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# Policies and practice of home science education in secondary schools

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**Abstract**

Policy formulation, implementation and evaluation in relation to Home Science education raise fundamental questions of efficacy. Since independence in Kenya in 1963, there have been several commissions to look into the education system, resulting in policy decisions that have changed the curriculum in secondary schools. Curriculum change was driven by the need to ensure that education is relevant to the needs of the learners, of good quality and contributes to the achievement of Kenya's development goals. The literature however reveals that little has changed in terms of what is taught in Home Science, leading to questions regarding its relevance. The purpose of this study was to investigate the policies and practice of Home Science education in Kenya. Document analysis was conducted to establish the policies guiding Home Science education in secondary schools, while teacher practices were obtained through the use of questionnaires. The study revealed that while there have been several attempts to review Home Science education in Kenya, these attempts have been incidental to whole sector review and not planned specifically for Home Science. The findings imply that policies guiding Home Science education need to be reviewed to make the subject more relevant to national development goals.

**Keywords:** Vocationalization of education, home science education, policy review, curriculum review, 8-4-4 system of education

## INTRODUCTION

The provision of education in Kenya is controlled by the government in relation to both policy and practice. The government makes policy decisions that are put into practice at school level countrywide. The policies that have shaped education in Kenya are based mainly on the periodic review carried out by government mandated commissions. Since independence there have been ten such reviews of the education system. Eshiwani (1990) and Abagi et al (2000) attribute the frequent education reviews on the emphasis the government and the people of Kenya have given to education and on the way education has failed to respond to various national needs. All the commissions pointed at the need to strive for relevance in education in order to enhance development.

The most recent review of the curriculum was the Commission of Inquiry into the Education System of Kenya (Republic of Kenya, 1999) . The commission was mandated to recommend ways of enabling the education system to achieve national unity and mutual social responsibility, and to speed up industrial and technological development. In its report the commission recommended an overhaul of the education system in order to ensure relevant and lifelong education.

The common thread over the years has been in the emphasis on quality, relevance and vocationalization of education as key to industrialization of the country. Despite this, there appears to be little effort given to policies that directly address the needs of practical and vocational subjects such as Home Science. Pre-vocational subjects either continue to be largely ignored by the commissions looking into education, or changes are implemented in a piecemeal manner. For example the need to set up a National Authority for

Technical and Vocational Education and Training (TIVET) has been proposed over and over but has never been implemented (Republic of Kenya 1994; 1996; 2000; 2005). The lack of clear guidance in prevocational subjects like Home Science may lead to perception that they are not important, yet the country is seeking industrial transformation. The skills learnt in Home Science are directly applicable in a wide variety of manufacturing and service industries and are crucial to help the country realize its industrialization goals. In a speech during a seminar for Technical and Vocational Education and Training (TVET) policy makers, the Kenya Minister for education pointed out that in countries with the most rapid development over 40% of the students in secondary schools studied technical and vocational subjects (MOEST, 2005). If indeed this is the case, it is crucial that educational planners and implementers, governments and stakeholders understand how educational policy has impacted on a subject in a learning area key to Kenya's development.

To contribute to development however, Home Science education must impart knowledge and skills that are relevant to the country's needs at each stage of its development. While education has been reviewed three times since 1981, it is not clear how the resultant policies have impacted on Home Science education, in relation to national development goals. If the result of change in policies has been change in Home Science content, have these changes contributed to or detracted from future goals? Is Home Science still relevant in relation to the needs of the country?

Educational policies that are formulated to plan, monitor and evaluate the implementation of decisions and directives in the education sector in Kenya originate from the Government or the Ministry of Education. Once enacted policy has an effect on the way subjects are taught and learnt. It is not clear what the impact of policy on the way Home Science is taught and learnt in secondary schools has been.

Curriculum review and reform are possible responses to specific circumstances such as public dissatisfaction with prevailing educational systems, emerging economic, social and technological requirements, or new priorities in national development. Since the circumstances or contexts of reform have a direct impact on the focus of reform and are therefore important in understanding why specific policies were enforced, it is necessary to understand the rationale for curriculum review in Kenya in 2002.

Review of the education sector in Kenya focuses on whole system review, but the impact of the reviews on Home Science is yet to be documented and evaluated. The premise of change is that it is supposed to improve existing theory and practice. The curriculum needs to adapt to changing realities in order to remain valid and be relevant to changing learner expectations. Each of the commissions that have reviewed education in Kenya have examined the overall education practice prevailing at the time depending on their Terms of Reference. None of the commissions focused on what would be the impact their recommendations for change on individual subjects such as Home Science before the curriculum was revised. How then has the whole sector policy change impacted on Home Science education in Kenya?

## Purpose and Objectives

The purpose of this study was to determine the policies and practice of Home Science education in secondary schools in Kenya. Therefore the objectives of the study were to:
1. Establish the policies guiding Home Science education in secondary schools.
2. Assess the implementation of Home Science education in secondary schools.

## Scope of the Study

The evaluation focused on context analysis of documents relating to Home Science education in Kenya in 2002. These included teacher's guides and Home Science syllabus, the 1997-2001 Development Plans and relevant sessional papers on education and training in this period. The field study was carried out in Nyanza Province, Kenya. Nyanza Province represents a wide diversity of urban and rural schools, as well as both provincial and district schools. The province thus provided enough of a demographic profile to reduce any bias caused by being selected purposively.

## Conceptual Framework

To conceptualize the policy process Ball (1994) suggested using three contexts: the context of influence, the context of policy text production, and the context of practice. The three contexts are cyclical and interrelated; one affects the other and they often overlap despite the varied activities at each stage.

