

Relationship between curriculum content and course objectives: A case of Home Science education in Kenya

¹ Catherine Sempele, ² Ruth Otunga, ³ Jacob Natade

¹ Department of Hotel and Hospitality Management, University of Eldoret Eldoret, Kenya

² Management Member, University of Eldoret Eldoret, Kenya

³ Department of Curriculum and Instruction, University of Eldoret Eldoret, Kenya

Abstract

This study sought the relevance of planned content in the Primary Teacher Education Home Science curriculum in meeting the course objectives. Study participants included 22 Home Science tutors and 318 teacher trainees both from primary teacher training colleges and 30 teachers teaching in primary schools in Kenya. The survey research design and questionnaires were used to solicit this information. Results showed that planned curriculum content had a significant contribution towards achievement of objectives of Home Science education in that it is adequate for competencies required, relates well to learners' needs and is applicable to real life situations. However, it is not updated and does not relate to societal needs. Hence, the study recommends that the curriculum be reviewed to ensure that planned content reflects the dynamic changes in the world today thus meeting learners' and societal expectations.

Keywords: Home Science Education, curriculum relevance, planned content, course objectives

1. Introduction

Provision of education in any society is known to be an expensive undertaking. It requires immense investment in the human and non human resources. Various stakeholders would therefore want to know the relevance of the curriculum they support. Currently in Kenya, Home Science is offered at the secondary and tertiary levels of education that include the Primary Teacher Training Colleges (PTTCs). Courses offered in PTTCs focus on pedagogy and subject knowledge content (Education Sector Review, 2004) ^[4]. The mission of Home Science is to help individuals, families and communities improve their economic, social, cultural and political environment (Education Information Centre (EIC), 2006 ^[3]; Nyangara, Indoshi & Othuon, 2010a ^[12]; Waudu, 2002) ^[18]. Its main objective is to promote self-reliance and improve the quality of life for students, families and the community (Nyangara *et al.*, 2010a ^[12]; Nyangara, Indoshi & Othuon, 2010c) ^[13].

The PTE Home Science curriculum was last revised in the year 2004 (KIE, 2004 ^[8]; Otunga *et al.*, 2011) ^[15]. This revision addressed several PTE curriculum issues that included; the harmonization of the curriculum with the revised primary school curriculum; addressing issues of curriculum overloads and overlaps; infusing and integrating contemporary issues and incorporating industrial and technological development in the revised curriculum (KIE, 2004) ^[8]. However, despite this revision, there have been complains on the suitability of the curriculum in meeting the demands of the changing societal needs.

For instance, a contextual analysis by Nyangara *et al.* (2010a) ^[12] on the need for review of high school Home Science Education in Kenya showed that the subject had evolved in terms of structure and time allocated for teaching it but very little in terms of the content itself. The study recommended

that the syllabus and organization of Home Science Education be reviewed to ensure the subject remains relevant to the country's development goals.

Home Science Education at the PTTCs is governed by six key objectives: to help teacher trainees understand and appreciate the importance of Home Science to the primary school child especially in relation to food, clothing, shelter and overall development; to enable teacher trainees transfer Home Science knowledge and skills to children using appropriate methods and learning aids; to help teacher trainees use acquired knowledge and skills to improvise materials and formulate realistic strategies for solving problems in life; to enable teacher trainees express their desire and ability to adapt to new situations and changes in society in relation to home and family living; to enable teacher trainees apply the knowledge and skills of Home Science to improve the standards of living of self, the family and members of the community and to enable teacher trainees use the basic principles and skills acquired in Home Science as a function for further learning (KIE, 1994) ^[7].

Planned Home Science content at the PTE level is taught in four basic units that include Home Management, Food and Nutrition, Clothing and Textile and Maternal and Child Health Care (KIE, 2004) ^[8]. Given that Home Science in PTE is introduced during the second year of study, tutors are expected to cover these topics in a period of one year and its graduates come out as experts in Home Science Education. Most of the Home Science tutors have complained of too much content in the PTE Home Science curriculum given the time allocated for teaching it (Iregi, 2015) ^[5].

