

# RELATIONSHIP BETWEEN GEOGRAPHY CURRICULUM TEACHERS UNDERWENT AND THE STUDENTS' ACADEMIC ACHIEVEMENT IN GEOGRAPHY IN KENYA CERTIFICATE OF SECONDARY EDUCATION EXAMINATION IN RARIEDA SUB- COUNTY, KENYA

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**Abstract:** Geography provides opportunities for students to develop their general intellectual capacity for life-long learning, skills such as critical thinking, communication, information processing, problem solving, and decision-making. There has been lower performance in Geography compared to other subjects such as Religious Education and History in National Examination in Rarieda Sub County.. The main purpose of the study was to explore the relationship between the Geography Curriculum the teacher underwent and the students' academic achievement. Ex-post facto research design and a Conceptual framework were employed in the study. The target population was 76 Geography teachers, 44 heads of humanities department, 44 principals and 750 form 4 Geography students from the 44 public secondary schools. The sample size was 276 respondents which constituted 23 Geography teachers, 14 Principals and 14 Heads of Departments in Humanities and 225 form 4 Geography students. Cluster sampling procedure was used to sample 14 schools for the actual study. Simple random sampling technique was used to sample the respondents for the study. Questionnaires, interview schedules and document analysis were employed to collect data. Validity of the instruments was ascertained by the research experts (supervisors). Reliability of the instruments was established by piloting in 5 secondary schools using test –retest technique. Descriptive and inferential statistics were used to analyze quantitative data while qualitative data was done through thematic analysis. The study found out that there was no relationship between the Geography curriculum the teacher underwent and students' academic achievement in Geography. It was concluded that Teacher education and training affect the students' performance to a greater extent. The study recommended that the ministry of education should incorporate new paradigm shift in the pre service training of the teachers. The Teachers Service Commission to conduct mandatory sponsored Continuing Teacher Professional Development on regular basis. A study on influence of teachers' educational background on learners' enrolment in Geography in Kenya Certificate of secondary education examination would expound the current study.

**Keywords:** Geography Curriculum, Geography teachers, education, students.

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## 1. INTRODUCTION

### 1.1 Background to the Study

Geography enables us to understand the Earth we are living in from a spatial perspective; offers a systematic framework for enquiry into questions about the World that surrounds us; provides a bridge between the social sciences and the physical sciences, through the provision of an understanding of the dynamics of cultures, societies and economies on the one hand, and those of physical landscapes and environmental processes on the other. As a secondary school subject,

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Geography enables students to explore and understand the relationship between the earth and its people through the study of space, place and environment (Institute of Australian Geographers, 2013). These three macro-concepts form the core of geography in secondary education. In pursuit of such an understanding, as an elective subject in the secondary school curriculum, Geography aims to provide students with an understanding of the Earth and the modern world. Secondary geographical education seeks to use the rich context that Geography has to enable students to gain a deeper understanding of the changing world, the changing environment and the changing economy. Furthermore, the study of Geography would help students develop a sound knowledge of our nation (Geographical Association, 2011).

According to KICD Syllabus(2008) and KNEC- KCSE Regulations and Syllabuses (2013), the General Objectives of Secondary School Geography are to: appreciate the importance of studying Geography; recognize different types of environments and manage them for individual, national and international development; identify and explain weather phenomena and their influence on the physical environment and human activities; explain land-forming processes and appreciate the resultant features and their influence on human activities; acquire knowledge of available natural resources and demonstrate ability and willingness to utilize them sustainably; identify and compare economic activities in Kenya and the rest of the world; state, interpret, analyze and use Geographical principles and methods to solve problems of national development; apply field-work techniques in studying Geography; acquire knowledge and skills necessary to analyze population issues of Kenya and the world; appreciate the importance of interdependence among people and among nations; identify, assess and have respect for different ways of life influencing development at local, national and international levels; demonstrate the acquisition of positive attitudes, values and skills for self-reliance; acquire appropriate knowledge, skills and attitudes as a basis for technological and industrial development; and promote patriotism and national unity.

According to Niemi and Jaku (2009), Teachers have to be familiar with the most recent knowledge and research about the subject matter. In their article on teacher education curriculum of secondary schools in Finland, the authors assert that teachers have to know how subject matter can be transformed in relevant ways to benefit different learners and how it can help learners create foundations on which they can build their lifelong learning. This means that teachers need the latest research findings and knowledge in pedagogy. A study was conducted by Celik (2011) on characteristics and competencies that teacher educators need to address for improved professional standards for teachers in Turkey. The author avers that the quality of teaching requires teachers to have a strong pedagogical foundation, including expert knowledge of the field and education in general, instructional skills of transferring this knowledge to others and to bring practical experiences to a theoretical level.

