The impact of History teaching/learning resources on student performance in KCSE History examinations: A case of Tigania and Igembe districts Meru County, Kenya

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Abstract

This study set to establish the impact which influenced academic performance in Kenya Certificate of Secondary Education (KCSE) History examination in Tigania and Igembe Districts, Meru County Kenya. This study aimed at establishing how learning and teaching resources impact on performance in Kenya Certificate of Secondary Education (KCSE) History examination in Tigania and Igembe Districts, Meru County Kenya. The study covered the period between 2005 and 2009. It involved public and private secondary schools (mixed and single sex, boarding and day school). The study was conducted using descriptive survey design. The study used probability sampling where simple random sampling was employed. The collection of data was done using questionnaires for head teachers and teachers, interview guide for parents, and focus group discussion with form three History students. The data was analyzed using statistical package for social sciences (SPSS) computer program and descriptive statistics. Chi square was used to test the null hypotheses. It was found that teachinglearning resources are statistically significant in learning and teaching of History. From the findings, most schools in the two districts (75%) lacked a library and of those schools which have a library only 18.2% are adequately stocked with History learning /teaching resources.

Key Words: Learning/Teaching Resources on student performance, Tigania and Igembe Districts.

1.0 Background Information

Learning/teaching resources are essential part of any education. According to Eshiwani (1983) lack of school resources affect performance in both primary and secondary schools. School resources in this case include classroom size, text books, library, laboratory facilities and visual aids. Lack of school resources affects performance in examinations because teachers and students are not able to expose themselves to these resources in order to prepare for K.C.S.E examinations. Ananda (1990) in support of Eshwani stated that lack of facilities is a primary contributory factor to poor performance, it is true that lack of any reading books and other facilities manifest poor continuous performance. Eshwani and Ananda talked of general performance. They did not refer to History subject specifically. There was a gap to be filled here to investigate whether Adequacy of Teaching Aid/Resources in schools influenced performance of History as a subject.

1.1 Statement of the problem

The government of Kenya introduced free primary education in all public primary schools in 2003. This resulted in increased overall enrolment into primary schools. The funding provided by the government was mainly geared toward tuition fees. The increased intake in primary schools meant that with time secondary enrolment would also increase. However, with no funding to improve and increase teaching/learning resources in secondary schools, this implied that resources in secondary schools would be strained. Moreover, recent observation of the Kenya National Examinations Council (KNEC) reports indicates that performances in Kenya Certificate of Secondary Education (KCSE) History examinations had been below average in Tigania and Igembe District between 2005 and 2009. This implied that the number of students in the districts joining university to study History is minimal if any. This is despite the fact that History is one of the important social sciences in the secondary school curriculum. Thus, this study was commissioned to investigate the impact of teaching/learning resources on performances in Kenya Certificate of Secondary Education (KCSE) History examinations in Tigania and Igembe Districts.

2.0 Literature Review

2.1 Lack of Adequate Teaching or Learning Resources

In her study, Ananda (1990:91) found out that most of the schools lacked adequate teaching/learning resources such as textbooks, teachers' guides and reference materials, maps, games facilities and stationary. The pupils brought to school the teaching/learning resources they could get from their homes. In fact, performance in school is actually affected by lack of adequate physical facilities and teaching aids which many schools lack. The researcher wanted specifically to find out whether schools in Tigania and Igembe districts lacked these resources. Parents have abdicated their responsibility of providing the students with learning materials, which many of the schools are not able to buy. Therefore, there is need for the parents to get involved in providing books and other relevant learning materials to their children. This should not be the sole responsibility of the school. The parents should confirm whether the children have enough required books and encourage the children to make use of them while at school or at home. This was subject to investigation in this study for there has been no study carried out in Tigania and Igembe to investigate History teaching/learning resources.

2.2 Quality Teaching

Maundu (1986) stated that the variation in the quality of teaching/learning facilities suggest that student receive poorer education. Maundu was referring to the poor science laboratories and library facilities in Harambee (community) schools, unlike those found in Provincial and National secondary schools which were much better. In this research, Maundu noted that old schools were equipped with adequate number of laboratories and library facilities. This might have contributed to their better performance in KCSE. The availability of teaching aids/resources in schools is ranked among factors that influence performance in national exams. The above view is strengthened by assertion of psychologists who suggest that the sense of hearing and seeing contribute to the disparity of learning. People retain 20% of all that they hear and 50% of what they both see and hear (Ayot 1984:134).

