
Aming’a Robert Maina* and Kisilu Kitainge
Science Education Department, School of Education, University of Eldoret, Kenya

Abstract

Kenya can reorient itself towards sustainable development, using technical education as a vehicle for socio-economic and technological transformation. The skills development is important for economic growth, poverty alleviation, youth and women’s empowerment and social inclusion. Rwanda has the highest enrollment in technical subjects at the secondary level (35%), followed by Tanzania (13%) and South Africa (5.8%). Sub-Saharan Africa (6.1%) and South and West Asia (1.2%) have little room for Technical education at the post-primary school level. Given the above, it is a matter of concern that Africa lags behind the rest of the world in technology and still it continues to pay little attention to technical education and technological research. This therefore poses the need for this current study as to the factors militating inclusion of Home Economics studies in secondary schools. In line with the foregoing, the purpose of this study was to determine the factors militating inclusion of Home Economics studies in secondary schools in Kenya. The study objectives were: to determine student related factors influencing inclusion of home economics in secondary schools in Kenya and to establish teacher related factors influencing inclusion of home economics in secondary schools in Kenya. The researcher in this study adopted a descriptive survey design and used questionnaires to gather information. The sample size comprised 100 respondents whereby 80 were students while the Home Economics teachers were 20. The Home Economics teachers of the participating schools were purposely selected. The researcher used both qualitative and quantitative method of data analysis and the findings were presented by use of frequency tables. The study concluded that lack of adequate facilities and finances were common problems facing the schools that teach the subject. On the other hand, most of the girls’ secondary schools were well established in the teaching of the subject while the mixed and boys secondary schools started teaching the subject with the implementation of the 8-4-4 system of education. Schools with adequate facilities enrolled a larger number of students. It is also important to note that student enrolment in Home Economics subject is not stable. The study recommended that more males should be encouraged to join home economics profession especially in Diploma Teacher Training Colleges and at the University level. Once they qualify and start teaching in secondary schools, more boys will be encouraged to choose the subject as well and thus some of the negative attitude towards Home Science would change.

Keywords: Home economics; Student-related factors; Teacher-related factors; Secondary schools

Introduction

Since in the present day technology and its scientific basis is present in every aspect of personal, social and professional life, there is a strong interest among policy makers, researchers and educators in acquiring a better understanding of factors militating inclusion of Home Science Studies. Several studies have drawn attention to the relevance of contextual variables in predicting academic performance in the field of Mathematical and Scientific subjects (e.g. [1,2]; Trautwein, in the study “What Room For Skills Development In Post-Primary Education?: A Look at Selected Countries,” Palmer looks at ten selected countries (Ethiopia, Ghana, Kenya, Rwanda, South Africa, Tanzania, Uganda, India, China and Vietnam) and examines what room there is for skills development in ‘post primary education’ [1-3]. Of the ten countries examined in Palmer (2007), Rwanda has the highest enrollment in technical subjects at the secondary level (35%), followed by Tanzania (13%) and South Africa (5.8%). The study notes that Sub-Saharan Africa (6.1%) and South and West Asia (1.2%) have little room for Technical education at the post-primary school level. Given the above, it is a matter of concern that Africa lags behind the rest of the world in technology and still it continues to pay little attention to technical education and technological research [4,4].

Home Science, Art and Design, Agriculture, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, and Aviation Technology, are technical subjects offered in secondary schools in Kenyan secondary schools. These subjects get advanced in Technical and Vocational Education (TIVET) colleges [5,6]. Enrollment in these subjects has been low as compared to the other academic oriented subjects, the possible reason being due to the emphasis on academics and grades in the Kenyan system. In secondary schools, Home Science is an optional subject. When students join form one, most schools introduce them to the subject alongside the other technical subjects. Enrollment in home science in secondary schools is largely composed of girls. The Kenya National Examination Council’s records show that in 1987, a total of 2,600 students had enrolled in different areas of home science, namely, foods and nutrition, clothing and textiles and home management. With the implementation of 8-4-4 system of education, enrollment in 1989 rose to 12,705 students [7,8]. The increase in home science enrollment resulted partly due to the effort of the Ministry of Education in seeing that most of the schools have physical facilities for the practical subjects.

*Corresponding author: Aming’a Robert Maina, Science Education Department, School of Education, University of Eldoret, Kenya, Tel: +254 727543807; E-mail: aminga2006@yahoo.com

Received February 09, 2018; Accepted February 15, 2018; Published February 22, 2018


Copyright: © 2018 Maina AR, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Inclusion of home science in secondary schools in Kenya has not been successful as expected [9]. Various factors have been identified as barriers to successful inclusion of Home Science in secondary schools in Kenya. For instance, there have been general complaints from parents and teachers that home science is an expensive subject [10]. As a result, many parents have found it difficult to contribute towards home science expenses, and only students who can afford opt for the subject, while others enroll in other optional subjects [11]. There is also uncertainty on the part of home science teachers regarding their competence in coping with the requirements of home science syllabus since the three main areas were combined under the 8-4-4 system of education. This has affected inclusion of home science in one way or the other in secondary schools. Therefore, the researcher's intention was to document the factors militating inclusion of Home Science studies in secondary schools in Kenya.