Further, Mberengwa, (2004) ^[10] studying curriculum change in Home Economics education at Gweru Teachers College in Zimbabwe also established that the Home Economics curriculum had very little change in content despite changes in

the course names. Moreover, Amankwa (2015) ^[11] in the study improving the skill component of clothing and textiles among students in second cycle institutions in Ghana recommended that practical teaching hours for Home Science lessons should be increased as this would ensure teachers have enough time to take students through practical training.

Most of the drawbacks of the vocational curriculum highlighted by research indicate that there have been overlaps across subjects (KIE, 2004 ^[8]; Mwiria, 2002) ^[11], negative student and societal attitudes towards the subject (Cheruiyot, 2001 ^[2]; Sang, 2002) ^[17], some objectives seem unachievable in terms of resource availability, poor sequencing of teaching topics within individual subjects and little time allocation to some subjects (Nyangara *et al.*, 2010a ^[12]; Otunga, 2010a) ^[14]. Further, some content has been reported to be obsolete thus fails to keep pace with the changing times especially technological advancement (Kinuthia, 2009) ^[9]. This has rendered subjects irrelevant in terms of self reliance, self employment and even improving graduates' standards of living besides that of their families and the community. A relevant curriculum should enable learners apply what they have learnt to their needs and interests of the society (Kafu, 2014 ^[6]; Otunga, 2010b) ^[16].

Given a context of a vibrant national economy, relevant content offered in the technical and vocational subjects are perceived as a source of valuable employment and training opportunities for the graduates. It was therefore deemed necessary to examine the relevance of planned content in the PTE Home Science curriculum. Hence, the purpose of this study was to determine the relationship between planned curriculum content and the objectives of Home Science Education in the PTE curriculum.

2. Materials and Methods

The study adopted a cross sectional survey research design. The study targeted thirty PTTCs in Kenya that were operational since the last review of the current PTE curriculum and thirty primary schools near these PTTCs. The study's target population comprised of 78 tutors teaching Home Science at the 30 PTTCs, 6,039 teacher trainees taking Home Science Education and 78 primary school teachers near the 30 PTTCs. Ideally, the target population comprised 6,195 participants. The study's accessible population comprised of 9 (30%) randomly selected PTTC's with a total of 1,915 (940 males and 975 female) teacher trainees, 23 Home Science tutors and 30 primary school teachers former graduates of the PTTC's. This gave a total of 1,968 participants for the accessible population.

The dependent variable of the study was objectives of Home Science Education. This was measured by finding out the extent to which the six respective objectives were being achieved as a result of the implementation of the PTE Home Science curriculum. A 5 point Likert scale was used to solicit this information. The independent variable was planned curriculum content. Nine content related indicators were developed and used to describe the relevance of planned curriculum content in the Home Science curriculum. Respondents were therefore required to rate these indicators against a 5 point Likert scale of (SA) strongly agree, (A) agree, (UD) undecided, (D) disagree and (SD) strongly disagree.

The researcher used self administered questionnaires for tutors, teacher trainees and Home Science graduates teaching at

primary schools. The questionnaires were structured in a way that they had both open and closed ended questions. The instruments were divided into three parts: Part I sought respondent's demographic information. Part II had a five point Likert scale that rated the extent to which the six objectives of Home Science education were being achieved while Part III also had a five point Likert scale that required respondents' to rate the relevance of planned content in the PTE Home Science curriculum.

The Cronbach alpha internal consistency coefficient results obtained from items in Part II and III were 0.88 and 0.72 respectively. Factor analysis was also done to establish construct validity of the items in the questionnaires. Items on objectives of Home Science education scale yielded a Kaiser-Meyer-Okin value of 0.913 at $p < 0.000$. The principal component analysis revealed the presence of three components with Eigenvalues exceeding 1, explaining 35.8%, 34.0% and 28.2% of the variance respectively. Three items loaded on factor one explaining a total of 35.8% variance. Two other items loaded strongly on factor two accounting for a total of 34.0% of the variance. The remaining one item loaded on component three and explained 28.2% of the variance. Cumulatively, the three components explained a total of 98.1% of the variance in the objectives of Home Science Education.