From this view it would appear that the use of a variety of teaching aids/resources is necessary because the chances of greater perception, understanding, reinforcement and retention of the subject matter may be improved and this was what the researcher was out to investigate. Ayot (1984) emphasizes that classroom text books are valuable for teaching but their value is very limited if the pupils cannot obtain or use them. Further, he adds and states that a school library has a vital part to play in any good system of education. This is an important area of educational resources without which the learning process in the school cannot take place to a satisfactory level. I agree with Ayot because if a school aims at really educating the students entrusted to it, and not merely teaching them, the library can provide the background materials which can enrich the study of almost any subject. Therefore, whether availability and adequacy of teaching aid/resources improve students' performance in secondary schools was to be investigated in this study.

2.3 Institutional Libraries and Teachers' resource centers

According to Koech report (1999:39), institutional libraries, as well as teachers' resource centers were poorly equipped in terms of books, modern journals, and funds were not available to purchase new publications or obtain database facilities for accessing library information from the internet. These materials were also lacking in the majority of learning institutions. It was observed that institutional libraries do not open during the weekend or holidays to allow people to use the facilities. Lack of these facilities may influence performance in national examinations. According to this report, the quality and adequacy of resources such as physical facilities, teaching and learning materials have a direct bearing on the quality of education as they determine how effectively the curriculum is implemented.

According to Nasibi and Kiio (2005), History learning resources are important in education because they motivate learners to learn, learners come in contact with real things. They encourage learners to utilize more than one sense, thereby increasing their retention capacity. Availability and utilization of school libraries is what the researcher was out to investigate for a study has not been carried out in Tigania and Igembe districts.

3.0 Methodology

3.1 Research design

Descriptive survey design was used to carry out this study. The design enabled the researcher to identify teaching/learning resources that influence performance of students in the sampled districts in the KCSE History examinations. The target population for the study comprised eighty two (82) Head teachers, all the teachers of history from the eighty two (82) secondary schools, all parents who were members of Parents Teachers Association (P.T.A) in the eighty two (82) secondary schools and one thousand six hundred and forty (1640) form three students. Probability sampling using simple random sampling was used to sample 20 schools based on their categories (Provincial boarding schools, District boarding schools, private Boarding Schools and mixed

day schools). The sample comprised of twenty (20) secondary schools, twenty head teachers, forty (40) History teachers, forty (40) parents who were members of the P.T.A, and four hundred (400) students (twenty from each of the twenty secondary schools) were sampled.

3.2 Data analysis

The data was quantitative and qualitative in nature. It was analyzed using descriptive statistics, that is, means, percentages and inferential statistics. A Chi- Square was used to test the Null Hypotheses. The researcher did raw data editing. Raw data editing is the procedure that improves the quality of data for coding. The researcher did data tabulation which was part of the technical procedure, where the classified data are put in the form of tables. The researcher coded the data on the Computer Coding Sheets commonly used, using SPSS-X Computer Programme. The SPSS-X is a comprehensive integrated collection of computer programmes for managing, analyzing and displaying data (Orodho 2004:250). The data was then presented in form of tables, bar graphs, and pie charts.

4.0 Results and discussion

4.1 Adequacy of History resources

The availability and adequacy of learning materials is closely related to how learners perform in History examinations. It is understood that insufficient learning resources will lead to poor performance in any course, not just History. On the other hand, learners that are exposed to sufficient learning resources are bound to perform better in their examinations. Therefore, the researcher sought to determine the availability of History resources in the surveyed schools. Teachers were requested to comment on the adequacy of History resources in the surveyed schools. Table 1 presents the results.

Table 1: Adequacy of History resources in surveyed schools

Adequacy	Frequency	Percentage
Adequate	10	25.0
Inadequate	30	75.0
Total	40	100.0

From table 1, majority (75.0%) of the schools had inadequate History resources, while the minority (25.0%) had adequate History resources. These findings indicate that majority of schools in Tigania and Igembe districts had insufficient History resources. Poor performance in the subject can be attributed to this limited supply of resources.

It is generally accepted that good facilities are needed for good education. Omotayo et al (2008) maintain that the provision of adequate facilities would ensure quality education. All of these would have implications for the conduct of educational activities in higher institutions of learning and lack of these may, therefore, lead to the general decline of standards in higher education. Various authors (Eshiwani, 1983; Maundu, 1986 and Ananda, 1990) have argued that inadequate learning resources in both primary and secondary schools impact negatively on performance of students in national examinations. A library is the main place that most learning resources are found in schools. The study also sought to find out if the schools had a library. Table 2 shows the results.

