THE FUTURE OF CLOTHING AND TEXTILES IN KENYAN SECONDARY SCHOOLS

Dorcas.J. Serem. C. Mukwa, P.A. Kafu.
Department Of Family & Consumer Sciences, School Of Agriculture, Moi University.
Associate Professor Department Of Curriculum, Instruction and Media, School Of Education Moi University
email: seremdorcas@yahoo.com

ABSTRACT

The aim of this study was to investigate the attitude of Home Science students and teachers towards Clothing and Textiles in Home Science discipline of the secondary school curriculum. Home Science is one of the technical and vocational subjects introduced to Africans in Kenya towards the end of the 19th century by Christian missionaries (Wandera, 1967). Home Science was fragmented into Needlework and Foods and Nutrition until 1985 when it was consolidated. The objectives were to establish the teachers' and students' attitude towards instruction of Clothing and Textiles and determine problems affecting the instruction of Clothing and Textiles. Simple and systematic random sampling techniques were used to choose schools offering Home Science and students to participate in the study respectively. Data was collected using questionnaire from 409 students and 27 teachers from 21 secondary schools offering Home Science in three (3) districts in Western Kenya. Descriptive statistics was used in data analysis and relationship between variables was established using chi-square tests. The study established that 61% and 78% of teachers and students respectively have positive attitude towards Clothing and Textiles.

Key words: Attitude, Kenya, Home Science, Speed test, Vocational Education, Approved teacher

INTRODUCTION

Dewey 1938) emphasizes the creative role of education in developing an individual into a good learner and a complete human being. This means that the student's abilities, skills and attitudes need to be developed and properly nurtured. Attitudes may be learned from other people, they can be a product or an experience or they can be created in our own minds. A teacher is responsible for facilitating the learner to acquire new knowledge, skills and attitudes. Otunga, 1993) reported that Clothing and Textiles and Consumer Education are the worst taught and learnt units as ranked by sample students and teachers in the study. Further, (Sang, 2002) reported that 61.9% of Home Science teachers in Nandi district expressed the need for more training in Clothing and Textiles. Attitudes as mentioned earlier influence a person's behaviour, and therefore, the attitudes of teachers can influence the attitudes of students towards Clothing and Textiles.

Despite the usefulness of Clothing and Textiles (Kanga , 1994) found out that only 18.2% of Home Science teachers in Nairobi and Kiambu enjoyed teaching Clothing and Textiles while the majority, 63.6% least enjoyed teaching it. Students as well have been reported to dislike Clothing and Textile unit (Sang, 2002). According to (Maduka, 2010) in Arubayi many lecturers and students in Nigeria perceive Clothing and Textiles as a very difficult aspect of Home Economics. According to (Nyangi, 1992) 85.7% students taking Home Science in Nairobi found Clothing and Textiles to be difficult to learn. (Muthui , 1981) argued that Clothing and Textiles curriculum lacked clearly defined objectives so that the performance standards demanded for coursework are too high although it is allocated too few marks in relation to the work and time involved. Paper 2 is Clothing and Textiles practical examination and it contains coursework which is worth 15 marks and Speed test which is worth 20 marks (KNEC, 2004).

Needlework as a technical and vocational course was considered to be in the secondary school curriculum in the 1960s (Wandera, 1967) so that by 1969, 24 schools had registered students for secondary levels examination in Needlework or Foods and Nutrition. Advanced secondary ("A") levels Home Science was tested for the first time in 1973. In 1981 Home Science became a compulsory subject in Forms 1 and 2 in all girls' secondary schools and mixed secondary schools and examinable at secondary levels and at advanced secondary levels (Sigot, 1987). Home Science was fragmented into Foods and Nutrition, Needlework and Home Management until 1985 when it became consolidated into one.

From these views concerning the unpopularity of the unit among Home Science teachers and students and the consolidation of Home Science, it was necessary to establish the attitudes of Home Science teachers and students towards

Clothing and Textiles and find out if they are responsible for making it unpopular among teachers and students. The objectives were; to establish the teachers' and students' attitudes towards Clothing and Textiles and to determine problems affecting the instruction of Clothing and Textiles.

METHODS

A descriptive research design was used to establish the attitudes of teachers and students of Home Science in secondary schools in three districts namely Uasin Gishu, Nandi and Keiyo in Western part of Kenya towards Clothing and Textiles in Home Science. The study obtained data from two (2) main target groups namely, Forms 3 and 4 Home Science students and teachers in the selected schools offering Home Science. Secondary schools in the study area were divided into four categories (strata) and to produce appropriate number of representatives from each stratum, stratified random sampling was used. The strata covered national, provincial, district and private secondary schools. After stratifying the schools, simple random sampling technique, specifically the lottery approach, was used to choose schools offering Home Science in each stratum to participate in the study. The process ensured equal chance of each school being included in the sample.

