



**RELATIONSHIP BETWEEN COMPUTER AIDED LEARNING AND WRITING
ACHIEVEMENTS IN KISWAHILI ESSAYS IN SECONDARY SCHOOLS IN
NAKURU COUNTY, KENYA**

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Abstract:

The Ministry of Education initiated the integration of computer aided learning in teaching of school curriculum in order to enhance quality of education in Kenya. Poor performance in Kiswahili writing essays has been experienced for a while, among majority students in sub-county secondary schools in Nakuru County, Kenya. The integration of CAL in teaching of Languages, helps to transform pedagogical skills in order to improve learners' performance. The main objective of the Paper was to determine the difference in performance in Kiswahili writing essays between students taught Kiswahili writing essays using CAL and those students taught the same content using TMs on learning achievements on Kiswahili writing essays. This Paper employed a causal-comparative design. A sample of 89 participants was drawn from a target population of 390 subjects. Stratified, purposive and simple random sampling methods were used to select the study sample. Questionnaires for teachers and semi interview schedules for principals were used to collect quantitative and qualitative data. Piloting was done in three secondary schools to determine the validity and reliability of the research items in two weeks before the commencement of the actual study, whereby the study confirmed that the instruments were valid and reliable; the students' each was computed separately using Cronbach's Alpha Formula internal consistency and teachers' alpha coefficient yielded an alpha of 0.72 which were considered adequate for the study. Percentages, mean and standard deviations were used to compare the quantitative data of the two groups. Quantitative data was presented and interpreted in frequency table distributions. The findings of the study established that CAI enhances learning achievements on Kiswahili writing essays. While qualitative data from principals' semi structured interview schedules were summarized into differences and were analysed thematically and narrated in words around differences derived from participants' responses so as to verify differences in performance in Kiswahili writing essays between students taught Kiswahili writing essays using computer-aided instruction and those students taught the same content using traditional teaching methods on Kiswahili writing essays. The findings of the Paper showed that majority of the teachers and principals agreed that computer



technologies enhance students' writing essays in Kiswahili writing essays than TTMs. The Paper concluded that computer technologies are superior to traditional teaching methods in teaching of Kiswahili writing essays. The Paper recommended that the Ministry of Education should make integration of CAI mandatory for all secondary schools in teaching of Kiswahili writing essays, because it is perceived that Computer technologies improve performance scores in Kiswahili writing essays.

Keywords: Computer Aided Learning, Learning Achievements in Kiswahili Essays and secondary schools in Nakuru County, Kenya.

1.Introduction

The advent of ever-changing technology has revolutionized the education sector across the world, with many countries realigning their instructional strategies to meet the emerging educational needs (Duval, Sharples & Sutherland, 2017). Modern classrooms are characterized by modern teaching methods contrary to the traditional teaching methods. This is due to changing market demands. Such revolutions have led to the adoption of computer-aided learning in teaching and learning of school curriculum. Kiswahili is one of the compulsory subjects that is predominantly East African, has unique characteristics that distinguish it from English subjects. As such, the role of computer-aided instruction on teaching and learning of various aspects of Kiswahili subject is largely unknown (Milima, 2014).

Traditional instruction strategies were applied for instructing students in lower and higher grades to improve quality of education. For instance, in the US, learners instructed using traditional teaching strategies showed declined performance in oral communication. The academic learning achievement levels from the 1980s to 1990s revealed an improvement in performance of scores by 65 percent when learners of all grades are taught using student computer technologies. The demand by both parents and US government for higher scores in compulsory curriculum subjects such as Languages and Math accelerated the formation of another body called, The National Assessment of Educational Progress, (NAEP, 1990). This body was tasked to come up with a new strategy to teach these, hence computer-aided learning (United Department of Education, 2010 and United Department of Technology, 2010).