4.2 Availability of library

Table 2: Availability of a library

	Frequency	Valid Percent	Cumulative Percent
Library available	10	25.0	25.0
Not available	30	75.0	100.0
Total	40	100.0	

This study established that most schools (75%) in the study area have no library. This might probably be due to lack of enough financial resources to set up a library in most schools. This might also be a reflection of poverty levels in the two districts since most facilities are financed by parents. It is likely that if the schools were set up in economically stable regions then most parents could be able to finance the establishment of libraries. The high number of schools lacking libraries might be an indication that the administration in most of schools are failing in their role to prioritize provision of learning and teaching resources. In addition, the administration in these schools might also be poor in outsourcing for resources that can enable them set up libraries in their schools. Data in table 2 show that 25% of schools have libraries. This study also sought to establish how well the libraries are equipped. Table 3 below illustrates the adequacy of resources in these libraries.

Availability of a library	History resource adequacy	Number of schools	Percent	Valid Percent	Cumulative Percent
Have a library	Adequately	2	5.0	18.2	18.2
	Fairly adequate	6	15.0	54.5	72.7
	Inadequate	3	7.5	27.3	100.0
	Total	11	27.5	100.0	
Have no library		29	72.5		
Total		40	100.0		

Table 3: History resources in the library

Data in the table above indicate that a large percentage (72.5%) of schools in the districts had no libraries while only 27.5% of the schools had a library. These findings present a negative picture about the library situation in both Igembe and Tigania districts. This situation needed a quick remedy if learners were to register better performance in History examinations. The study also sought to determine whether the available libraries were well stocked or not. From the table above, only 18.2% of the school libraries were adequately stocked. However, 54.5% of school libraries were fairly equipped while 27.3% of the libraries were inadequately stocked. The pie chart below paints a better picture on the adequacy of History resources in school libraries.

Figure 1: History resources in the library



From the figure above it is clear that most schools which have libraries have fairly adequate resources. This is an indication that those schools which have libraries are committed to stocking the libraries with History teaching resources even though much need to be done. Since most schools do not have a library, this study sought to establish whether schools have adequate History resources despite them having no libraries. Table 4 summarizes the state of History resources in schools in Tigania and Igembe districts.

4.3 State of History Resources

History resources	Adequacy of History resources	Frequency	Valid Percent	Cumulative Percent
History resources (according to teachers)	Adequate	11	27.5	27.5
	Inadequate	29	72.5	100.0
	Total	40	100.0	
History resources (according to	Adequate	2	10.0	10.0
head teachers)	Inadequate	17	85.0	95.0
	No response	1	5.0	100.0
	Total	20	100.0	
History resources (according to	Inadequate	40	67.7	67.7
students' focus groups)	Adequate	20	33.3	100.0
	Total	60	100.0	

The results show the general state of History resources in schools studied is inadequate. From the findings, only 27.5% (according to teachers), 10.0% (according to head teachers) and 33.3% (according to students' focus groups) of the schools surveyed had adequate History resources. The inadequacy of resources in most schools in the two districts might be contributory factor to the poor results in KCSE History examinations in the districts.

The results indicate that the majority of teachers (72.5%), head teachers (85.0%) and students (67.7%) feel that History resources are inadequate to teach effectively. However, there is a significant difference between students and head teachers on adequacy of History resources. This could probably be due to the differences in their interpretation of what is meant by History teaching resources. Table 5 provides a summary of learning resources according to students' responses.

Learning resource	Frequency	% of focus groups
Adequate revision materials	33	55
Adequate course books	16	26.7
Adequate History teachers	14	23.3
adequate exposure (field trips)	5	8.3
Well equipped library	5	8.3
Availability of audio visual resources	11	18.3

Table 5: Learning resources according to students

Sixty focus group interviews were held. It is apparent that revision materials (55%) and books (26.7%) are valued among students. Other resources that are valuable for effective learning include adequate teachers and exposure, well equipped library and availability of audio visual resources. The finding that well equipped library and availability of audio-visual resources supports Ngure (20120 findings that libraries and technological facilities such as computers are essential for effective learning and teaching. The emphasis on revision materials by students reflects the emphasis in passing exams instead of content acquisition. This implies teaching of History in Kenya has a negative backwash effect, whereby teaching and learning are dictated by national examinations, in this case, KCSE examinations.

In order to clearly understand the situation of books in schools, head teachers were asked to state the textbook/student ratio in their schools. Figure 2 illustrates the ratio reported by head teachers.