The structure of planned curriculum content items was equally examined using a scale with nine items. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above with Kaiser-Meyer-Okin's value of 0.83 and a statistically significance Bartlett's Test of Sphericity ($p < 0.000$). Principal component analysis revealed three factors with Eigenvalues greater than one which cumulatively explained 86% of variance. Five items loaded on factor one accounting for 38.6% of the variance. Three items loaded on the second component explaining 33.7% of the total variance while the remaining one item loaded strongly on the third component and accounted for 13.8% of the variance. Cumulatively, the three factors explained a total of 86.1% of the total variance in planned curriculum content.

3. Results and Discussion

A total of twenty two tutors participated in this study. Six (27.3%) of them were male and 12(54.5%) female. Further, 318 teacher trainees also took part in the study. One hundred and sixty (50.3%) of them were male and 158(49.7%) female. One hundred and ninety eight (62.3%) of the teacher trainees were aged 20 years and below; 105(33%) between 21 and 30 years and 15(4.7%) between 31 and 40 years. Moreover, a total of 30 primary school teachers took part in this study out of whom sixteen (53.3%) were male and 14(46.7%) female. One (3.3%) of the teachers was aged 20 years while 12(40%) were aged between 21 and 30 years and the remaining 17(56.7%) were aged between 31 and 40 years.

Perceptions towards Achievement of the Objectives of Home Science Education

According to table 1, a total of at least 50% of the tutors felt that five out of the six objectives of Home Science Education were being achieved either to a very great extent or to a great extent. The five objectives were; 'to help teacher trainees understand and appreciate the importance of Home Science to the primary school child especially in relation to food, clothing, shelter and overall development' (82%), 'to help

teacher trainees use acquired knowledge and skills to improvise materials and formulate realistic strategies for solving problems in life’ (68%), ‘to enable teacher trainees express their desire and ability to adapt to new situations and changes in society in relation to home and family living’ (77%), ‘to enable teacher trainees apply the knowledge and skills of Home Science to improve the standards of living of self, the family and members of the community’ (81%), and ‘to enable teacher trainees use the basic principles and skills

acquired in Home Science as a function for further learning’ (50%). The only objective rated (41%) by tutors was ‘to enable teacher trainees transfer Home Science knowledge and skills to children using appropriate methods and learning aids’. This may be attributed to the fact that graduates of Home Science Education at PTTCs do not get the opportunity to teach Home Science at primary schools given that the subject is not offered in the primary school curriculum thus could not achieve it to a great extent.

Table 1 : Tutors’ Ratings on Achievement of the Objectives of Home Science Education

S/NO.	Objectives of Home Science Education	% Distribution of responses					Total
		VGE	GE	UD	SE	VSE	
1.	Helps to appreciate the importance of Home Science to the primary school child.	12	6	0	4	0	22
		55%	27%	0%	18%	0%	100%
2.	Enables the transfer of Home Science knowledge and skills to children	5	4	0	7	6	22
		23%	18%	0%	32%	27%	100%
3.	Enables improvisation of materials and formulation of realistic strategies for solving problems in life.	7	8	1	3	3	22
		32%	36%	5%	14%	14%	100%
4.	Enables ability to adapt to new situations and changes in society.	8	9	1	3	1	22
		36%	41%	5%	14%	5%	100%
5.	Improves the standards of living of self, the family and community.	8	10	0	2	2	22
		36%	45%	0%	9%	9%	100%
6.	Enables use of basic principles and skills as a function for further learning.	6	5	2	8	1	22
		27%	23%	9%	36%	5%	100%

VGE – Very Great Extent; GE - Great Extent; UD – Undecided; SE – Small Extent, VSE – Very Small Extent
Source: Research data (2016)

Based on teacher trainees’ ratings as shown in table 2, at least 50% of the teacher trainees were of the opinion that four out of the six objectives of Home Science Education are currently being achieved either to a very great extent or to a great extent. However, the objectives ‘enables the transfer of Home Science

knowledge and skills to children’ and ‘enables the ability to adapt to new situations and changes in society were rated below 50%. Generally, a total of over 50% of the teacher trainees were undecided or felt that these two objectives are either achieved to a small extent or to a very small extent.