A study was done on schools offering Geography in England by Ofsted (2011) and found that secondary school pupils often faced dull lessons and had confused "mental images" of the world. The report further indicated that Geography is declining in many of England's schools as pupils turn away from a subject they find "boring and irrelevant". In secondary schools, "uninspiring teaching" and the "lack of challenge" discouraged many students from choosing geography at GCSE. The decline in school geography means that there is less geography being taught in school and more children leaving school with an inadequate knowledge and understanding of their existence on planet earth. With many schools providing 'no better than satisfactory' teaching, the society may be required to endorse Ofsted's recommendation for more subject-specific training.

In examining whether teacher licensure test scores and other teacher qualifications affect high school student achievement, the results of Buddin and Zamarro (2009) showed large differences in teacher quality across the school district. However, measured teacher characteristics explain little of the difference in academic achievement. They found that teacher licensure test scores are unrelated to teacher success in the classroom. Similarly, student achievement is unaffected by whether classroom teachers have advanced degrees or not. This was the outcomes of a study conducted in Urban, Elementary Schools in Los Angeles, United States of America (Buddin and Zamarro, 2009).

According to Lauwerier and Akkari (2015), the issue of quality in basic education in sub-Saharan Africa is inseparable from the quality of teachers involved. They further argued that both pre-service and in-service training are superficial and inadequate and thus have a little bearing on classroom practice. Meeting this challenge is vital in achieving quality of basic education in sub-Saharan Africa. Moreover, Lauwerier *et al* holds the view that low level of teacher training in sub-Saharan Africa holds back any improvement in the quality of basic education. Abe's (2014) study conducted in Ekiti

State, Nigeria concluded that, a significant difference existed in the performances of students in Mathematics taught by professional teachers and non-professional teachers, between students taught by Nigeria Certificate in Education teachers and Bachelor of Science in Education Teachers (B.Sc Ed) and also between B.Sc teachers and B.Sc Ed. Teachers. It was supported by another study in Ondo State, Nigeria by Olatunji and Nuvadeen (2010) who concluded that there is a positive relationship between teacher's attributes and students' academic performance in Geography measured in terms of knowledge of subject matter, communication ability, and interest in the job and student academic achievement. However, Maphoso and Mahlo (2015) carried out a study in Limpopo province in South Africa to investigate the relationship between teacher qualification and pupil academic achievement. The study found no significant difference in qualifications of teachers between boarding and non-boarding schools and between low and high achieving schools. It was found that Teacher qualification was not the sole contributor in academic achievement. It seems that there is mixed information on the effect of teacher qualification on students' academic performance. Some studies show some effects while others do not show any effect.

In Kenya, the government's commitment to the provision of quality education and training to its citizens cannot be overemphasized. For instance, Ministry of Planning and National Development (2007) through vision 2030 singles out education and training as the vehicle that will drive Kenya into becoming middle –income economy. According to the Ministry of Education's task force report on the Realignment of the Education sector to Vision 2030 and the Constitution of Kenya 2010, basic education curriculum should be designed to equip learners with the relevant knowledge that emphasizes on technology, innovation and entrepreneurship, the development of their full capacities, living and working in dignity, enhancing their quality of lives, making informed decisions and continuing with learning as a lifelong engagement (MOE, 2013).

### **1.2 Statement of the Problem**

Despite the fact that Geography has a contribution to holistic development of the learners as envisaged in Kenya's broad based curriculum, it is a matter of concern to make learners perform well. Students record lower performance in Geography compared to History and Government and Religious Studies in National examinations. Therefore low performance in Geography coupled with low enrolment is of concern to teachers, students and other education stakeholders on how to reverse this trend. Among the factors within teacher's control that significantly influence student achievement are professional characteristics and teaching skills. It is against this background that the study was geared towards establishing the relationship between Geography Curriculum the teacher underwent and the students' academic achievement in Geography in KCSE in Rarieda sub-county.

### **1.3 Objective of the study**

The objective of the study was to explore the relationship between Geography Curriculum the teacher underwent and the students' academic achievement in Geography in KCSE in Rarieda sub-county.

### **1.4 Research question**

The research question of the study was “What is the relationship between Geography Curriculum the teacher underwent and the students' academic achievement in Geography in KCSE in Rarieda sub-county?”

### **1.5 Significance of the study**

The study may benefit various stakeholders namely, Teachers Service Commission (TSC), Kenya Institute of Curriculum Development (KICD) and Kenya National Examination Council (KNEC).

### **1.6 Scope of the study**

The study was carried out in public secondary schools in Rarieda sub-county in Kenya and focused on the relationship between Geography Curriculum the teacher underwent and the students' academic achievement in Geography. The study adopted Ex-post facto research design.

### **1.7 Theoretical and conceptual framework of the study**

The study employed the performance theory and a conceptual framework.