To choose Home Science students in the selected schools, systematic random sampling technique was used. It is a variation of simple random sampling where a size of the selection or sampling interval will be obtained by dividing the population by the expected number of the sample. For example, if a researcher wants to select a sample of 100 pupils from a census lot of 1000 pupils, he/she will first divide the population by the number that is needed for the sample (1000 divided by 100 equals to 10). Then he/she selects at random a number for example 6 then he/she selects every tenth name from the list of population. It should be noted that systematic sampling, can only, be used if one is certain that the population list is in random order (Borg and Gall, 1983). Teachers who participated were selected using purposive random sampling technique.

At least fifty percent (50%) of the total number of schools from each stratum were randomly selected to participate in the present study. Therefore, in Uasin Gishu district one national school, four Provincial schools, three district schools and two private schools were part of the sample. In Nandi district five Provincial and four district schools formed part of the sample while in Keiyo two provincial schools participated.

Seventy percent (70%) of students in Forms 3 and 4 in each selected school were picked randomly using systematic random sampling. Twenty seven (96.4%), out of the 28 Home Science teachers in the sampled schools participated in the study. In summary, the twenty-one (21) sampled schools in the study area out of 38 represented 58% of total schools offering Home Science. The total student population of these schools at the time of data collection was 8262 students. Form 4 students were 1943 while Form 3 students were 2039. Those who opted to take Home Science in Form 4 were 291 and in Form 3 were 314 totaling 605 students. This, therefore, was 15% of the total school student population of Forms 4 and 3. Both the teacher and the student questionnaire contained three sections namely demographic data (Section A), Section B solicited for data concerning the instruction of Clothing and Textiles unit in the schools and Section C Teacher and Student Attitude Scale. Section C sought opinions from teachers and the students about Clothing and Textiles based on positive and negative statements on a 5-point scale. The teacher and the student-respondents were required to weigh the statement and either tick against Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (DA) and Strongly Disagree (SD). Positive statements were awarded 5, 4, 2, and 1 point(s) respectively, while for the negative statements, the scoring procedure was reversed so that they were awarded 1, 2, 4 and 5 points respectively. Undecided (neutral) was awarded a score of three. All the ratings of four and five were translated to positive attitude, three was neutral attitude and one and two were negative attitude. The field research was carried out in September to mid-October 2005.

RESULTS

Attitude of Home Science teachers towards Clothing and Textiles

This sub-section had seven (7) statements of which two and five were positive attitude and negative attitude statements respectively designed to answer the research question "What is the relationship between teacher's qualification and experience and attitude towards Clothing and

Textiles unit?" and the Null Hypothesis (Ho_2) "The qualification and experience of teachers do not influence their attitude towards Clothing and Textiles unit." The findings are presented in Table 1 and 2. To the positive statements item 1 and 2 on Table 1 revealed that the teacher-respondents had a positive attitude towards teaching clothing and textile. When the same data in item one was cross tabulated against qualification of the teachers, only one graduate teacher with teaching experience of 10 to 12 years had a negative attitude. When the same data for item 1 and item 2 was subjected to the Chi-square (X^2) statistical tests, no significant relationship was observed. There was no significant relationship also between teacher experience and attitude which implies that qualification and experience of teachers do not necessarily influence attitude towards Clothing and Textiles.

To further solicit attitude of teachers, the negative statement 'Clothing and Textiles is the least well taught unit in Home Science' generated data that revealed that half of the teachers had negative attitude.

To better, understand the attitude of teachers towards Clothing and Textiles unit a negative attitude statement which implied that Clothing and Textiles unit is too technical to teach was included in teacher questionnaire. Analysis of data revealed that 18 (66.7%) teacher-respondents had a positive attitude and nine (33.3%) of them had a negative attitude. Item 6 as indicated on tables 1 and 2 reveals that teachers do not perceive the unit to be difficult for the students to learn which may mean that if teachers are well equipped with knowledge and skills, and facilities provided, students will learn well. Item 7 on tables 1 and 2 reveals that there was almost equal number of teachers who have positive attitude and those who have negative attitude towards Clothing and Textiles. On subjecting the same data in each case to Chi-Square (X^2), statistical analysis, there was no significant relationship. This means that attitudes of teachers towards Clothing and Textiles are neither due to teachers' qualification nor due to teachers' experience and therefore the null hypothesis "The qualification and the experience of teachers do not influence their attitude towards Clothing and Textiles" is accepted.