According to the Ministry of Education, Kenya initiated its computer applications policy in 2006 with the aim of employing computer technology in teaching and learning of secondary school curriculum to enhance the quality of education such as literacy and communication skills in all Language subjects (RoK, 2006). The Ministry of Education has been financing and



equipping at least five secondary schools in every constituency in Kenya with computer facilities since 2008. Teachers teaching Languages, including Kiswahili, have been trained on how to integrate computer technology (multimedia CD-ROM programme, CDs and DVDs programme) in teaching. The Kenya Institute of Education RoK, (2007), implemented its policy on the integration of computer technology (multimedia programme) in teaching and learning of all subjects in Kenyan secondary schools. The purpose was to enable students to participate fully in their instruction activities and therefore identify and nurture their individual talents. The other reasons were to complement and transform traditional instruction strategies into rich student-teacher interactive strategies and improve students' scores in all the eleven subjects. Unlike other subjects, which use English language as a medium of instruction; Kiswahili is an East African language with unique syntax, semantic, dialect, and composition and therefore, requires different instructional strategies (Milima, 2014). However, little is known about the difference in performance between students taught Kiswahili subject employing CAI and those students taught similar content using traditional strategies.

Literature reveals that poor performance in Kiswahili language is due to the application of traditional instruction strategies in classrooms; while the good performance in Kiswahili language is attributed to the employment of computer technologies such as radio programs, television and video media in classrooms. Regular classroom instruction strategies such as lecture, whole group discussion and textbook provide learning experiences, which do not allow individual student participation in classrooms; in other words, the learning experiences provided in classrooms are in forms of rote learning. On the contrary, computer technologies instruction strategies offer useful instruction concepts that allow learners to learn individually through unifying new concepts and propositions in relation to the previous ones in an active way. Therefore, a student acquires and builds his or her own academic knowledge structures. New learning experiences and concepts learned and acquired are related to the previously known experiences to become part of new learning experiences and concepts (Githinji, 2017 and MOE, 2018).

In Kenyan schools, computer technologies-aided instruction strategies have been implemented in 40 percent of secondary schools. Currently, 45 percent teachers teaching all subjects at both primary and secondary levels integrate computer technologies in the teaching and learning of majority of the subjects offered at these levels. Many times, computer technology strategies are hurriedly initiated without proper capacitation of teachers and students; which makes it hard for many students and teachers to implement these computer strategies in classrooms and therefore teachers continue employing the regular traditional instruction approaches (UNESCO, 2017).



2. The Art of Literature Review

Princhandar and Ayub (2014) conducted a study to find out the effects of computer-aided instruction on students' performance in English writing skills among secondary schools in Malaysia. Their study sampled 60 students, who were randomized into experimental and control groups of students. The experimental group of students was instructed English writing skills using computer-aided writing software and Microsoft word programme while the control group of students was taught English writing skills using traditional teaching methods such as pen and paper. The study results confirmed that those students who were taught English writing skills using computer-aided writing software and Microsoft word enhanced their competencies in grammar, vocabulary, spelling, sentence structure and the overall performance in writing than those students who were taught the same content using traditional teaching methods. In addition, the results found that there was a significant difference in performance in English writing skills between students taught English writing skills using CAI and those students taught similar content using traditional teaching methods.

Keshta and Harb (2013) studied the effect of computer-assisted language learning on students' achievement in writing skills in English language among secondary schools in Palestine. The students were randomized into experimental and control group of students. The experimental group was taught English writing skills using computer-assisted instruction while the control group was instructed English writing skills using traditional teaching methods. Both groups were pre-tested and post-tested to measure the effectiveness of computer-assisted instruction on students' performance in writing skills in the English language. The study outcomes revealed that the experimental group of students who were instructed English writing skills using computer-aided instruction scored higher marks than their counterparts in the control group who were taught English writing skills using traditional teaching methods. This implied that computer-assisted instruction increased students' performance in English writing skills.

Carrillo, Onofa, and Ponce (2010) studied the influence of computer-assisted instruction on students' learning achievements in English writing skills among secondary institutions in Guayaquil State of Ecuador. The study sample was randomly categorized into experimental and control groups. The experimental group was taught English writing skills using computers while the control group was instructed English writing skills using traditional teaching methods. Both the experimental and control groups were evaluated with a pre-test and post-test in English writing skills proficiency to measure the effectiveness of computer-assisted instruction in English writing skills proficiency. The results indicated that the control group of students, who were instructed English writing skills using traditional teaching approaches, scored higher marks in English writing skills than the experimental group of students, who were taught the



same English writing skills using computer-aided instruction. This implied that traditional teaching methods, if used effectively in the classrooms, could enhance students' language writing skills.

