) in the teaching of grammar has a significantly positive effect on pupils' writing development. Fidan and Erden (1996) undertook a study which reported the importance of using various visual materials used in teaching-learning process. The results of the study revealed that visualization helped learners acquire knowledge and skills quite easily. As in many areas of education, visual materials may also be used effectively in language teaching, especially to concretise abstract concepts, increase retention of what is learned and attract children's attention.

III. CONCLUSIONS AND RECOMMENDATIONS

Teaching English language composition writing using Neurological Bimodal teaching approach improved learner achievement in language classrooms than did the conventional teaching methods. This was based on the statistically significant difference on the posttest mean scores of the experimental and control groups, which favoured the experimental groups.

It is essential for educators to focus more keenly on English language composition writing through personalizing, contextualizing, visualizing, and diversifying classroom processes in order to capture the imagination and motivation of all learners for better language outcomes.

REFERENCES

[1] Barski, A. (2013). Challenges of Learning English. Retrieved on 6/9/15 from eHow Contributor @http://www.ehow.com/

[2] Borsook, D., Higginbotham, K. & Wheat, L. (1992). Multimedia Effectiveness in the Learning Environment. Retrieved on 30/12/14 from staff @http://staff.niacc.edu

[3] Caine, R. N., & Caine, G. (1994). Making connections: Teaching and the human brain. New York: Addison-Wesley.

[4] Cicogna, C., & Nussel, F. (1993). Neuropedagogy and the Teaching of Italian. AATI Newsletter, 13(3), 3-6.

[5] Cohen, L. & Manion, L. (1989). Research Methods in Education (Third Edition). London and New York: Routledge.

[6] Cohen, L. & Manion, R. (1981). Creative Communication, Teaching the Language Arts New York: McGRAW HILL Pearson Ltd.

[7] Coolican, H. (1990). Research methods and statistics in psychology. London, England: Hodder & Stoughton Educational Research methods and statistics in psychology. Retrieved on 15/4/2016 from http://psycnet.apa.org/psycinfo/1990-98624-000.

[8] Danesi, M. (1987). Practical applications of current brain research to the teaching of Italian. Italica, 64(3), 377-392.

[9] Fidan, N. & Erden, M. (1996). Importance of Visual Materials. Ankara: Alkım Yayınevi.

[10] Franke, R. H. & Kaul, J. D. (1978). The Hawthorne experiments: First statistical interpretation. American Sociological Review. 43(5), 638.

[11] Kenya Institute of Education (2002). Secondary Education Syllabus. Volume Two. KLB: Nairobi.

[12] Kenya National Examinations Council. (2015). Candidates' Overall Performance Report for 2014. Nairobi: KNEC.

[13] Kenny, D.A. (1994), Interpersonal Perception: A Social Relations Analysis, Guilford Press, New York, NY.

[14] Kumaravadivelu, B. (2003). Beyond methods: Macrostrategies for language teaching. New Haven, CT: Yale University Press.

[15] Manu, J. (2011). India Faces a Linguistic Truth. Retrieved on 15/4/2016 from http://www.nytimes.com/2011/02/17/world/asia/17iht-letter17.html?_r=0

[16] Mugenda, M.O. & Mugenda, A.G. (1999). Research Methods: Quantitative and Qualitative Approaches. Nairobi: ACTS Press.

[17] Myhill, D. A., & Jones, S. (2011). Rethinking Grammar: The impact of contextualised grammar teaching on students' writing and students' metalinguistic understanding. Technical Report for the Economic and Social Research Council (ESRC) RES-000-23-0208, from www.esrc.ac.uk/ESRCInfoCentre)

[18] Nuessel, F. & Cicogna, C. (1991). Pedagogical Applications of the Bimodal Model of Learning through Visual and Auditory Stimuli, University of Louisville and Consulate General of Italy, Toronto. Retrieved on 18/5/14 @http://tell.fll.purdue.edu/

[19] Ogweno, S. A. (2010). Influence of teaching methods on students' achievement in KCSE English in public secondary schools in Kasipul Division, Rachuonyo South District, Kenya. Retrieved on April 4, 2016, from Repository @http://erepository.uonbi.ac.ke

[20] Ouma, K. B. (2010). Factors affecting performance in Kenya certificate of secondary education (K.C.S.E) English examinations in Nyamache division, Gucha district, Kenya. Retrieved on 4/08/2014 from uonbi@http://erepository.uonbi.ac.ke.

[21] Pietro, D. (1987). 'Educational Stages and Interactive Learning: From Kindergarten to Workplace'. Downloaded on 27/11/2015 from https://books.google.co.ke/books?id=nKCeBQAAQBAJ&pg=PA307&dq=pietro+%281987%29&hl=en&sa=X&ved=0ahUKEwjInaPCtLXJAhUBGRQKHSngCEsQ6AEIGjAA#v=onepage&q=pietro%20%281987%29&f=false.

[22] Schiffer, D. (2000). Reach & Teach English Language Learners: Levels, strategies, and Pixie ideas. Downloaded on 30/12/13 from creativeeducator@http://creativeeducator.tech

[23] Shrum, J.L. & Glisan, E.W. (2010). Teacher's Handbook: Contextualizing Language Instruction (4th ed.) downloaded 11/5/13 from Flarcstartalk@http://www.google.co.ke/url?

[24] Sonnier, I. L. (1991). Hemisphericity: A key to understanding individual differences among teachers and learners. Journal of Instructional Psychology, 18 (1), 17-22.

[25] Tileston, D. (2005). 10 best teaching practices: How brain research, learning styles and standards define teaching competencies (2nd ed). Thousand Oaks, California: Corwin Press.

[26] Wang, P. (2009). The Inter-rater Reliability in Scoring Composition. Journal of English Language Teaching, 2(3), 39-43.

[27] Young, B. A. & Danesi, M. (2001). Studying How the Brain Learns: Are There Any seful Implications for Instruction? Retrieved April 4, 2015, from http://www.arrowsmithschool.org/howbrainlearns.htm.