Research Methodology

In order to search for answers to our research questions, descriptive research study was instituted. This was essential to demonstrate the factors militating inclusion of Home Science Studies in secondary schools.

The study is also able to answer the questions 'what is' (Bickman and Rog). The research area was in Eldoret Municipality, Uasin Gishu County Government, Kenya. Using the list of current schools (Girls, Boys and mixed secondary schools) as at April 2015 (42), the researchers sampled 27 schools found in Eldoret Municipality. Stratified sampling strategy was employed in this study.

The method used for data collection were structured questionnaires whereby test and retest technique was used to test their validity as well as reliability. The questionnaires were issued in the month of April 2015 whereby 100 were returned. After editing and coding data, it was entered into Statistical Package for the Social Sciences (SPSS) and analyzed using descriptive statistics.

Results and Discussion

Student related factors

Attitude of students towards the subject is important since it indicates the general inclination regarding inclusion of the subject. It was important to study the attitude of students in order to find out their feelings and bias towards the subject. In the analysis, the scale Agree=3, Disagree=2, Not Sure=1 (Table 1).

The results presented in Table 1 show that, majority of the students disagreed that, career opportunities in Home Science made them to choose the subject, lack of adequate facilities made them not to enroll in the subject, Home Science is relevant to both male and female students, Home Science is more important than other subjects in the curriculum, home Science is a practical subject that develops skills and talents relevant to daily life, Home Science encourages self-development, Home Science has a promise of financially rewarding career, Home Science should be compulsory in forms three and four, Home Science is a female subject and men should not study it and Home Science syllabus is too wide to cover adequately. According to the respondents views, lack of adequate resources in Home Science make students not to choose the subject (mean=2.26, S.D=0.670) was the main reason as to why students did not choose the subject. The least factor that influenced students choice of Home Science was, Home Science syllabus is too wide to cover adequately (mean=1.64, S.D=0.484).

Teacher related factors

Respondents were asked to respond to statements seeking to determine teacher related factors militating inclusion of Home Science Studies in Kenyan Secondary Schools. Attitude of teachers towards home science is also important since it indicates the general inclinations towards inclusion of the subject. It was necessary to study the attitude of teachers to find out their feelings and biases towards the subject. A three point likert scale was used where 1=Not Sure, 2=Disagree, 3=Agree (Table 2).

The results presented in Table 2 show that, majority of the teachers disagreed with the statements seeking to measure attitude towards Home science. Negative attitude was expressed by the teachers as a result of disagreeing with the following statements; Home Science is the most useful subject in secondary schools, Home Science is an easy subject to teach, content learned at every class is appropriate, Home Science syllabus contains aspects applicable after students leave secondary school and Home Science is relevant to both male and female. These statements imply that, Home science was not generally a desired subject among the teachers and these were the factors affecting its inclusion in secondary schools [11-13].

Positive attitude was expressed in the following statements; Home Science curriculum is wide to cover adequately, improvisation makes teaching too involving for the ones liking, lack of Home Science equipment makes teaching almost impossible, Home Science is an easy subject to teach, content learned at every class is appropriate, Home Science syllabus is too wide to cover adequately. According to the respondents views, lack of adequate resources in Home Science make students not to enroll in Home Science and the content the students are supposed to cover cannot be covered within available time. This implies that, these factors were not a hindrance to inclusion of Home Science in the secondary schools.

Concerning the attitude of students on Home science subject, the findings showed that, the majority of the students had similar opinions by being negatively inclined towards Home Science. A good
of students especially the male did not like the idea of studying Home Science at all.

Findings from Home Science teachers showed that teachers play an active role in influencing students' choice of home science and at the same time, they transmit skills, knowledge, principles, practices and attitudes to students. All the teachers felt the need for revision of the home science syllabus especially in the Clothing and Textiles unit which they felt was too involving and required more time for teaching. As concerns the attitude of teachers towards home science, the findings revealed that the majority of the teachers were negatively inclined towards the subject. This was indicated by the majority of the teachers who disagreed that, home science is a useful subject in secondary schools. The majority of them felt that, the home science was not a difficult subject to teach but were aware that the syllabus is too wide to be covered adequately within the time allocated. They expressed the need to revise the syllabus to make it more appropriate for the students.

Conclusion and Recommendations

The study concluded that, lack of adequate facilities and finances were common problems facing the schools that teach the subject. On the other hand, most of the girls' secondary schools were well established in the teaching of the subject while the mixed and boys secondary schools started teaching the subject with the implementation of the 8-4-4 system of education. Schools with adequate facilities enrolled a larger number of students. It is also important to note that student enrolment in home science subject is not stable.

Based on the findings of the study, it is recommended that, more males should be encouraged to join home science profession especially in Diploma Teacher Training Colleges and at the University level. Once they qualify and start teaching in secondary schools, more boys will be encouraged to choose the subject as well and thus some of the negative attitude towards home science would change.

References