

School Policies as a Determinant for Selection of Home Science Subject: The Belvedere of the Kenyan Secondary School

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Abstract

Home Science is a subject that facilitates acquisition of knowledge, skills and attitudes meant to improve lives of everyone yet very few students choose to pursue it in secondary school. This study sought to establish the influence of school policies on enrolment in Home Science subject in secondary school in 3 Sub-Counties of Elgeyo Marakwet County. It was guided by the following specific objectives: to identify the various school policies on subject selection in secondary schools in Elgeyo Marakwet County and to investigate how school policies on subject selection influenced enrolment of Home Science in secondary schools. The research design adopted was a descriptive survey. Purposive sampling technique was used to select all the six (6) county secondary schools offering Home Science subject at Kenya Certificate of Secondary Education (KCSE) level. This was to ensure a homogenous group for the study with the aim of curbing extraneous variables. Six (6) Home Science teachers were also purposively selected together with the six (6) Principals of all the purposively sampled county secondary schools. This study had a total of twelve (12) respondents. Data from the Home Science teachers was collected using questionnaires and interview schedules were used to collect data from the Principals. The sample size was deemed adequate due to their respective positions in the sampled schools. Data was analyzed descriptively. The study established that most schools did not have policies thus low enrolment in Home Science subject. Also, schools had streaming practices with a class being set specifically for Home Science thus limiting number of students choosing the subject. The study recommends that Home Science related professionals should market the subject through career talks and curriculum developers should review the curriculum for the sake of re-introducing the Home Science subject at primary school for learners to have prior knowledge to undertake the subject at Secondary school. These interventions will increase student enrolment in Home Science subject.

Key Words: School policies, Enrolment, Home Science subject.

INTRODUCTION

The Kenya's Ministry of Education, (2006) defines Home Science as an applied science that puts scientific principles into our lives thus promoting self-reliance in an individual (Gitobu, 1990). Wandera, cited in Serem, (2011) reports that, Home science subject was introduced as Home craft particularly to African women with an aim of equipping them with skills to enhance their family lives.

Since its inception, several girl schools registered to offer examinations in Needlework and Foods and Nutrition and for the first time, it was examined in 1973 (Serem, 2011). Tremendous improvement in Home Science subject was made in the year 1981 where it became a compulsory subject in form 1 and 2 in all the girls' and mixed schools (Sigot, 1987).

Home Science subject has undergone different reviews for the sole purpose of making it relevant. Among the notable reviews was its exemption in the Kenya Certificate of Primary Education (Mwiria, 2002). The review further brought clustering of subjects that occasioned most secondary schools to stop offering Home Science (MoE, 2008; Nyangara, Indoshi and Ethuon, 2010). This grouping did specify the optional subjects (Group four & five) where students were free to choose or drop it depending on their personal interests. Table 1 represents the clustering.

Table 1: Secondary School Subject Groupings

Group	Subject grouping
Group 1	English, Mathematics, Kiswahili
Group 2	Biology, Physics, Chemistry, Physical Science Biological Sciences
Group 3	History and Government, Geography, Christian Religious Education, Islamic Religious Education, Hindu Religious Education
Group 4	Home Science, Art and Design, Agriculture, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Technology
Group 5	French, German, Arabic, Music, Business Studies, Computer Studies

Source: Ministry of Education, 2008

Kenya aims at being a middle level-industrialized nation by the year 2030 suggesting that subjects offered in group four and five would provide an impetus to this realization as they capitalize on knowledge in technology and innovation (Kinuthia, 2009). This goal may not be realized in light of the fact that these subjects are optional as per the minimum KCSE subject requirements.

Currently, Home Science subject experiences low enrollment which may be attributed to it being placed in group four. Naoe and Toshio,(2003), reports that if a particular curriculum is not made compulsory, students will not be attracted to it.

According to the preliminary study done in Elgeyo Marakwet by the researcher, there was an indication that there is a reduction in the number of students who choose Home

Science subject vis a vis the total enrolment as indicated in Table 2 thus negative implication for the realization of vision 2030.

Table 2: Percentage of Home Science students against the entire form 2 cohort

School	Year	No. of form 2 students	No. of Form 2 Home Science students	% of form 2 Home Science students
X	2010	200	40	20
	2011	200	20	10
	2012	230	36	15.7
	2013	240	20	8.3
	2014	250	21	8.4
Y	2010	136	13	9.5
	2011	142	24	16.9
	2012	170	21	12.4
	2013	210	18	8.6
	2014	230	20	8.6

Source: Field data, 2015

Home Science may be the only subject that directly focuses on everyday life meeting the basic needs and revolving around the home and on an individual's life. With all these daily practices, Home Science subject should attract as many students as possible because of its tremendous benefits. In this regard, the problem at hand is why students opt not to take Home science in Secondary school over other optional subjects leading to its low enrollment at KCSE. Consequently, this trend may lead to extinction of the subject which may in turn make teacher training colleges not to offer the subject in their institutions and in the end lead to scarcity of trained Home Science teachers.