## 2. LITERATURE REVIEW

### **Relationship between the Curriculum Geography Teacher underwent and Student's academic achievement**

Curriculum may be school based or centrally-based curriculum development (Shiundu and Omulando, 1992). In the former, the teacher may be involved from planning to evaluation while in the latter, the teacher's role is dominant only at the implementation stage as most curriculum activities are done by the central office. Celik (2011) opined that the quality of teaching requires teachers of a strong pedagogical foundation including expert knowledge of the field and of education in general, instructional skills of transferring this knowledge to others and to bring practical experiences to a theoretical level. Teacher education is an important component of education as through it, teachers who are considered as mentors in any society are prepared and produced (Kafu,2011).

Niemi and Jaku-Sihvonen (2009) in their article on teacher education curriculum of secondary schools in Finland posited that high level learning outcomes can be seen as a result of a purposeful educational policy and a high competence of teachers. This teacher education was raised to Master of Arts level and teachers are seen as professionals who have their rights and obligation to develop their work in schools. The structure and content of teacher education to be research and evidence –based. This implies that the teachers learn to be analytical and draw conclusion based on their observation and experiences to help them develop their teaching and learning environment in a systematic manner. The teacher education degree programme of secondary school teachers (subject teachers) includes one major subject plus a Master's thesis in their own academic discipline. In addition, they must complete one or two minor subjects comprising at least in one subject. Subject teachers receive instruction in research methodology and research in their subjects as a part of subject studies. They also become familiar with education and research in education in pedagogical studies.

Teachers' education in the United states is divided into three stages: initial teacher training/education (pre service course before entering the classroom as a fully responsible teacher); induction (process of providing training and support during first few years of teaching or first year in a particular school; and Continuing teacher professional development (an in service process for practicingteachers (Feistritzer, (2007). In many countries, initial teacher training (pre service teacher training) takes place largely or exclusively in institutions of Higher learning/Education. It may be organized according to two basic models -consecutive and concurrent model (MOE, 2012). Generally teacher education can be broken down into four major areas which include: Foundational knowledge in educational-related aspects of philosophy of education, history of education, educational psychology and sociology of education; skills in assessing student learning; content-area methods knowledge and skills; and practice at classroom teaching. It is worth noting that based on reviewed literature from the Jabbar and Hardaker (2013), several authors note that the current teacher education in is highly flawed and primarily geared towards a western dominated curriculum. They suggest that teacher education should be inclusive and take into account multiple backgrounds and variables to allow teachers to be responsive to the requirements of their students.

The same sentiments were echoed by Lauwerier and Akkari (2015) who argue that the issue of quality in basic education in sub-Saharan Africa is inseparable from the quality of teachers. They further indicated that both pre service and in-service training are superficial and inadequate and thus have little bearing on classroom practice. Meeting this challenge is vital in achieving any improvement in the quality of basic education in Sub Saharan Africa. A study was conducted in South Africa by Nana and Sisulu (2010) on school- based continuing teacher Professional Development in Eastern Cape. The study found that two major problems bedeviling teacher education and training as in-service and continuing professional teacher development initiatives are how to equip practicing teachers with modern technological expertise to implement curriculum and be able to do their teaching professionally. The Study proposed school based in-service training as an intervention strategy for teacher professional growth and development in Eastern Cape.

There are new developments in teacher education in Kenya that have been occasioned by socio-economic and political changes as well as technological advancements locally and beyond. Karanja as cited by Kafu (2011) avers that the term teacher training and teacher education are confusing. There is a school of thought which believes that teacher education means mere training of teachers. That is, an education programme that equips the teachers with pedagogical content only. Then there is another school of thought that regards teacher education as preparation of teachers or training and teacher

development process. This concept of teacher education focuses on preparing school teachers in pedagogical content as well as academic content. The emphasis is laid on equipping a school teacher with adequate competencies in both pedagogical and academic contents that prepares the teacher for challenges of modern life. This unclear definition of teacher education has tended to affect the preferred modes (approaches) of training teachers today and the quality of teachers produced to serve an education system. The author further connotes that things became bad for the programme after 1978 when politics was introduced with impunity in teacher education administration. This period saw head-teachers of secondary schools who had failed in their duties being posted as Principals and tutors in teacher-training institutions, young University graduates being appointed as teacher-trainers and individuals with no training in education also serving as teacher-trainers. It has tainted the image of teacher education and raised questions on the quality of the prepared and produced school teachers (Kafu, 2011).