Table 2: Teacher Trainees’ Ratings on Achievement of the Objectives of Home Science Education

S/NO.	Objectives of Home Science Education	% Distribution of responses					Total
		VGE	GE	UD	SE	VSE	
1.	Helps to appreciate the importance of Home Science to the primary school child.	123	68	46	53	28	318
		39%	21%	14%	17%	9%	100%
2.	Enables the transfer of Home Science knowledge and skills to children	87	55	51	114	11	318
		27%	17%	16%	36%	3%	100%
3.	Enables improvisation of materials and formulation of realistic strategies for solving problems in life.	76	83	40	65	54	318
		24%	26%	13%	20%	17%	100%
4.	Enables ability to adapt to new situations and changes in society.	83	62	33	76	64	318
		26%	19%	10%	24%	20%	100%
5.	Improves the standards of living of self, the family and community.	102	75	23	53	65	318
		32%	24%	7%	17%	20%	100%
6.	Enables use of basic principles and skills as a function for further learning.	99	81	33	43	62	318
		31%	25%	10%	14%	19%	100%

VGE – Very Great Extent; GE - Great Extent; UD – Undecided; SE – Small Extent, VSE – Very Small Extent
Source: Research data (2016)

According to primary school teachers’ responses depicted in table 3, the objective ‘enables improvisation of materials and formulation of realistic strategies for solving problems in life’ was being achieved to a 73% extent while ‘improves the standards of living of self, the family and community’ was being achieved to a 74% extent as per primary school teachers’ perceptions. Similar to tutors and teacher trainees, about 56%

of the primary school teachers felt that the objective ‘enables the transfer of Home Science knowledge and skills to children’ was being achieved to a small extent (23%) and to a very small extent (23%). Further, 10% of primary school teachers were undecided about this attribute. This meant that they were not sure on the extent to which this objective was being achieved.

Table 3: Primary School Teachers’ Ratings on Achievement of the Objectives of Home Science Education

S/NO.	Objectives of Home Science Education	% Distribution of responses					Total
		VGE	GE	UD	SE	VSE	
1.	Helps to appreciate the importance of Home Science to the primary school child.	12 40%	5 17%	2 7%	6 20%	5 17%	30 100%
2.	Enables the transfer of Home Science knowledge and skills to children	7 23%	6 20%	3 10%	7 23%	7 23%	30 100%
3.	Enables improvisation of materials and formulation of realistic strategies for solving problems in life.	13 43%	9 30%	5 17%	2 7%	1 3%	30 100%
4.	Enables ability to adapt to new situations and changes in society.	11 37%	7 23%	3 10%	5 17%	4 13%	30 100%
5.	Improves the standards of living of self, the family and community.	14 47%	8 27%	1 3%	4 13%	3 10%	30 100%
6.	Enables use of basic principles and skills as a function for further learning.	11 37%	6 20%	4 13%	4 13%	5 17%	30 100%

VGE – Very Great Extent; GE - Great Extent; UD – Undecided; SE – Small Extent, VSE – Very Small Extent
 Source: Research data (2016)

Chi square Results on Respondents Perceptions towards Achievement of the Objectives of Home Science Education

According to table 4, the chi square analysis test was done to establish if there was any significant relationship in ratings given by tutors, teacher trainees and primary school teachers on the extent to which the objectives of Home Science Education were being achieved. Results indicated that there was a significant relationship between respondents’ ratings on only one objective. This objective ‘enables the transfer of Home Science knowledge and skills to children’ that yielded the chi square result ($\chi^2=38.093$, $df=8$, $p=0.000$) at 95%

confidence level was rated similarly by the three categories of respondents.

In total, 56% of the respondents either disagreed (41%) or were undecided (15%) on the extent to which Home Science Education enables teacher trainees transfer Home Science knowledge and skills to children. This implies that tutors, teacher trainees and primary school teachers were in agreement that this objective was being achieved only to a small extent. Further, the three categories of respondents perceived the extent to which the remaining five objectives of Home Science Education were being achieved differently. Therefore, all ratings given on these five objectives were not significantly related.