Mingaine (2013) studied factors affecting effective integration of computer instruction approaches in secondary schools in Meru County, Kenya. The study adopted a descriptive survey design. From the 350-targeted secondary schools, the study only sampled 105 schools using simple random sampling techniques. The study used questionnaires only to gather information needed for the study. The data was analyzed using quantitative methods and presented in frequencies, percentages, and tables. The study findings revealed challenges such as incompetent teachers of computer, high costs of computer tools and negative attitude towards computer instruction education strategies. The study recommended that the government ought to decrease the prices of computer infrastructure devices and capacitate teachers on computer-instruction education strategies.

Ambuko and Odera (2013) determined the extent to which the multimedia programme is applied in teaching of Kiswahili language in secondary schools in Emuhaya Sub County, Kakamega County. The study employed a descriptive design. The study sampled 400 students and 20 teachers through simple random sampling techniques. The study used questionnaires, observation schedule, and document analysis guide. The study used descriptive statistics to analyze the data. The results pointed out that there was a limited multimedia programme for the purposes of teaching and learning of all subjects in secondary schools. The study suggested that the Ministry of Education and other stakeholders should provide and ensure effective implementation of multimedia digital content in secondary schools in Kenya to improve students' academic achievements in the classrooms.

3. Statement of the Problem

The Kenya National Examination Council (KNEC) (2011, 2012, 2013 and 2014) reports reveal poor performance in Kiswahili writing essays. The poorly performed skills are writing essays, summary and punctuations. These KNEC reports, confirmed that more than 55 percent of the candidates scored less than half of the total score of (80) marks. In addition, 60 percent students have continued to experience low competencies in functional and creative compositions, summary and punctuations. First, the examinees proved insufficient by showing cases of mother tongue interference and secondly most students could not construct coherent essays in written. Furthermore, the poor performance was also observed in summary and notes making, whereby the examinees proved insufficient by showing cases of inability to make summary on exact number of words, analysis, rewriting and punctuating written work This required learners to construct syntactically correct sentences that should pass the message across. Hence, the learners have no choice, but to master the grammar of Kiswahili language. The Kenya National



Examination Council reports (2010 and 2015) reveal that Kiswahili language has been ranked lower than the other four languages examined in KCSE examinations. In Nakuru County, for example, two thirds of the candidates in sub-county secondary schools score less than a C in Kiswahili language (RoK, 2012). Therefore, it indicates that majority of the students in sub-county secondary schools are not competent in Kiswahili language. This poor performance is mainly attributed to teachers' use of traditional methods in teaching. The question is what will happen to students' scores in Kiswahili if the teachers used the CAL strategies in teaching Kiswahili. That is why this study sought to find out the difference in performance in Kiswahili writing essays between students taught Kiswahili writing essays using CAL and those students taught the same contents using traditional teaching approaches.

4. Purpose of the Paper

The purpose of this Paper was to determine difference in performance in Kiswahili writing essays between students taught Kiswahili writing essays using computer-aided learning and those students taught Kiswahili writing essays using traditional teaching methods among public secondary schools in Nakuru County, Kenya. The main objective was to determine the differences between students taught Kiswahili writing essays using computer aided learning and those students taught the same content using TTMs on learning achievements on Kiswahili writing essays.

5. Research Methodology

This Paper adopted causal-comparative design to establish whether computer-aided learning such as: audio media, video media, text media, interactive media, and photographic; and the traditional teaching methods such as lecture methods, textbook and chalk and talk and how they influenced the difference in performance in Kiswahili writing essays between students taught Kiswahili writing essays using CAL and those students taught similar content using traditional teaching methods after an action has already happened among public secondary schools in Nakuru County. The Paper targeted 390 participants spread out in the 130 sub-county secondary schools in Nakuru County. The Paper employed purposive and simple random sampling techniques to select 89 participants consisting of 59 teachers and 30 principals. The 59 teachers comprised 30 teachers who taught Kiswahili writing essays using CAL and 29 teachers who taught similar content using TTMs.