Teacher knowledge plays a significant role in classrooms, as it can affect teachers' choice of appropriate strategies during the teaching process (Rilwani, 2014). Teachers are an important resource in the teaching and learning process and their training and continuous professional development is pivotal to achieving the vision and aspirations of the country. A teacher refers to a person who organizes the environment to enable learners to acquire knowledge, competencies, skills and attitudes to learners and has undertaken a recognized pedagogical training program and attained accredited certification (Muita, 2012). In a general sense, teachers can be categorized as trained or untrained teachers. A trained teacher is a person who meets the prescribed admission criteria to training, as provided for in the regulations, and has gone through a recognized and accredited training program, and attained accredited certification. An untrained teacher refers to a person who is engaged as a teacher and meets the prescribed admission criteria as provided for in the regulations and has the subject mastery for the purposes of becoming a teacher but has not undertaken pedagogical training program (MOE, 2012). Whether trained or untrained the teacher has certain content that is attained as the teacher climbs up the academic ladder.

The objectives of teacher education programmes aim at developing communication skills, professional attitudes and values that equip teachers with the knowledge and ability to identify and develop the educational needs of the child. According MOE (2012), Secondary teacher training courses are provided in two models- consecutive and concurrent models. In the consecutive model, the trainees undertake the subject area first and graduate with either Bachelor of Arts or Bachelor of Science degree and later undertake a nine month postgraduate diploma to make them trained teachers. In the concurrent model, the trainees study both the subject area and pedagogy at the same time and graduate with a Bachelor of Education. Secondary teacher training concentrates on pedagogy and subject knowledge in two subject areas. One of the subjects becomes the major and the other is the minor. Geography teachers are employed as teachers when trained in the following subject combinations: Geography/Mathematics, Geography/Kiswahili, Geography/History, Geography/CRE, and Geography/Business (TSC Recruitment Guidelines, 2017). In addition students are required to follow courses in theories of education. The balance of time allocated to theory and practice is a matter of debate, with the argument now moving towards a greater emphasis on teaching and teaching methods, leaving the more theoretical aspects of education to be addressed in post-graduate programmes (MOE, 2012). Bishop (1985) and Ayot (1988) postulated that availability of adequately trained manpower is crucial for the proper implementation of curriculum and attainment of the syllabus objectives. Well-trained teachers can make important decisions with wide implications in the classroom, whether it is in terms of the content or the methods used in teaching.

Innovations and changes, such as the introduction of integrated subjects, have a better chance of successful integration if teachers are familiar with the aims and objectives of the curriculum. Bishop (1985) was of the opinion that a curriculum is only as good as the quality of its teachers. He observed that there are many reasons for the discrepancy between the intent of curriculum projects and what actually happens in the classroom, between theory and practice, between desire and actual achievement, between plan and execution. While emphasizing the importance of teacher professional development as one of the reasons, Bishop noted that for curriculum implementation to be effective, it requires continuous support which may be realized through various support services such as training of key personnel on implementation process.

According to MOE's task force Report (2013), it was observed that teacher education in Kenya has not kept pace with the development that has occurred throughout most developed countries. This is attributed to lack of policy framework for



teacher education. Teacher education and the teaching profession are not well defined; and continuous professional development of teachers is still not embraced. The secondary school teacher education sector is faced with the following challenges: A number of the lecturers at the universities offering teacher training do not have Teacher Trainer Education qualification and fewer have recent and relevant secondary school teaching experience; there is no proper preparation or training for teacher educators; the teacher education curricula at the university are not based on well researched needs assessment, hence do not address the teacher needs at secondary level.

In 1967, the East African Community which consisted of Kenya, Uganda and Tanzania adopted the 7-4-2-3 system of education. This meant 7 years for primary education, 4 years of Secondary education, 2 years of high school and 3-5 years spent on college/ university education. Ominde Commission (1964), the first educational commission in Kenya, was formed to introduce changes that would reflect the nation's sovereignty. The commission focused on identity and unity, which were critical issues at the time. Changes in the subject content of history and geography were made to reflect national cohesion. The principle preoccupation for Ominde's report was to introduce an education system that promoted national unity and inculcated in the learners the desire to serve their nation.

Kahura (2018) postulated that the 7-4-2-3 system was good because it allowed students to identify their specialization early enough. It also helped them to gradually mature as students as they developed and gained analytical and comprehensive skills. However, according to Wanjohi (2016) the critics argue that, between 1964 and 1985 the 7-4-2-3-system of education lacked the capacity and flexibility to respond to the changing aspirations of individual Kenyans and the labour market needs, in terms of new skills, new technologies and the attitude to work. The education system was too academic and therefore not suitable for direct employment. Furthermore, the education system encouraged elitist and individualistic attitudes among school leavers, something that was considered incompatible to the African socialist milieu.

In 1985, there was introduction of the 8-4-4 system, which is to date applied widely in Kenyan schools and all public schools. Some private schools offer the British curriculum, which like the 8-4-4 system; include 4 years of secondary education. According to the Kenya Ministry of Education (1984) the 8-4-4 system of education was designed to encourage students to become more self-reliant and better oriented towards self-employment. It contained a rather broad curriculum at both primary and secondary levels, with a strong emphasis on practical subjects sitting alongside a rather traditional approach to academic subject. Strengths of the 8-4-4 System of Education in Kenya as identified by Koech Commission (1999) were: Practical subjects introduced the children to life skills and laid the foundation for skills development. Those subjects also oriented pupils towards the dignity of manual work. It is not clear which of these curricular makes a superior Geography teacher. This study was intended to fill this gap.