Table 4: Chi Square Results on Perceptions towards Achievement of the Objectives of Home Science Education

S/NO	Objectives of Home Science Education	Extent of achievement	% Distribution	χ^2	df	Sig
1.	Helps to appreciate the importance of Home Science to the primary school child.	Great Extent	226 (61%)	10.477	8	0.233
		Undecided	48 (13%)			
		Small Extent	96 (26%)			
		Total	370 (100%)			
2.	Enables the transfer of Home Science knowledge and skills to children	Great Extent	163 (44%)	38.093	8	0.000
		Undecided	56 (15%)			
		Small Extent	152 (41%)			
		Total	370 (100%)			
3.	Enables improvisation of materials and formulation of realistic strategies for solving problems in life.	Great Extent	196 (53%)	13.162	8	0.106
		Undecided	44 (12%)			
		Small Extent	130 (35%)			
		Total	370 (100%)			
4.	Enables ability to adapt to new situations and changes in society.	Great Extent	181 (49%)	12.631	8	0.125
		Undecided	37 (10%)			
		Small Extent	152 (41%)			
		Total	370 (100%)			
5.	Improves the standards of living of self, the family and community.	Great Extent	218 (59%)	10.032	8	0.263
		Undecided	22 (6%)			
		Small Extent	130 (35%)			
		Total	370 (100%)			
6.	Enables use of basic principles and skills as a function for further learning.	Great Extent	207 (56%)	10.867	8	0.209
		Undecided	41 (11%)			
		Small Extent	122 (33%)			
		Total	370 (100%)			

SA – Strongly Agree; A - Agree; UD – Undecided; D – Disagree and SD – Strongly Disagree
 Source: Research data (2016)

Respondents’ Perceptions towards Attributes on Planned Curriculum Content

The study further sought respondents’ perceptions towards attributes related to planned curriculum content. Respondents were required to rate nine items on planned content in the PTE Home Science curriculum against a five point Likert scale of strongly agree (SA), agree (A), not sure (NS), disagree (D) and strongly disagree (SD). According to table 5, a total of 63% of the tutors disagreed that planned curriculum content is adequate for the competencies required while another 63% either strongly agreed (36%) or agreed (27%) that planned curriculum content relates to learners’ needs. Further, a total of 64% of the respondents were in agreement that planned content relates to societal needs with 27% disagreeing.

On whether planned content relates to the objectives of Home Science Education, 50% of the tutors disagreed while 45% agreed to this attribute. Sixty eight percent of the tutors opined that planned curriculum content is applicable to real life situation despite the fact that 50% felt that this content is not up to date. Moreover, a majority of the tutors (81%) disagreed that planned curriculum content relates to time allocated for teaching it while the remaining 18% were either undecided (9%) or in agreement (9%) with the same attribute. A total of 41% of the tutors disagreed that planned content motivates further learning while another 63% averred that this content relates to the national goals of development. Tutors generally agreed with 4 out of the 9 attributes on planned curriculum content.

Table 5: Tutors’ Ratings on Attributes Related to Planned Curriculum Content

S/NO.	Attributes on planned curriculum content	Count and % distribution of responses					Total
		SA	A	UD	D	SD	
1.	Content is adequate for competencies required.	5 23%	3 14%	0 0%	6 27%	8 36%	22 100%
2.	Content relates to learners’ needs.	8 36%	6 27%	0 0%	6 27%	2 9%	22 100%
3.	Content relates to societal needs.	9 41%	5 23%	2 9%	4 18%	2 9%	22 100%
4.	Content relates to objectives of Home Science Education.	4 18%	6 27%	1 5%	6 27%	5 23%	22 100%
5.	Content is applicable to real life situations.	6 27%	9 41%	2 9%	3 14%	2 9%	22 100%
6.	Content is up to date	3 14%	4 18%	4 18%	7 32%	4 18%	22 100%
7.	Content relates to time allocated for teaching it.	0 0%	2 9%	2 9%	8 36%	10 45%	22 100%
8.	Content motivates further learning	3 14%	5 22%	5 23%	6 27%	3 14%	22 100%
9.	Content relates to national goals of development	6 27%	8 36%	2 9%	5 23%	1 5%	22 100%