Regarding the study locale: This study was conducted in Nakuru County among public sub-county secondary schools. The county has many sub-county schools in both rural and urban setting. The teachers in this county use both traditional and CAL strategies in teaching Kiswahili. It was therefore envisaged that the study would do a comparison of the two methods of teaching effectively. Secondly, Nakuru County schools have received the highest number of



computers than any other county in Kenya (KESSP 2013) and therefore examining the teaching of Kiswahili writing essays using CAL and traditional teaching methods would be easy.

Concerning the research instruments: This Paper used Teachers' Questionnaires, and Principals' Semi Structured Interview Schedules. Piloting of questionnaires for six teachers; and was pre-tested in three different target public Sub-County secondary schools from a different County but with same characteristics to the 30 sample secondary schools, purposively selected in two weeks before carrying out the actual study and which were not included in the actual study. Piloting aided this study to correct errors in the items before conducting the actual study. The validity of teachers' questionnaires and principals' interview schedules was determined by piloting the instruments in selected form two mixed and single sex secondary schools with similar characteristics as those used in the study. Feedback from experts from the department of educational management and curriculum studies was incorporated to ensure instruments' validity. The Paper took into consideration the remarks, notes, and suggestions of the validation team and made necessary adjustments in the items before the collection of data. Questionnaires for teachers were administered once to teachers to check for its reliability. Teachers' reliability coefficient was computed employing Cronbach's Alpha Formula for Internal Consistency and students' reliability coefficient yielded an alpha coefficient of 0.72 which was regarded reliable for the study to be carried out. This is because Cronbach's Alpha reliability coefficient is regarded as suitable to compute internal consistency of perception scale or an achievement test when a research item evaluates a unidimensional trait when it is scored by ratings such as (1-5) scoring procedure. Moreover, regarding the reliability from interview responses was tested on three principals and thereafter, it was grounded and compared with the responses from teachers' questionnaires to ensure the reliability of the two instruments.

Regarding data collection: This Paper sought permission from the County Education Director before visiting the secondary schools enlisted for this study to seek consent to carry out the study. This Paper also sought appointments with the 30 principals of the sample secondary schools to notify them about intention to conduct the study in their secondary schools. This Paper further sought confirmation of dates of carrying out the study so as to draw timetable schedules when the study would commence and when it would end. The Paper then explained the purpose and importance of participating in the study. The Paper administered teachers' questionnaires to teachers and also interviewed 30 Principals at the same time.

Concerning data analysis: Quantitative methods were used to analyse data so as to determine the difference between learners tutored Kiswahili writing essays applying CAL and those learners instructed Kiswahili writing essays employing traditional instruction approaches on learning achievements on Kiswahili writing essays. Descriptive statistics such as percentages, means and standard deviations were applied to compare data from closed ended items and likert



scale items. The analysed data was presented and interpreted using frequency table distributions. The analysed data was presented and interpreted in each of the descriptive statistics tables separately so as to support or contradict the results yielded from students' questionnaires so as to establish the difference or relationship on means between the two groups taught by either applying either CAL or TTMs on learning achievements in Kiswahili writing essays. While qualitative data from principals' semi structured interview schedules were summarized into differences and were analysed thematically and narrated in words around differences derived from participants' responses so as to verify differences in performance in Kiswahili writing essays between students taught Kiswahili writing essays using computer-aided learning and those students taught the same content using traditional teaching methods.

6. Discussions and Findings

The questionnaires were issued to 59 teacher respondents, who all filled and returned their responses. The same case was evident among all principals who took part in the interviews representing a 100 percent response rate.

The main objective of the study was to determine the difference in performance in Kiswahili writing essays aspects between students taught Kiswahili grammar writing essays using computer assisted learning and those students taught the same content using Traditional teaching methods on students' performance in Kiswahili writing essays among secondary school students in Nakuru County. The teacher respondents were provided with questionnaires to get their perceptions concerning this objective. The teacher respondents were issued with a range of questions on a likert scale where one represented strongly disagree, 2= disagree 3= undecided 4=agree 5= strongly agree. Tables 4.1 and 4.2 illustrate their responses. The principals were also interviewed and the results are discussed below.