Literature has shown that schools usually have policies pertaining to the number and kind of subjects they offer especially among the group 4 and 5 as outlined in Table 1. Ndalichako and Komba (2014) points out that choice of subjects to take largely depends on the availability of that particular subject in the school. They further report that some optional subjects may be offered to a small group within a limited number of schools. Their study revealed that technical subjects and Home science related subject did have fewer students taking them.

A study done by Indoshi, Wagah and Agak (2010), revealed that school's environmental factors strongly affect the choice of a subject to take by the students. For instance, they found out that certain schools made a certain optional subject compulsory in a particular stream. This may translate to attitude formation where the number of schools offering the subject becomes few thus enrolls very few students. Another study by Nyangara *et al.*, (2010) confirms that, only one of a sampled school had a written policy for selecting students to pursue Home Science but on the ground classes were set aside for the different subjects. This implied that talented students in a particular subject were denied a chance to pursue a particular subject simply because of being placed in another stream. Nyangara *et al.*, (2010) further reports that some Home Science classes were registered pegged on a given number of students based on a first come first served basis and once the ideal number was reached, no more students were admitted. Related studies were done by Roger and Duffield (2000) who established that schools do have a

great influence on the kind of subjects to take through their packaging of the optional subjects.

The reviewed literature has shown that school policies play a critical role in determining the kind of subjects they offer in the school and this translates to selection of different subjects by the students. Therefore, this study was designed and conducted to investigate the influence of school policies in selection of Home Science subject in the selected schools in Elgeyo Marakwet County.

MATERIALS AND METHODS

Descriptive survey design was used in this study. The study population comprised of 8 county secondary schools in Elgeyo Marakwet County. Elgeyo Marakwet County was selected for this study because according to KCSE and KCPE analysis of 2013, out of the 91 secondary schools in the county, only 12 schools offered Home Science subject. The criteria for selecting the county schools were informed on the assumption that county schools were many thus the possibility of having many students who may be affected by the determinants under the study. The Principals and the Home Science teachers in the County schools formed part of the study as they held valuable information.

Purposive sampling was used to select Six (6) Principals and six (6) Home Science teachers of the sampled county schools taking Home Science subject resulting in a sample size of 12. The study employed use of questionnaires which were administered to teachers and interview schedules for the principals. The findings of this study may not be generalized to other counties since the study was only conducted in Elgeyo Marakwet County.

Through the questionnaires, the study sought to find out availability of school policies and how they influenced choice of Home science subject. Data was analyzed quantitatively and qualitatively after it was collected, examined for completeness, cleaned and then coded appropriately. Quantitative data was analyzed using descriptive statistics whereby frequencies, percentages and means were used to analyze data that was obtained from close-ended items in the questionnaire. Qualitative data derived from open-ended questions in the questionnaire and interview schedule was organized, sorted and analyzed thematically.

RESULTS AND DISCUSSION

Schools normally follow the guidelines provided by the Ministry of Education pertaining to the number and type of subjects as per the clusters. From this study, it was revealed that subjects offered in the sampled schools from group four and five were four in number that is Home Science, Business Studies, Agriculture and Computer Studies. In most cases, Agriculture and Home Science were blocked such that a student was to choose one of them. Business Studies was mostly compulsory in form one and upon entry to form three, a student would make one choice of the subject to pursue. It was also revealed that most of the sampled schools had no prerequisites for choosing Home Science subject except one school where choice of Home Science was determined by good performance and their ability to pay the extra fee to fund the subject.

Through the interviews with the principals, it was established that the school administration fully supported the Home Science subject. It was reported that Home Science was among the top in performance in the KCSE subject ranking within the school in comparison to other subjects. Therefore, it was viewed as a very essential subject. Besides performance it was evident that the school administration felt that Home Science students and teachers were very handy in meal preparation and service of guests during school functions. Also, presence of Home Science subject in the school ensures a smooth running of the school as it improves standards of living within the school especially in terms of good grooming, personal and environmental hygiene and safety measures. Home Science teachers were expected to give their opinion pertaining to the school's administration perception towards Home Science subject in their schools. There were varied responses to this basing on the statements as outlined in Table 3.