### 3. RESEARCH METHODOLOGY

#### 3.1 Research Design

The study employed ex-post facto research design. This design was chosen because the researcher was studying the events and circumstances which had already occurred and as they exist in schools. The design is particularly suitable in social and educational contexts where the independent variables lie outside the researcher's control. The design also does not allow the manipulation of independent variables (educational background) and dependent variables (performance in KCSE). No treatment was administered to the respondents in order to change their results. An ex-post facto design deals with variables that have already occurred and hence they could not be deliberately arranged and manipulated through the intervention of the researcher.

#### 3.2 Locale of the study

This study was conducted in Rarieda sub-county which covers a total of 798 Km<sup>2</sup> out of which 400 Km<sup>2</sup> is lake area and 398 Km<sup>2</sup> is dry land. It is bordering Lake Victoria and Homa County to the south Bondo and Siaya Sub County to the North and Kisumu County to the East. Geographically Rarieda lies between latitudes 00<sup>0</sup> 12' (degrees and minutes) south of equator and longitudes 34<sup>0</sup> 20'E (east of Prime meridian).

**3.3 Target Population**

The target population for this study comprised of all 76 Geography teachers, 44 principals and 44 Heads of Humanities Department and 750 form four Geography students in all the 44 public secondary schools in the Sub County. The form four fours were considered for the study because they had already made a choice on the subject and therefore were in a position to articulate the challenges face they face while learning Geography

**3.4 Sampling technique and Sample of the study**

Stratified sampling technique was employed to select a sample of 276 respondents which constituted 225 Form Four Geography students, 23 Geography teachers, and 14 Heads of Humanities Department and 14 Principals.

**3.5 Instruments of data collection**

Data was collected using questionnaires, interview schedule and document analysis guide.

**3.6 Reliability of research instruments**

Piloting was done in 5 secondary schools which formed 10% of the study population and a test-retest was done in order to establish reliability of the instruments. The results showed that r was 0.812 for Geography teachers’ questionnaire, 0.761 for Geography Students’ Questionnaire and 0.794 for HODs questionnaires while interview schedule for Principals was 0.770 depicting that the instruments were reliable for use.

**3.7 Validity of research instruments**

Validity of the instruments was ascertained through scrutiny by research experts ( supervisors) to examine the content and format in relation to the objectives of the study. Their feedback was then used to revise the instruments before being taken for pilot testing.

**3.8 Data analysis**

Quantitative data was analyzed using both descriptive and inferential statistics. Using the Statistical Package for Social Sciences (SPSS) version 20.0 and results were then presented in form of frequency tables, bar graphs and pie charts.

**4. RESULTS AND DISCUSSION OF THE STUDY**

**Findings on Relationship between Geography curriculum the teacher underwent and student academic achievement in Secondary schools**

Of 21 Geography teachers who took part in the study, 19 of them indicated that they acquired the Kenya Certificate of Primary Education (KCPE) then Kenya Certificate of Secondary Education (KCSE) while 2 had Certificate of Primary Education (CPE) and Kenya Certificate of Education (KCE) before attaining their highest academic qualification. The results of the findings are indicated in Table 4.1.

**Table 4.1: Geography teachers’ system of education**

System of Education	Frequency	%
8-4-4 System	19	90
7-4-2-3 System	2	10
<b>Total</b>	<b>21</b>	<b>100</b>

Source: Field data (2018)

The findings revealed that the curriculum system that majority of Geography teachers (90%) went through was 8-4-4 while 10% were 7-4-2-3 products. Data was also collected on students’ performance in Geography. The results of their performance showed that students taught by 8-4-4 Geography teachers had a mean of 6.926 while those taught by 7-4-2-3 Geography teachers had a mean of 6.810. An independent samples t-test was conducted to compare the means of students’ scores in relation to the systems of education experienced by the teacher. The findings shown in Table 4. 2

Table 4.2: Independent t-test

Group Statistics					
	System of Education	N	Mean	Std. Deviation	Std. Error Mean
Geog mean score	8-4-4 system	19	6.9268	1.73593	.39825
	7-4-2-3 system	2	6.8100	2.68701	1.90000

Levene's Test for t-test for Equality of Means						
Equality of Variance						
F	Sig.	t	df	Sig (2-tailed)	Mean Difference	
Equal Variances	.479	.497	.080	19	.931	.11684
Geog	assumed					
Score	Equal variances not assumed	.060	1.090	.961	.11684	

Source: Field data (2018)