Table 4.1: Teacher’s Perceptions on Effect of CAL on Performance in writing Essays

Statement		S. A	A	Undecided	D	S. D	Mean	SD
Computer graphics and videos enable students to spell words correctly.	F	4	48	2	3	2	4.000	1.07
	%	6.8	81.3	3.3	5.3	3.3		
Computerized documents improve students’ use of punctuation marks appropriately.	F	11	45	0	1	2	3.98	0.87
	%	18.6	76.27	0	1.8	3.33		
Computer programme enable students to communicate effectively in writing.	F	8	47	1	2	1	3.56	1.05
	%	13.6	79.7	1.8	3.1	1.8		
Computers enable students to use variety of sentence structures correctly.	F	6	48	3	2	0	3.62	0.99
	%	10.2	81.3	5.1	3.4	0		
Computers improve students’ performance in writing skills	F	9	43	4	2	1	3.64	1.01
	%	15.1	72.9	6.8	3.4	1.8		
Computers improve students’ language use in various writing contexts.	F	7	45	2	3	2	3.68	1.04
	%	11.9	76.27	3.4	5.03	3.4		
Computer programme enable students to summarize the passage in a given number of words.	F	8	43	5	2	1	3.54	1.20
	%	13.4	72.9	8.5	3.4	1.8		
Computers enable students to write Functional and Creative essays correctly.	F	5	46	4	3	1	3.64	1.03
	%	8.5	77.97	6.7	5.03	1.8		
Average							3.64	1.03



Table 4.2: Teachers’ Perceptions on Effect of Traditional Training Methods on Performance in Kiswahili Writing Essays

Statement		SA	A	Undecided	D	SD	Mean	S. D
Traditional teaching methods enable students to spell words correctly.	F	2	1	5	8	42	1.1356	0.34529
	%	3.3	1.8	8.5	13.6	72.8		
Traditional teaching methods improve students’ use of punctuation marks appropriately.	F	2	2	6	11	38	1.1695	0.37841
	%	3.3	3.3	10.1	18.6	64.7		
Traditional teaching methods enable students to communicate effectively in writing.	F	0	0	0	0	59	1.0000	0.0000
	%	0	0	0	0	100		
Traditional teaching methods enable students to use variety of sentence structures correctly.	F	2	2	6	11	38	1.1695	0.37841
	%	3.3	3.3	10.1	18.6	64.7		
Traditional teaching methods improve students’ performance in writing skills.	F	2	1	4	5	47	1.1186	0.32614
	%	3.3	1.8	6.8	8.5	79.6		
Traditional teaching improves students’ language use in various writing contexts.	F	0	0	1	5	53	1.14564	0.31753
	%	0	0	1.7	8.5	89.8		
Traditional teaching enables students to summarize the passage in a given number of words.	F	0	1	2	5	51	1.16894	0.35489
	%	0	1.7	3.3	8.5	86.5		
Traditional teaching enables students to write Functional and Creative essays correctly.	F	2	1	0	6	49	1.178986	0.37745
	%	3.3	1.7	0	10.2	84.8		
Average							1.1358	0.03097



Tables 4.1 and 4.2, show teachers' perception on effect of CAL on performance in writing skills, 87 percent of teachers teaching writing using CAL agreed that CAL helps students spell words correctly. On the contrary, 86 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students spell words correctly. This meant that CAL is an effective method for teaching spellings. Similarly, teachers' mean perception of 4.00, meant that majority of teachers teaching writing skills using CAL agreed with this perception. On the other hand, teachers' mean perception of 1.1356 implied that majority of teachers teaching writing skills using traditional teaching methods disagreed with this perception. This means that CAL is effective in teaching Kiswahili writing skills.

Similarly, about teachers' perception on effect of CAL on performance in writing skills, 95 percent of teachers teaching writing using CAL agreed that CAL helps students use punctuation marks correctly. On the contrary, 83 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students use punctuation marks correctly. This meant that CAL is an effective method for teaching punctuation marks. Furthermore, teachers' mean perception of 3.98 implied that majority of teachers teaching writing skills using CAL agreed with this perception. On the contrary, teachers' mean perception of 1.1695 meant that majority of teachers teaching writing skills using traditional teaching methods disagreed with this perception. This implied that CAL is effective in teaching Kiswahili writing skills.