Attitudes of Home Science students towards Clothing and Textiles

It is a fact that attitudes toward specific objects, people, and symbols satisfy specific needs. The closer these objects are to actual need satisfaction, and the more they are clearly perceived as relevant to need satisfaction, the greater are the probabilities of positive attitude formation (Katz, 1960). In view of this, the present study attempted to establish the attitudes of students towards Clothing and Textiles unit. In order to establish this, eleven statements were formulated. Of the eleven statements, three were negative and eight were positive. The likert- scale questionnaire required the respondents to rate the statements as per their feelings. These statements attempted to answer the following research question "What is the relationship between student's gender and attitudes towards Clothing and Textiles unit?" and subsequent Null hypothesis (Ho_1) "The student's gender does not influence their attitude towards learning Clothing and Textiles." The positive and the negative statements were rated by the respondents and the findings are presented in Table 3

All the first positive statements in the attitude scale when analyzed revealed that the attitudes of the majority of students were positive, while the minorities were either neutral or negative. This indicates that the majority of students view Clothing and Textiles as a valuable unit because they will get the skills and knowledge of making their own clothes. Home Science students whether male or female who have chosen the subject for KCSE seem to understand Clothing and Textiles as having utilitarian value, hence valuable for day-to-day life.

Although pattern drafting, has been claimed to be difficult from the observations made, it appears that it is not so much the cause of negative attitude towards Clothing and Textiles. Since it is a skill learnt from the teacher, it is possible that when the teacher is good in pattern drafting, students will easily have interest in it too.

Table 1: Attitude of teachers according to their qualification

Attitude Statement	Attitude	Qualification of Teacher									
		Diploma (n=3)		Approved (n=6)		B.Ed (n=6)		Masters (n=2)		Total (No=27)	
		n	%	n	%	n	%	n	%	n	%
1. Clothing and Textiles is an important unit	Positive	3	100	6	100	15	94	2	100	26	96
	Negative	0	0	0	0	1	6	0	0	1	4
2.Clothing and Textiles unit prepare students for employment	Positive	1	33	5	83	10	63	1	50	17	63
	Neutral	0	0	0	0	3	19	1	50	4	15
	Negative	2	67	1	17	3	19	0	0	6	22
3.Clothing and Textiles is the least-liked unit	Positive	0	0	1	17	2	13	0	0	3	11
	Neutral	0	0	0	0	2	13	0	0	2	7
	Negative	3	100	5	83	12	75	2	100	22	82
4.Clothing and Textiles is the least-taught unit	Positive	1	33	1	17	9	56	2	100	13	48
	Neutral	0	0	0	0	1	6	0	0	1	4
	Negative	2	60	2	50	8	44	8	44	13	48
5.Clothing and Textiles unit is too technical to teach	Positive	0	0	4	67	12	75	2	100	18	67
	Neutral	0	0	0	0	0	0	0	0	0	0
	Negative	3	100	2	33	4	25	0	0	9	33
6. Clothing and Textiles unit is too difficult for students to learn.	Positive	2	67	6	100	14	88	1	50	23	85
	Neutral	0	0	0	0	1	6	1	50	2	7
	Negative	1	33	0	0	1	11	2	11	2	7
7. Clothing and Textiles unit is time-consuming	Positive	1	33	3	50	8	50	1	50	13	48
	Neutral	0	0	1	17	1	6	0	0	2	7
	Negative	2	67	2	33	7	44	1	50	12	44