SA – Strongly Agree; A - Agree; UD – Undecided; D – Disagree and SD – Strongly Disagree
Source: Research data (2016)

According to table 6, 53% of the teacher trainees were of the opinion that planned curriculum content in the PTE Home Science curriculum is adequate for the competencies required and relates to learners’ needs. On the contrary, 41% felt that this content does not relate to societal needs and neither does it relate to the objectives of Home Science Education. A higher percentage, (60%) of the respondents opined that planned content is applicable to real life situations while

another 58% disagreed that planned curriculum content is up to date. Most of the teacher trainees (69%) disagreed that planned curriculum content relates to the time allocated for teaching it while another 48% disagreed that this content motivates further learning. Further, 21% of these respondents were not sure that planned content relates to national goals of development. Generally, teacher trainees agreed with 3 out of 9 attributes on planned curriculum content by rating them above 50%.

Table 6: Teacher Trainees’ Ratings on Attributes Related to Planned Curriculum Content

S/NO.	Attributes on planned curriculum content	Count and % distribution of responses					Total
		SA	A	UD	D	SD	
1.	Content is adequate for competencies required.	102 32%	66 21%	42 13%	56 18%	52 16%	318 100%
2.	Content relates to learners’ needs.	98 31%	70 22%	32 10%	64 20%	54 17%	318 100%
3	Content relates to societal needs.	68 21%	54 17%	66 21%	55 17%	75 24%	318 100%
4.	Content relates to objectives of Home Science Education.	76 24%	68 21%	44 14%	52 16%	78 25%	318 100%
5.	Content is applicable to real life situations.	111 35%	78 25%	31 10%	55 17%	43 14%	318 100%
6.	Content is up to date	54	44	36	86	98	318

		17%	14%	11%	27%	31%	100%
7.	Content relates to time allocated for teaching it.	31 10%	23 7%	45 14%	102 32%	117 37%	318 100%
8.	Content motivates further learning	63 20%	49 15%	54 17%	75 24%	77 24%	318 100%
9.	Content relates to national goals of development	65 20%	55 17%	67 21%	87 27%	44 14%	318 100%

SA – Strongly Agree; A - Agree; UD – Undecided; D – Disagree and SD – Strongly Disagree
 Source: Research data (2016)

According to table 7, a total of 57% of the primary school teachers were of the opinion that planned curriculum content is adequate for competencies required of Home Science graduates and that this content relates to learners’ needs. On the contrary, 50% of these respondents disagreed that planned curriculum content relates to societal needs while 60% believed that this content relates to the objectives of Home Science Education.

Most of the primary school teachers (67%) agreed that planned content offered in the PTE Home Science curriculum provides knowledge and skills that are applicable to real life situations. This may imply that primary school teachers could be applying the competencies gained from Home Science Education in

their real life experiences despite Home Science not being offered as one of the subjects in the primary school curriculum. Similar to 50% tutors and 58% teacher trainees who disapproved the attribute ‘content is up to date’, 57% of the primary school teachers also negated this attribute. Furthermore, a majority of the teacher trainees (70%) opined that planned content does not relate to the time allocated for teaching it implying that the curriculum is overloaded. Half the teacher trainees (50%) believed that this content does not motivate further learning while another 44% felt that planned content relates to national goals of development. In summary, primary school teachers supported 4 out of 9 attributes on planned curriculum content.

Table 7: Primary School Teachers’ Ratings on Attributes Related to Planned Curriculum Content

S/NO.	Attributes on planned curriculum content	Count and % distribution of responses					Total
		SA	A	UD	D	SD	
1.	Content is adequate for competencies required.	8 27%	9 30%	2 7%	6 20%	5 17%	30 100%
2.	Content relates to learners’ needs.	8 27%	9 30%	2 7%	9 30%	2 7%	30 100%
3.	Content relates to societal needs.	7 23%	7 23%	1 3%	6 20%	9 30%	30 100%
4.	Content relates to objectives of Home Science Education.	11 37%	7 23%	3 10%	7 23%	2 7%	30 100%
5.	Content is applicable to real life situations.	8 27%	12 40%	1 3%	6 20%	3 10%	30 100%
6.	Content is up to date	5 17%	4 13%	4 13%	9 30%	8 27%	30 100%
7.	Content relates to time allocated for teaching it.	3 10%	2 7%	4 13%	11 37%	10 33%	30 100%
8.	Content motivates further learning	4 13%	6 20%	5 17%	7 23%	8 27%	30 100%
9	Content relates to national goals of development	5 17%	8 27%	5 17%	8 27%	4 13%	30 100%