Table 4.2, shows that there was no significant difference in teaching by either products of 8-4-4 system (6.93) or 7-4-2-3 system (6.81) ( $t(19) = .080, p = .931$ ). The findings seemed to agree with Wanjohi (2016) who opined that the 7-4-2-3 system lacked the capacity and flexibility to respond to the changing aspirations of individual Kenyans and the labour market needs in terms of new skills, technologies and the attitudes towards work. At the same time critics of 8-4-4 system argued that the system of education is overloaded, too examination oriented leading to academic backwash (Koech commission, 1999). However on the other hand, the proponents of 7-4-2-3 system of education allowed learners to specialize early, gradually mature and developed analytical and comprehensive skills (Kahura, 2018). The 8-4-4 system of education has broad based curriculum with practical aspects being offered, has increased opportunities for students to compete for university places. This implies that the system of education experienced by the teachers does not matter. It is the content knowledge and pedagogical training the teacher acquires enable effective delivery.

Majority of the Geography teachers posited that pursuing bachelor's degree training in either system of education was sufficient to produce the best academic performance in students. This finding is in line with the findings of Mamuda Sulaiman (2014) who noted that the teachers' characteristic is related to the subject matter knowledge teachers acquire during their formal studies, and pre-service teacher education courses. Several studies in the reviewed literature showed a positive relationship between teachers' preparation in the subject matter, they later teach and student achievement.

The HODs humanities were asked to indicate better Geography teachers between those who experienced 8-4-4 system and those who experienced 7-4-2-3 system. The finding revealed that majority of them (64%) believe that the products of either systems of education make better Geography teachers. Some 29% were of the opinion that 8-4-4 system products are better while 7% were for 7-4-2-3 products. Figure 1 below shows the results.



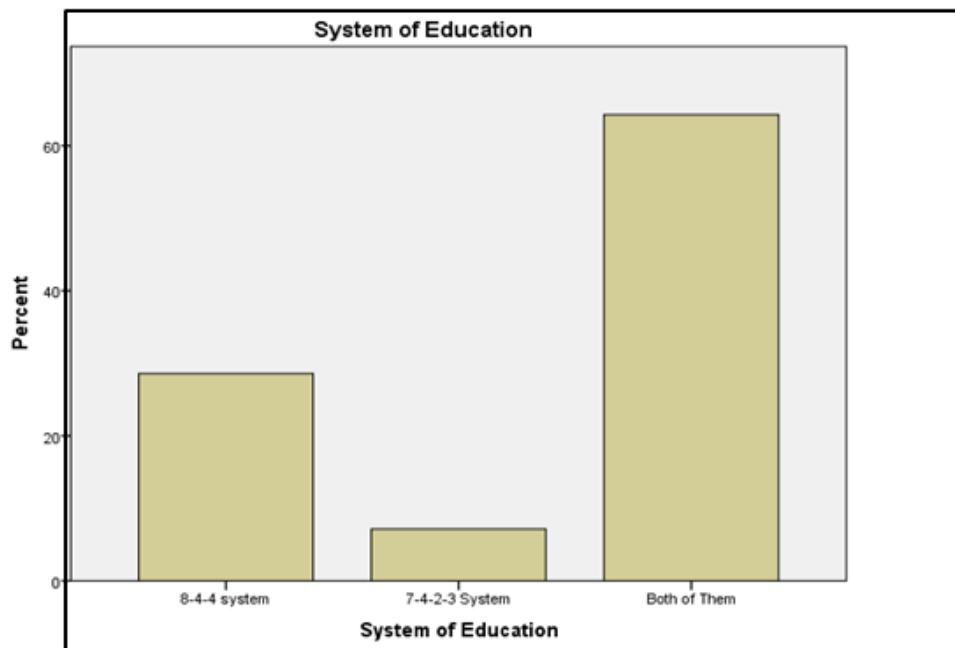


Figure 1: Better Education System

Source: Field Data (2018)

The study findings reveal that both 7-4-2-3 and 8-4-4 products have acquired adequate knowledge, content and skills necessary in facilitating geographical information to the students. This finding corroborates the findings on the principals as indicated in Table 4.3.

Table 4.3: Better Products of system of education in terms of teaching Geography

Education System	Frequency	%
Both of them	7	50
7-4-2-3	5	36
None of them	214	
<b>Total</b>	<b>14 100</b>	

Source: Field data (2018)

Table 4.3, shows that 50% of the Principals argued that both systems produce good teachers, 36% of the principals interviewed were of the opinion that 7-4-2-3 system products were better Geography teachers while 14% opined that none of them were better Geography teachers. One of the principals had this to say:

“The competencies of the teacher depend upon the training obtained. System is immaterial” (Principal 11)

It is evident that the system of education that the teacher experienced is immaterial has in terms of influencing on the academic achievement of the students. This finding seems to agree with the study by Olatunji and Nuvadeen (2010) who concluded that there is positive relationship between teachers’ attributes and students’ academic performance in Geography measured in terms of knowledge of subject matter, communication ability, and interest in the job and student academic achievement.