Table 2: Attitude of teachers according to their experience

Attitude Statement	Attitude	Experience of Teacher (n=27)							
		<1-3 (No=5)		4-9 (No=4)		>10 (No=18)		Total (No=27)	
		n	%	n	%	n	%	N	%
1. Clothing and Textiles is an important unit	Positive	5	100	4	100	17	94	26	96
	Negative	0	0	0	0	1	6	1	4
2.Clothing and Textiles unit prepare students for employment	Positive	4	80	2	50	11	61	17	63
	Neutral	1	20	1	25	2	11	4	15
	Negative	0	0	1	25	5	28	6	22
3.Clothing and Textiles is the least-liked unit	Positive	0	0	1	25	2	11	3	11
	Neutral	2	40	0	0	0	0	2	7
	Negative	3	60	3	75	16	89	22	82
4.Clothing and Textiles is the least-taught unit	Positive	2	40	2	50	9	50	13	48
	Neutral	0	0	0	0	1	6	1	4
	Negative	3	60	2	50	8	44	13	48
5.Clothing and Textiles unit is too technical to teach	Positive	5	100	3	75	10	56	18	67
	Neutral	0	0	0	0	0	0	0	0
	Negative	0	0	1	25	8	44	9	33
6. Clothing and Textiles unit is too difficult for students to learn.	Positive	4	80	4	100	15	83	23	85
	Neutral	1	20	0	0	1	6	2	7
	Negative	0	0	0	0	2	11	2	7
7. Clothing and Textiles unit is time-consuming	Positive	3	60	3	75	7	39	13	48
	Neutral	1	20	0	0	1	6	2	7
	Negative	1	20	1	25	10	56	12	44

Table 3. Summary of attitude of students (n =409)

Positive and Negative Attitude Statements	Positive		Neutral		Negative	
	n	%	n	%	n	%
I like using a sewing machine	355	87	23	6	31	8
I like sewing my own clothes	344	84	19	5	46	11
I wish I could make my own clothes	282	69	47	12	80	20
Pattern drafting is interesting to me	248	61	68	17	92	23
Impressed with my teacher's ability to make own clothes	251	61	89	22	69	17
I wish I could pursue C/T in the university	212	52	84	21	113	28
With knowledge and skill in C/T one cannot miss a job	366	90	16	4	27	7
C/T provides skills useful throughout life	372	91	17	4	20	5
Clothing and Textiles is not academic	353	86	28	7	28	7
Clothing and Textiles has no future	392	96	12	3	5	1
There are tailors and ready-made clothes	343	84	34	8	32	8

Analyzed data presented in Table 3 as a response to 'I wish I could pursue Clothing and Textiles unit at the University' show that more students have negative attitude. For a long time, Home Science could be pursued at the university only if one wanted to be a Home Science teacher and singling out Clothing and Textile may have contributed to the negative attitude in the way students responded. There are many cases also, where a student who has not taken Home Science at KCSE but has done well in sciences qualify to take Home Science and Technology Education at the university. The way students have responded could also be as a result of lack of information, concerning the future career prospects of Clothing and Textiles unit.

Analysed data to all the negative statements (item 9, 10 and 11) on Table 3 confirmed that more than 80% of students had a positive attitude to Clothing and Textiles as revealed from positive statements. This means that students felt that Clothing and Textiles is important and needs to be learnt despite the presence of tailors in our society. Clothing and Textiles entails more than just knowing how to sew.

On subjecting data to Chi-square (X^2) statistical tests to find out relationship between gender and attitude of students in all cases, no significant relationship was revealed. This means, therefore, that gender has no influence on the attitudes of students towards Clothing and Textiles, therefore the null hypothesis that the student's gender does not influence their attitude towards Clothing and Textiles unit is accepted.

Problem affecting the instruction of Clothing and Textiles Unit.

Problems associated with the learning and teaching can be detrimental to any subject. Problems may be due to an environment which is not conducive, the amount of time given against the topics and practical to be covered, lack of learning materials, and unclear usefulness of the unit. The research question was "What is the relationship between the problems associated with instruction of Clothing and Textile and the attitude of Home Science teachers and students towards Clothing and Textiles?" and the Null Hypothesis (Ho_3) was "Problems associated with instruction of Clothing and Textiles do not influence the teacher's and student's attitudes towards Clothing and Textiles unit."

In response to the above question, an item in the questionnaire was designed and administered to the students to identify the most disliked unit in Home Science. This study established that Clothing and Textiles is the most disliked unit as shown by 196 (47.9%) students who indicated so. This was followed by Consumer Education as indicated by 105 (25.7%) students, Child Education 43 (10.5%), Foods and Nutrition 16 (3.9%) and Home Management 13 (9.2%). Students who liked all the units were 36 (8.8%). From this analysis, Clothing and Textiles is the most disliked unit.

Among those who disliked Clothing and Textiles 56 (13.7%) of them felt that the unit is time consuming because there are many processes to learn and articles to make, so that there is limited time to study other subjects. There is course work, speed test and the regular examination papers. The second commonly stated reason, 54 (13.2%) was that the unit is hard and confusing. This was followed by those who indicated that the unit is hectic and tiresome, 37 (9%).