From this figure, it is clear that over 70% of schools in Tigania and Igembe districts have a high textbook/student ratio of over 1:3. This indicates that most schools do not have enough History textbooks. This affirms the teachers', the students' and head teachers' views on inadequacy of History resources among schools in Igembe and Tigania districts. This illustrates the emerging fact that most schools in the region have inadequate History teaching and learning resources. At this level, students should be able to learn on their own by each having his/her own textbook. The current situation implies that it is not possible for all the students to do homework outside the classroom. This limitation is most likely to affect performance.

In order to understand the impact of the state of History resources on the performance of students in KCSE History examinations, the following null hypothesis was tested using chi square.

HO1: History learning materials and resources in secondary schools do not influence students' performance in Kenya Certificate of Secondary Education (KCSE) History examinations.

Table 6 below shows chi square for resource availability and KCSE results between 2007 and 2009.

The results show that chi square for 2009 was 9.254and p-value was 0.029. This indicates that the chi square significant level was less than 0.05. This implies that there was a statistically significant relation between History resources and KCSE mean grade in 2009. The results for 2008 indicate that chi square was 12.042, and p-value was 0.01. These results also indicate that the chi square significant level was less than 0.05. This implies that there was a statistically significant relation between History resources and KCSE mean grade in 2009. The results for 2008 indicate that chi square was 12.042, and p-value was 0.01. These results also indicate that the chi square significant level was less than 0.05. This implies that there was a statistically significant relation between History resources and KCSE mean grade in 2008. In 2007 chi square was 7.030 and p-value was 0.001. This also shows that the chi square significant level was less than 0.05. This implies that there was a statistically significant relation between History resources and KCSE mean grade in 2007. All these findings support the findings of Opula (2012) that school based factors such as adequacy of instructional resources impact on the performance of students in national examinations.

Table 6 : Chi square for resources availabilit	v and KCSE results between 2007 and 2009
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Year				Asymp. Sig. (2-
		Value	df	sided)
History resources and KCSE mean score in 2009	Pearson Chi-Square	9.254(a)	5	.029
(mean score 6.06, mean grade C)	Likelihood Ratio	10.635	5	.019
	Linear-by-Linear Association	.728	1	.393
	N of Valid Cases	40		
		Value	df	Asymp. Sig. (2- sided)
History resources and KCSE mean grade in 2008 (mean score 6.42, mean grade C)	Pearson Chi-Square	.472(a)	3	.013
	Likelihood Ratio	.506	3	.018
	Linear-by-Linear Association	.171	1	.679
	N of Valid Cases	40		
History resources and KCSE mean grade in 2007(mean score 6.031, mean grade C)		Value	df	Asymp. Sig. (2- sided)
	Pearson Chi-Square	6.395(a)	5	.001
	Likelihood Ratio	6.354	5	.002
	Linear-by-Linear Association	1.773	1	.183
	N of Valid Cases	40		

Results for relation between state of History resources in schools and KCSE mean grade in 2006 indicate that the Pearson Chi square value was 7.243 and the significant level was 0.045 (X^2 =7.243, p<.05) as shown in table 7 below.

Table 7: Chi square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.243(a)	5	0.045
Likelihood Ratio	8.151	5	.023
Linear-by-Linear Association	3.631	1	.057
N of Valid Cases	40		

The table above shows that the Pearson Chi-square is 7.243 at 5 degrees of freedom (df). The significant level at this level is 0.045. This significant level for chi square is less than.05. This implies that the state of History resources significantly impacted on the KCSE History performance in 2006. From the analysis, it is imperative that the significant level of chi square for the relation between History resources and KCSE results was consistently less than 0.05 for 2009,2008, 2007 and 2006. Thus one might conclude that adequacy of History resources in schools significantly influence the performance of students in the Kenya Certificate of Secondary education in History resources in schools significantly influence the performance of students in the KCSE History examination in Igembe and Tigania districts. Thus one might conclude that adequacy of History examination in Igembe and Tigania districts. This is consistent with the findings of other authors such as

Eshiwani, 1983, Maundu 1986 and Ananda 1990. Table 8 is a summary of the results for the relation between library availability and KCSE mean grade.