The principals’ opinion were further sought on whether the training of the teachers had influenced the students’ performance in Geography .Majority of the principals (57%) in their responses indicated ‘yes’ while 43% said ‘no’. One of the principals had this to say:

“They are highly motivated since they have proper training” (*Principal 7*)

Another principal interviewed confirmed that the enrollment in Geography had increased since the employment of a trained teacher of Geography.

One principal said that:

“Teachers prefer the other teaching subject compared to Geography. They are not well prepared to brand and package their subject well for attraction to learners” (*Principal 2*).

Adeyemi (2010) argued that there is need for teacher education programme to encourage interdisciplinary/multidisciplinary approach in teaching, thereby teasing out the relationship between subject compartments during the foundation level at schools. It was found that many students who took Social Studies at the junior secondary school level opted to choose Geography at the senior secondary school level. This being so, an interdisciplinary approach to teaching may also be encouraged at the teachers’ training colleges. For instance, Integrated Science, Social Studies, Development Studies, Language Arts which rely on the interdisciplinary approach to teaching and learning, can be further introduced into the curricula of teacher training colleges to bring out the relationship between and among subjects. Further encouragement of the curriculum that is rich in curiosity, reflection to make students wonder about universal phenomena – what is it that is happening in the immediate and the global environments.

Teachers were asked to indicate their two teaching subjects. The results were shown in Table 4.4.

**Table 4.4: Subjects the Teacher Trained to teach**

<b>Subjects</b>	<b>Frequency</b>	<b>%</b>
Geography/Kiswahili	11	52
Geography/Mathematics	4	19
Geography/Business Studies	4	19
Geography/History	2	10
<b>Total</b>	<b>21</b>	<b>100</b>

The findings revealed that 52% of Geography teachers also taught Kiswahili, 19% Mathematics or Business studies and 10% History. This implied that majority of Geography teachers concentrated on teaching the compulsory subjects hence leading to lower performance in Geography. This confirms the statement remarked by one of the Principals that teachers prefer the other teaching subject compared to Geography.

Teachers were further asked to indicate whether they had ever attended workshop or seminar or in-service course in Geography. The results were shown in the Table 4.5

**Table 4.5: Number of Workshops/Seminars /in service Attended by the teacher**

<b>Number</b>	<b>Frequency</b>	<b>%</b>
<b>None</b>	<b>1</b>	<b>5</b>
<b>Once</b>	<b>4</b>	<b>19</b>
<b>Twice</b>	<b>9</b>	<b>43</b>
<b>Thrice</b>	<b>5</b>	<b>23</b>
<b>Four times</b>	<b>1</b>	<b>5</b>
<b>Five times</b>	<b>1</b>	<b>5</b>
<b>Total</b>	<b>21</b>	<b>100</b>

Source: Field data (2018)

On Table 4.15, it is evident that the Geography teachers had attended workshop/seminar/in-service course with majority at least twice (43%), followed by thrice (23%) while four and five times each realized 5% each. Only 5% of the respondents had not attended any workshop on Geography teaching. The HODs humanities respondents (n=14) agreed that training of the teachers had influence on the students’ performance because it enables teachers to acquire knowledge, skills and techniques for competent delivery in the classroom. Muita (2012) observed that teachers training was wanting hence recommended regular in service training to ensure quality teaching and should be done in conformity to the current trends of education. In service training enables teachers to identify the poorly performed topics, broadens their understanding in marking of geography, effective methodology, and updates on the changes in Geography curriculum. This concurs with Nana Adu and Sisulu (2010) in their study who asserted that identifiable problems in teacher education and training are in-service training and Continuous Professional Teacher Development initiatives to equip practicing teachers with modern technological expertise to implement the curriculum and be able to do their teaching professionally.

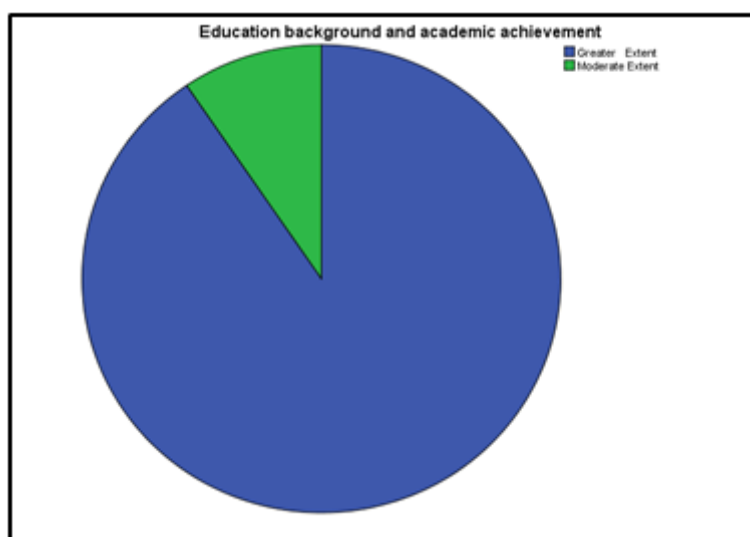
Geography teachers were further asked to indicate whether they were Geography examiners at the national level their responses were as shown in Table 4.6.