Furthermore, about teachers' perception on effect of CAL on performance in writing skills, 93 percent of teachers teaching writing using CAL agreed that CAL helps students communicate effectively in writing. On the contrary, 100 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students communicate effectively in writing. This meant that CAL is an effective method for teaching communication skills in writing. In addition, teachers' mean perception of 3.56 suggested that, majority of teachers teaching writing skills using CAL agreed with this perception; while teachers' mean perception of 1.0000 suggested that majority of teachers teaching writing skills using traditional teaching methods disagreed with this perception. This means that CAL is effective in teaching Kiswahili writing skills.

Similarly, about teachers' perception on effect of CAL on performance in writing skills, 92 percent of teachers teaching writing using CAL agreed that CAL helps students use variety of sentence structures correctly. On the contrary, 83 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students use variety of sentence structures correctly. This meant that CAL is an effective method for teaching use for variety sentence structures correctly. Additionally, teachers' mean perception of 3.62, meant that majority of teachers, teaching writing skills using CAL, agreed with this perception. On the other hand, teachers' mean perception of 1.1695 implied that majority of teachers, teaching



writing skills using traditional teaching methods, disagreed with this perception. This implies that CAL is effective in teaching Kiswahili writing skills.

Additionally, about teachers' perception on effect of CAL on performance in writing skills, 88 percent of teachers teaching writing using CAL agreed that CAL helps students perform well in writing skills. On the contrary, 98 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students perform well in writing. This meant that CAL is an effective method for teaching writing skills in Kiswahili language. More so, teachers' mean perception of 3.64, implied that majority of teachers, teaching writing skills using CAL, agreed with this perception; while teachers' mean perception of 1.1186, meant that majority of teachers, teaching writing skills using traditional teaching methods, disagreed with this perception. This means that CAL is effective in teaching Kiswahili writing skills.

Furthermore, about teachers' perception on effect of CAL on performance in writing skills, 88 percent of teachers teaching writing using CAL agreed that CAL helps students improve language in various writing contexts appropriately. On the contrary, 98 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students improve language use in various writing contexts appropriately. This meant that CAL is an effective method for teaching language use in various writing contexts efficiently. Moreover, teachers' mean perception of 3.68, suggested that majority of teachers teaching writing skills using CAL agreed with this perception. On the contrary, teachers' mean perception of 1.14564 suggested that majority of teachers, teaching similar content using traditional teaching methods, disagreed with this perception. This implies that CAL is effective in teaching Kiswahili writing skills.

In addition, about teachers' perception on effect of CAL on performance in writing skills, 86 percent of teachers teaching writing using CAL agreed that CAL helps students summarize the passage in a given number of words appropriately. On the contrary, 95 percent of teachers teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students summarize in a given number of words appropriately. This meant that CAL is an effective method for teaching how to summarize a passage in a given number of words. Similarly, teachers' mean perception of 3.54, meant that majority of teachers, teaching writing skills using CAL, agreed with this perception. On the other hand, teachers' mean perception of 1.16894, implied that majority of teachers teaching similar content using traditional teaching methods disagreed with this perception. This means that CAL is effective in teaching Kiswahili writing skills.

Similarly, about teachers' perception on effect of CAL on performance in writing skills, 86 percent of teachers teaching writing using CAL agreed that CAL helps students write Functional writing and Creative essays correctly. On the contrary, 91 percent of teachers



teaching writing skills in Kiswahili disagreed that traditional teaching methods enable students perform well in writing. This meant that CAL is an effective method for teaching Functional and Creative essays correctly in Kiswahili language. Furthermore, teachers' mean perception of 3.64, suggested that majority of teachers teaching writing skills using CAL agreed with this perception; while teachers' mean perception of 1.178986, suggested that majority of teachers teaching similar content using traditional teaching methods disagreed with this perception. This implies that CAL is effective in teaching Kiswahili writing skills.