SA – Strongly Agree; A - Agree; UD – Undecided; D – Disagree and SD – Strongly Disagree
 Source: Research data (2016)

Chi square Results on Respondents’ Perceptions towards Attributes on Planned Curriculum Content

In order to get a clearer picture of these ratings given by the three categories of study respondents, the chi square test was done as shown in table 8. The results revealed that there was no significant relationship on tutors’, teacher trainees’ and primary school teachers’ ratings on all 9 attributes related to planned curriculum content. This implied that the three categories of respondents differed in their views regarding the

nine attributes. For instance, despite the fact that almost equal percentages of the tutors (41%), teacher trainees (48%), and primary school teachers (50%) were dissatisfied with the attribute ‘content motivates further learning’, their ratings were not significantly related ($\chi^2=3.524$, $df=8$, $p=0.897$) at 0.05 alpha level. Generally, this finding established that most (6 out of 9) of the attributes on planned curriculum content were disapproved by the respondents.

Table 8: Chi Square Results on Perceptions towards Attributes on Planned Curriculum Content

S/NO	Attributes on planned curriculum content	Extent of agreement	Count & % Distribution	χ^2	df	Sig
1.	Content is adequate for competencies required	Great Extent	193 (52%)	12.350	8	0.136
		Undecided	44 (12%)			
		Small Extent	133 (36%)			
		Total	370 (100%)			
2.	Content relates to learners' needs	Great Extent	199 (54%)	7.974	8	0.436
		Undecided	34 (9%)			
		Small Extent	137 (37%)			
		Total	370 (100%)			
3.	Content relates to societal needs	Great Extent	150 (40%)	12.622	8	0.126
		Undecided	69 (19%)			
		Small Extent	151 (41%)			
		Total	370 (100%)			
4.	Content relates to objectives of Home Science Education	Great Extent	172 (46%)	9.979	8	0.267
		Undecided	48 (13%)			
		Small Extent	150 (41%)			
		Total	370 (100%)			
5.	Content is applicable to real life situations.	Great Extent	224 (61%)	7.107	8	0.525
		Undecided	34 (9%)			
		Small Extent	112 (30%)			
		Total	370 (100%)			
6.	Content is up to date	Great Extent	114 (31%)	2.746	8	0.949
		Undecided	44 (12%)			
		Small Extent	212 (57%)			
		Total	370 (100%)			
7.	Content relates to time allocated for teaching it.	Great Extent	61 (16%)	3.463	8	0.902
		Undecided	51 (14%)			
		Small Extent	258 (70%)			
		Total	370 (100%)			
8.	Content motivates further learning	Great Extent	130 (35%)	3.524	8	0.897
		Undecided	64 (17%)			
		Small Extent	176 (48%)			
		Total	370 (100%)			
9.	Content relates to national goals of development	Great Extent	147(40%)	8.720	8	0.366
		Undecided	74 (20%)			
		Small Extent	149 (40%)			
		Total	317 (100%)			

Source: Research Data (2016)

Ho: Planned curriculum content has no relationship with the objectives of Home Science Education

As a result of this finding, it was deemed necessary to establish the relationship between planned curriculum content and objectives of Home Science Education. Hence, the hypothesis that planned content in the PTE Home Science curriculum has no relationship with the objectives of Home Science Education was tested using the simple multiple regression analysis. The result obtained was $\beta=0.844$, $p=0.000$ which showed that planned curriculum content had a significant unique contribution on achievement of the objectives of Home Science Education. Therefore, this finding rejected the null hypothesis at 95% confidence level. This finding supports the idea that planned curriculum content is adequate for competencies required (52%), relates to learners' needs (54%) and that it is applicable to real life situations (61%).