Table 8: Chi square for Library	y availability and KCSE results between 2006 and 20)09

		Value	df	Asymp. Sig. (2- sided)
Library availability and KCSE mean grade in 2009 (mean score 6.06, mean grade C)	Pearson Chi-Square	7.923(a)	5	.161
	Likelihood Ratio	8.678	5	.123
	Linear-by-Linear Association	.202	1	.653
	N of Valid Cases	40		
Library availability and KCSE mean grade in 2008 (mean score 6.42, mean grade C)	Pearson Chi-Square	3.175(a)	3	.365
	Likelihood Ratio	4.579	3	.205
	Linear-by-Linear Association	.430	1	.512
	N of Valid Cases	40		
Library availability and KCSE mean grade in 2007 (mean score 6.031, mean grade C)	Pearson Chi-Square	4.978(a)	5	.419
	Likelihood Ratio	6.381	5	.271
	Linear-by-Linear Association	.032	1	.858
	N of Valid Cases	40		
Library availability and KCSE mean grade in 2006 (mean score 5.09, mean grade C)	Pearson Chi-Square	6.825(a)	5	.005
	Likelihood Ratio	7.408	5	.001
	Linear-by-Linear Association	3.317	1	.069
	N of Valid Cases	40		

The results for 2009 were X^2 =7.923, p=.161; 2008 were X^2 =3.175, p=.365 and 2007 were X^2 =4.978, p=.419. The significant levels for chi square obtained in 2009, 2008 and 2007 is greater than 0.05. This indicates that in 2009, 2008 and 2007 library availability did not significantly impact on KCSE mean grade. From table 4.3.9 the relation between library availability and KCSE mean grade in 2006 indicate that the Pearson Chi square value was 6.825 and the significant level was 0.005 (X^2 =6.825, p<.05). Since the significant level (p-value) is less than 0.05(p<0.05), it can be asserted that library availability significantly impacted on KCSE mean grade in 2006. This is inconsistent with what was obtained in other years (2007, 2008 and 2009) and, therefore, raises questions on whether the impact of availability of a library in a school significantly impacts on the KCSE History examination results. This might be probably due to the fact that some schools have adequate History learning and teaching resources, even though they lack a library. For example, when these results are compared to those obtained in table 4.3.8, it is clear that provision of History learning and teaching resources impact on KCSE results. For long, parents have been instrumental in the provision of learning resources in the schools. However, with the introduction of partial free secondary education in public secondary schools, the role of provision of learning resources by parents has been dwindling.

This study also sought to find out whether parents provide teaching/learning resources in schools. Table 10 below provides a summary of participation of parents in provision of learning resources.

Table 9: Teaching/Learning resources provided by parents

		Frequency	Valid Percent	Cumulative %
Parents provide teaching/learning	Yes	29	72.5	72.5
resources	No	11	27.5	100.0
Type of resource provided	School fees	8	27.6	27.6
	Physical facilities	1	3.4	31.0
	Revision materials	8	27.6	58.6
	Books and other reading materials	12	41.4	100.0

From the findings most parents (72.5%) are still involved in the provision of teaching/learning resources in schools in Tigania and Igembe districts. The main resources provided by parents are books and other reading materials, school fees, revision materials and to some extent physical facilities. Given that school fees is used to buy various teaching and learning resources, it can be said that parents in Tigania and Igembe districts are still engaged in provision of learning and teaching resources in schools.

5.0 Conclusion and recommendation

The study investigated the impact of availability and adequacy of learning resources for History in the two districts on academic performance. From the results obtained, it can be concluded that most schools in the districts (over 75%) lack a library and of those schools which have a library, only 18.2% are adequately stocked with History learning/teaching resources. It can also be concluded that the general resources in the schools in Tigania and Igembe districts have inadequate History resources. Of most importance are lack/inadequate revision materials, course books, History teachers and teaching aids, such as audio visual resources. The extent of inadequacy of History teaching resources in the two districts is reflected in the high textbook/student ratio of over 1:3 in most schools (70%). This implies that most schools are ill equipped with History learning/teaching resources in the two districts. The impact of insufficient teaching/learning resources on KCSE History examination results was significant for all the years investigated. Thus, it is hereby concluded that History learning materials and resources in secondary schools influence students' performance in Kenya Certificate of Secondary Education (KCSE) History examinations in Tigania and Igembe districts in Meru County, Kenya. However, it is interesting to note that this study did not establish any significant relationship between availability of a library in a school and performance in KCSE History examinations. This might probably be due to the fact that some schools have adequate History learning and teaching resources even though they lack a library. It is worthy noting that in most schools the parents still bear the burden of providing learning and teaching resources. This is in spite of the partial support to buy resources from the government. The inadequacy of History teaching resources in the district was one of the major factors influencing poor performance in KCSE History examinations.

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