In overall, 90 percent of teachers teaching writing skills using CAL that CAL improves students' Kiswahili writing skills efficiently. On the other hand, 91 percent of teachers teaching writing skills using traditional teaching methods disagreed that traditional teaching methods enhance students' Kiswahili writing skills. These perceptions meant that CAL is an effective way for Kiswahili writing skills. Similarly, teachers' average mean perception of 3.64, meant that majority of teachers, teaching writing skills using CAL, agreed with these perceptions that CAL improves students' performance in Kiswahili writing skills. On the other hand, teachers' average mean perception of 1.1358, implied that majority of teachers, teaching writing skills using traditional teaching methods, disagreed with these perceptions that traditional teaching methods enhance students' Kiswahili writing skills. This means that CAL is effective in teaching Kiswahili writing skills. These results correspond with Muhammed (2016) that CAL enhances students' performance in Kiswahili writing skills than traditional teaching methods.

Nonetheless, Tables 4.1 and 4.2, 6.0 percent of teachers teaching Kiswahili writing skills using CAL disagreed that CAL enhance students' performance in Kiswahili writing skills. On the contrary, 4.0 percent of teachers teaching writing skills in Kiswahili language agreed that traditional teaching methods improve performance in Kiswahili writing skills. These perceptions meant that traditional teaching methods are effective ways for teaching Kiswahili writing skills. Similarly, teachers' average mean perception of 1.36 meant that few teachers, teaching writing skills, disagreed with these perceptions that CAL enhances students' performance in Kiswahili writing skills. On the other hand, teachers' average mean perception of 0.865, implied that few teachers, teaching similar content using traditional teaching methods, agreed with these perceptions that traditional teaching methods enhance performance in writing skills. This means that traditional teaching methods are also effective in teaching writing skills. These findings agree with Carillo et al (2010) that traditional teaching methods enhance students' scores in Kiswahili writing skills as opposed to CAL which decrease performance in Kiswahili writing skills.

More so, regarding principals' responses, the qualitative data from the 30 sampled principals 'semi-structured interview schedules, shows that 14 (93 percent) of those principals whose teachers teach Kiswahili writing skills using CAL agreed that CAL increase students'



performance in Kiswahili writing skills, helps them write complete sentences and meaningful sentences, helps them summarize the passage in a given number of words appropriately, helps them use correct words and right spelling, helps use proper paragraphs and lastly perform better in Kiswahili essay writing. On the contrary, 15 (100 percent) of those principals whose teachers teaching of Kiswahili writing skills using traditional teaching methods disagreed that traditional teaching methods enhance students' performance in Kiswahili writing skills, enable them write complete sentences and meaningful sentences, enable them summarize the passage in a given number of words appropriately, enable them use correct words and right spelling, enable use proper paragraphs and lastly perform better in Kiswahili essay writing . These results meant that CAL is an effective method for teaching Kiswahili writing skills. These findings contravene with Carillo et al (2010) that those students taught Kiswahili writing skills using traditional teaching methods outperformed those students taught similar contents using computer aided instruction.

Nevertheless, 15 (100 percent) those principals whose teacher teaching Kiswahili writing skills using CAL agreed that, CAL enables them introduce their essay well, enable them conclude their essays proficiently and enhance students' score in Kiswahili essay writing. On the other hand, 14 (93 percent) of those principals whose teachers teaching Kiswahili writing skills are using traditional teaching methods agreed that CAL enable them introduce their essay well, enable them conclude their essays proficiently and enhance students' score in Kiswahili essay writing. This meant that traditional teaching methods are effective methods for teaching Kiswahili writing skills. These results agree with Carrillo et al (2010) that traditional teaching methods improve scores in English writing skills than CAL strategies than CAL strategies.

7. Conclusion and Recommendation.

The Paper concluded that, teachers perceived that computer aided learning strategies are superior to traditional teaching methods in teaching of Kiswahili writing essays.

7.1 Recommendation

The Paper recommended that the The Ministry of Education should make integration of CAI mandatory for all secondary schools in teaching of Kiswahili writing essays because it is perceived that Computer -aided learning improve performance scores in Kiswahili writing essays.



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