Table 3: School Administration Perception towards Home Science Subject

Statement	N	Mean	SD
A very important subject that should be pursued by all the students	6	4.33	1.211
Home science is a booster subject	6	4.5	0.548
Home science is time consuming especially on practicals	6	4.17	0.408
Home science is very expensive subject as it requires a lot of expensive resources	6	2.17	1.472

The findings in this study revealed that majority of the teachers had a strong feeling that Home Science is a booster subject as it had the highest mean ($4.50 \pm .548$). Despite the fact that the teachers strongly felt that the subject is a booster and that should be pursued by all students (4.33 ± 1.211), they also felt that Home Science consumed a lot of time especially on practicals. This statement also recorded a very high mean (4.17 ± 0.408) bearing in mind that the subject has three papers; paper one (441/1), paper two (441/2) and paper three (441/3). Of the three papers, two of them are practical-oriented. Paper two deals with clothing and construction, where students are expected to demonstrate clothing construction processes learnt throughout the course within a short period of two and half hours. With this in mind, a lot of time has to be spent learning the concepts in class hence the strong feeling by teachers that the subject is time consuming. The statement that recorded the lowest mean (2.17 ± 1.472) by the sampled teachers was that on Home Science being a very expensive subject. It was argued that the subject was less expensive because most respondents felt that the expensive resources could be easily improvised from the locally available resources. Therefore, the payment of extra fee policy should not be a factor because it could discourage students from choosing Home Science subject.

From this study, it is evident that there were laid down school policies on choice of group four and five subjects but there were no prerequisites for choosing Home Science except a sample of one school that indicated that one stream was specifically set aside for Home science. As a matter of fact, school policies may demand that certain subjects in group four and five should only be offered in one stream out of the other streams.

This practice was also noted by Wagah 2009 (as cited by Indoshi et al., 2010) who noted that Art and Design was only offered in one stream. Therefore, students in a different stream missed a particular subject because it was not in their stream. Indeed, the present study was able to establish that certain schools in the county had streaming practices where one particular class in form one was specifically set aside for Home Science subject. It was felt that students who were not good in that particular chosen class would be denied the golden opportunity to get life skills offered in Home Science that are very essential to an individual. Despite the fact that the teachers strongly felt that the subject is a booster and that should be pursued by all students they also felt that Home Science consumed a lot of time especially on practicals. This study is in harmony with that of Indoshi et al., (2010) where they reported that 79 (26.96%) of the respondents ranked Art and Design in first position as the curriculum that consumed a lot of time. Nyangara et al., (2010) viewed that Home Science being a vocational subject, calls for practicing the learnt concepts as it is very crucial for the attainment of required Home Science competencies. Similar sentiments were echoed by Serem, Mukwa, and Kafu (2010) where (22.2%) of the respondents felt that the clothing and construction unit is practical-oriented and more time is required for learning to take place. They further stated that the unit needs to be separated and offered individually as a subject at KCSE level.

Paper three is also practical-oriented dealing with foods and nutrition. Here, learners are also expected to put into practice concepts learnt theoretically. It may be concluded that the majority of the teachers felt that Home Science subject is time consuming simply because in this paper, students are put into shifts to be able to carry out the practical individually from preparation, cooking, presentation and clearing up for the next shift to come in. This process usually takes a lot of time especially where there is a large class with limited resources as they wait for one another. Despite the fact that Home Science may be an expensive subject on the part of the resources, sampled teachers reported that they had to be highly innovative by improvising resources from the locally available materials to be able to teach Home Science concepts well.

Also, this study established that the school administration fully supported the teaching and learning of Home Science subject as it was felt that the subject was very important in the normal running of the school and in boosting the school mean as it was among the well performed subjects in the KCSE subject ranking in the school. This finding was in disharmony with that of Etherington (2013) who remarked that school organization was unsupportive and obstructive towards art where it became very difficult for the department to solve.

Students and schools that take Home Science subject do this with an aim of boosting the school's results and that of the student. The study also revealed that teachers of Home Science who participated in this study felt that Home Science was a very important subject that should be pursued by all the students because it imparts one with essential life skills to face the realities of life.

CONCLUSION

The findings in this study revealed that most of the sampled schools had no prerequisites for choosing Home Science subject. Therefore, the schools adopted the Ministry of Education (MoE) guidelines and students chose their subjects at will depending on their

preference with a few cases where they were affected by the streaming of subjects, performance, students' cleanliness, availability of human and physical resources and a minimal extra fee Home Science students pay to support the subject. This study further established that the school administration fully supported the Home Science subject as it was reported that Home science was the most performing subject in the KCSE subject ranking within the schools in comparison to other subjects and therefore viewed as a very essential subject.

RECOMMENDATIONS

Curriculum developers should review the curriculum so that Home Science subject can be re-introduced and made examinable in primary school so that pupils can be oriented in the subject early enough so that they can have a glimpse of a bigger picture of what the subject has to offer.

Schools in collaboration with various stakeholders such as the County Quality and Assurances Standards office, the private sector and the Ministry of Education should strive to come up with a policy that enhances Home science subject selection.

Since the purpose of education is to acquire skills and knowledge for the development of self and the nation, schools should strive to encourage students to choose Home science subject as its objectives are geared towards achieving this goal.

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