Another item designed and administered to the students solicited for factors that contributed to disliking of Clothing and Textiles unit. A large proportion of students 65 (15.8%) identified too many processes in Clothing and Textiles unit as a major factor for disliking the unit. A small number 45 (11%) identified incompetence in using a sewing machine, and 28 (6.8%) indicated sewing, while 16 (3.8%) identified speed test. Multiple responses were given by student respondent who disliked C/T unit.

Chi-square (X^2) statistical analysis, showed significant relationship between factors for disliking and attitudes towards Clothing and Textiles unit. The analysis reveals that Clothing and Textiles unit has many topics to be covered and therefore require more time and yet in schools, offering Home Science, it is only taught in third term meaning that it is a crush program for the students.

Time allocation for practical

An item in the questionnaire solicited teachers' views on given time for Clothing and Textiles practical in schools. A large proportion of teachers 24 (88.9%) were of the opinion that time for practical is not enough, while three (11.1%) felt time was enough. The reasons given by respondents varied. One (3.7%) teacher said that the practical time is only enough for demonstrations by the teacher. Two (7.4%) teachers said that Clothing and Textiles be spread throughout the year for students to gain practical knowledge and skills and one (3.7%) teacher said that the class is too large. Six (22.2%) teachers said that the unit is practical oriented and for students to learn how to design they need extra time and therefore, Clothing and Textiles be separated and offered as a subject by itself at KCSE. The respondents suggested more time for practical as follows:

- **a large proportion 7 (26%) of them suggested 80 minutes extra,**
- **Three (11.1%) of them suggested 80 minutes**
- **Two (7.4%) of them suggested 120 minutes and of the 4 other respondents who made suggestions the first one suggested 40 minutes, the second one suggested 160 minutes, the third one suggested 240 minutes and the last one suggested just more time.**

A more-or-less similar statement in a form of a suggestion was designed and administered to teachers in the likert- scale form 'Clothing and Textiles should be given more time' and it was observed that all 27 (100%) teachers agreed that more time should be dedicated to the teaching and learning of Clothing and Textiles. It is interesting to note that 22 (81.5%) of them, strongly agreed with the statement. Teachers are the ones responsible for seeing that students learn and they know better problems that students face and therefore, this observation reveals inadequate time for Clothing and Textile practical is a problem for both teachers and students.

Clothing and Textiles be separate from Home Science at KCSE

The suggestion that Clothing and Textiles be treated as a KCSE subject by itself was made by some teacher-respondents when explaining why practical lessons are not enough or sufficient. A similar statement was included in the attitude statements in the likert scale form and whose analysis of the observations shows the majority, 23 (85.2%) of the respondents agreed with the statement while 2 (7.4%) were neutral and 2 (7.4%) disagreed with the statement. The coverage of Clothing and Textile has been greatly scaled-down since it was combined with other units so that it is poorly covered. In this context, poor covered include shallow coverage. Chi-square (X^2) statistical analysis to determine relationship between teacher experience and opinion, showed a significant relationship and therefore, the null hypothesis is not accepted. This means that most teachers are of the opinion that Clothing and Textiles deserves to be treated as an examinable subject by itself in KCSE.

DISCUSSION

Results revealed that Clothing and Textiles is the least liked unit. This observation is in line with findings of (Sang, 2002) which revealed training needs of Home Science teachers led by Clothing and Textiles and (Kanga, 1994) which reported 63.6% teachers who said they least enjoyed teaching Clothing and Textiles. Clothing and textiles teachers are in a position "to know" what units of Home Science students like or dislike. They are also in a position to change the situation if more time is given for practical, if Clothing and Textiles unit can be taught in all the school terms instead of only in third term and if teachers are in-serviced in areas they are not confident to teach. Results also revealed that Clothing and Textiles is not well taught. This observation may be justifying (Sang, 2002) findings that not all Home

Science teachers are confident, in handling the Clothing and Textiles. It should be further noted that teachers' attitude towards any subject will affect the attitude of students towards the same.

The majority of students view Clothing and Textiles as a valuable unit. These findings are not in line with (Cheruiyot's, 2001) and (Sang's, 2002) findings which revealed that students have negative attitudes.

Results revealed that Clothing and Textiles was the most disliked unit in Home Science. This was in line with what (Otunga, 1993) reported.

CONCLUSION

Based on the findings of this study, it is concluded that students and teachers of Home Science in the study area have positive attitude towards Clothing and Textiles. It is the recommendation of the researcher that the area of competence of teachers be examined as it affects the teaching of Clothing and Textiles.

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