**Table 4.6: Being National examiners in Geography**

National Examiner	Frequency	%
Yes	2	10
No	19	90
<b>Total</b>	<b>21</b>	<b>100</b>

Source: Field data (2018)

The study results indicate that 90% of the teachers are not examiners while only 10% as national examiners in Geography. The findings therefore reveal that majority of the teachers had no idea on the current marking trends and this affects the performance of students in Geography. The study further sought to establish the extent to which the teachers’ educational background has influenced the academic achievement of students in Geography as depicted by Figure 2.



**Figure 2: Extent of teacher’s education background in students’**

**Academic achievement**

The results in figure 4.2 show that teacher’s educational background influence the academic achievement to a greater extent (90.5%) while 2(9.5%) to a moderate extent. The findings therefore reveal that teachers’ education background influence the student academic achievement to a greater extent.

## 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary of the Findings

The findings revealed that 90% of the Geography teachers experienced the 8-4-4 system of education while 10% experienced the 7-4-2-3 system before attaining their highest academic qualification. Majority of the respondents posited that pursuing bachelor's degree training was sufficient to produce the best academic performance in students. Data from the HODs and Principals indicated that teachers who had gone through either system of education (7-4-2-3 and 8-4-4 products) had acquired adequate knowledge, content and skills necessary in facilitating geographical information to the students since the system of education experienced by the teacher is immaterial and competencies of the teacher depends upon the training obtained during either pre-service or in-service. It was further revealed that that teacher's educational background influence the students' academic achievement to a greater extent (90.5%) while (9.5%) to a moderate extent.

Majority of the teachers who trained in Geography and another compulsory subject tends to prefer the other teaching subjects as a major while Geography as minor hence little attention to Geography hampering the achievement of the students in it. Further finding revealed that the Geography teachers had attended workshop/seminar/in-service courses with majority at least twice (43%). This was wanting and could be attributing to lower performance in Geography. In service training ensure quality teaching and done in conformity with the current trends of education as it enables teachers to identify the poorly performed topics, broadens their understanding in marking of Geography. It was also revealed that majority of the Geography teachers are not Examiners at national level implying that the teachers were deficient of the setting and marking trends employed in the marking of Geography.

### 5.2 Conclusion of the study

It is concluded that there is no relationship between Geography curriculum the teacher experienced and students' academic achievement in Geography. There is no difference in competence in teaching Geography between the 7-4-2-3 education system products and 8-4-4 education system products. It is the teachers' training that has great influence on the students' performance in Geography.

### 5.3 Recommendations of the study

In light of the above findings, the study recommends that:

- i) The principals should mobilize adequate resources to acquire Geography classroom for students taking Geography in their schools as well as storing of Geography materials developed by the Geography teachers.
- ii) The ministry of education (MOE) through the KICD to carry out review on Geography in terms of the content and scope to make it manageable within the time allotted for Geography syllabus.
- iii) The Ministry of Education to incorporate the new paradigm shift in the pre-service training of the teachers and train teacher on Geography with another subject which is not compulsory, that is Subject combination with Geography be History/CRE/Business studies.
- iv) The teachers Service Commission (TSC) to mount mandatory sponsored regular in-service education and training for Geography teachers at least once a term to ensure they keep abreast with current changes in the scope and teaching of Geography to enhance it. The continuing teacher professional development and growth can take any or a combination of the following in-service programmes: school –based in-service to help teachers improve the quality of education in their school; qualification -in-service to provide teacher with further qualifications; career-oriented in- service to prepare teachers for promotion and job-related -in-service to help teachers be more effective in their own posts and derive job satisfaction.
- v) TSC to ensure adequate Geography teachers employed in schools to alleviate the problem of understaffing in the subject.
- vi) Geography teachers should be facilitated for further study.
- viii) All schools irrespective of category should be adequately facilitated to acquire teaching-learning resources for Geography teaching and learning.

#### 5.4 Suggestions for Further Research

The study recommends further research should be carried out in the following areas:

- i) Explore the influence of teachers' educational background on learners' enrolment in Geography in Kenya Certificate of secondary education examination.
- ii) Explore the factors related to few number of female Geography teachers teaching Geography in Secondary schools.

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