However, study findings also indicated that planned curriculum content does not relate to societal needs' (60%) or the general course objectives (54%). Further, it is not up to date (69%), does not relate to the time allocated for teaching it (84%), it does not motivate further learning (65%) or relate to the national goals of development (60%). These finding corroborate findings by Nyangara *et al.* (2010a) [12] which showed that Home Science Education had evolved in terms of

structure but very little in terms of the content itself and Mberengwa, (2004) [10], who established that the Home Economics curriculum had very little change in content despite changes in the course names.

4. Conclusion and Recommendations

Planned Home Science content in the PTE curriculum significantly contributes to achievement of the objectives of Home Science education. The planned content is adequate for the competencies required, relates to learners' needs and is applicable to real life situations. However, this content does not relate to societal needs, the national goals of development, the time allocated for teaching it or the general course objectives. Further, it is out dated and does not motivate further learning in its graduates.

Hence, it is important that curriculum developers and other educational stakeholders consider reviewing the curriculum with the aim of making content relevant and manageable. The review should ensure that planned curriculum content is updated to take note of dynamic changes in the world today besides motivating further learning in its graduates. This will improve the relevance of planned curriculum content in Home Science Education in turn boosting the country's developmental goals.

5. References

1. Amankwa J, Gbadegbe R, Gbetodeme S, Agra F. Improving the skill component of clothing and textiles among students in second cycle institutions in Ghana and its effect on the polytechnique fashion students, *Journal of Education and Practice*. 2015; 6(27).
2. Cheruiyot M. Teaching clothing and textiles in secondary schools within Eldoret Municipality, Unpublished Project Report, Current Issues and Seminars in Home Science and Technology Course, Moi University, 2001.
3. Education Information Center, Kenya high commission, <http://www.ibe.unesco.org>. September, 2014.
4. Education Sector Review. Education, training and research, Government printers, Nairobi, 2004.
5. Iregi I. Challenges faced in teaching of Home Science in primary teacher training colleges in Embu and Meru Counties, Kenya, Unpublished master's thesis, Kenyatta University, 2015.
6. Kafu AK. Teacher education and development of quality education in modern Africa, *Journal of African Studies in Educational Management and Leadership*, 2014; 4(1): 24-37.
7. Kenya Institute of Education, Primary teacher education syllabus, Kenya Literature Bureau, Nairobi, Kenya, 1994.
8. Kenya Institute of Education, Primary teacher education syllabus, Kenya Literature Bureau, Nairobi, Kenya, 2004, 2.
9. Kinuthia W. Educational development in Kenya and the role of ICT, *International Journal of Education and Development using ICT*, 5(2) 2009.
10. Mberengwa L. Curriculum change in Home Economics education at Gweru Teachers College, Zimbabwe, 1975-1995 *Journal of Family and Consumer Sciences Education*. 2004; 22(2):17-23.
11. Mwiria K. Vocationalization of secondary education: Kenya case study, A paper prepared for the World Bank Regional Vocational Skills Development Review, 2002.
12. Nyangara KN, Indoshi FC, Othuo LO. Home Science Education in Kenya: The need for review, *Educational Research Journal*. 2010a; 1(9):396-401.
13. Nyangara KN, Indoshi FC, Othuo LO. Policies and practices of home science in secondary schools, *Educational Research Journal*. 2010c; 1(6):156-165.
14. Otunga RN. The context of curriculum development in Kenya, Moi University, Kenya, 2010a.
15. Otunga NR, Odeo II, Barasa LP. A Handbook for curriculum and instruction, Eldoret: Moi University Press, Kenya, 2011.
16. Otunga RN. The dilemma of curriculum relevance in Kenya, Moi University, Kenya, Inaugural Lecture 2010b; 10(2).
17. Sang H. Attitudes of teachers and teacher trainees towards the teaching and learning of Home Science in secondary schools, in Nandi District Kenya, Unpublished master's thesis. Moi University, 2002.
18. Waudu J. Home economics in Kenya: Challenges and perspectives. *Curriculum Technology, Family and consumer sciences*, 2002; 12(1).