The conceptual framework below was used to study the interrelationship between policy and practice in terms of Home Science education. Policy decisions are influenced by the prevailing national development goals and reflected in the education goals. When the curriculum is revised the findings from both field research and document analysis should be used to inform subsequent decisions about curriculum development and implementation. It is thereafter necessary to assess the impact of policies on classroom practice on individual subjects like Home Science.
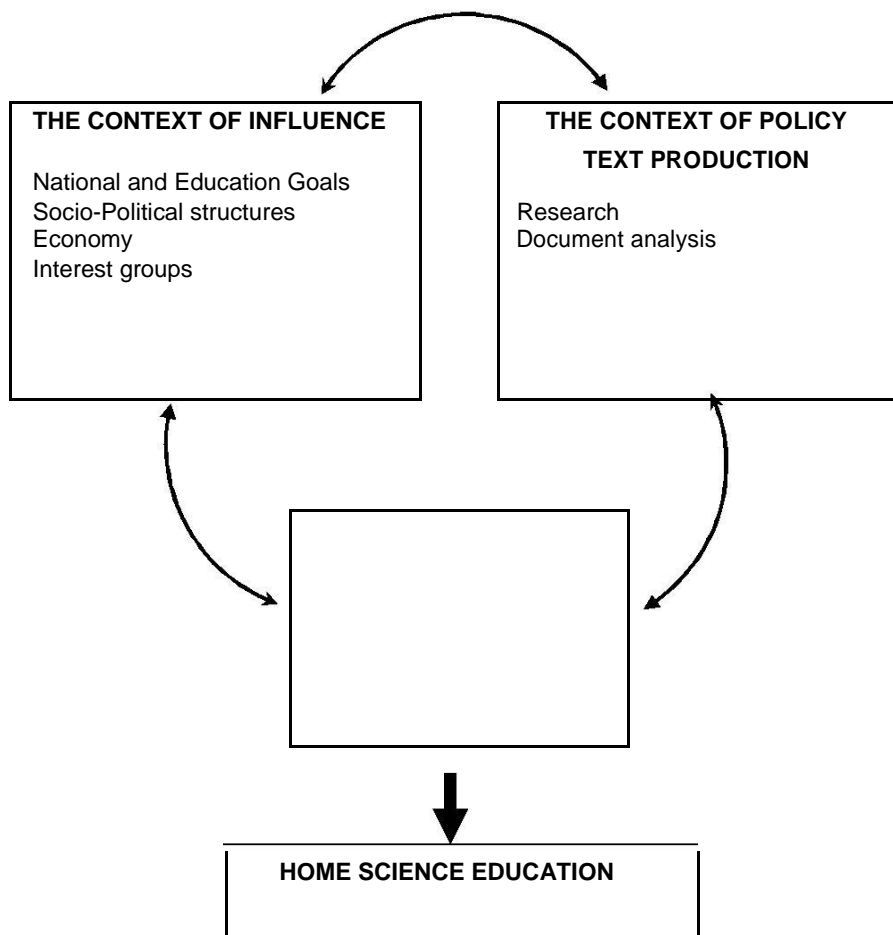
**Figure 1.** Framework for Policy Analysis

## RESEARCH METHODOLOGY

### Design of the Study

The study was descriptive and used mixed methods research design. A mixed methods research design is the processes and procedures for collecting, analyzing and inferring both quantitative and qualitative data in a single study based on priority and sequence of information (Greene et al., 1989; Tashakkori and Teddlie, 1998; Creswell et al, 2003). The design was selected to enable the researcher to focus on the research questions and plan a disciplined approach to the collection, analysis, and interpretation of the related data while reducing the possibility of bias. Both quantitative and qualitative methods of data collection were employed in a multiplicity of methods- historical, case study and ethnographic methods.

### Population

The population for this study consisted of Home Science teachers in secondary schools in Nyanza Province, Kenya.

### Sample and Sampling techniques

Criterion based sampling was used to select all Home Science teachers in secondary schools in Nyanza Province, Kenya who had taught for at least 10 years. This yielded a sample of 31 teachers. Three were used during the piloting of the instruments and were therefore left out of the main study. The study therefore used 29 teachers.

### Instruments for Data Collection

The conceptual framework was used to develop a document analysis guide comprising of a list of 6 major questions and 9 subsections that enabled a comprehensive analysis of policy documents by comparing perceptions, conceptualization and interpretation of the national and educational goals, the socio-political structure, the economy and interest groups. The information obtained was integrated with analysis of the dependent variables. A questionnaire with both close-ended and open- ended questions was used to gather information from the teachers. Close ended questions enabled the researcher to obtain standardized responses useful in obtaining a general picture of current practice. The questions were divided into five sections: background information, departmental organization, home science teaching and learning and evaluation. The questionnaires were delivered to the teachers personally by the researcher and filled out and collected immediately, thus ensuring a 100% return rate.

**Validity and Reliability of Instruments**

In order to determine the content and face validity, the questionnaires and the interview schedule were examined by three lecturers from Maseno University who are experts in data management in research. Based on their agreed-upon comments, the questionnaires and interview questions were modified and any omissions included to best answer the research questions. Reliability was obtained by using instruments that had items derived from the current Home Science syllabus. To ensure that the research instruments were accurate, the instruments were tested before the main study through a pilot study. The data collected during the pilot study was analyzed and interpreted. The purpose of this analysis was to look for patterns and relationships in the data, to ascertain that the questions were clear and that the information sought would be obtained.

**Data Analysis**

Mixed methods designs rely on analyzing and inferring both qualitative and quantitative data (Tashakkori & Teddlie, 1998). Qualitative context analysis was used for document analysis. This approach was preferable to quantitative analysis in order to assess the meaning attached to policy declarations, by contextualizing the policies in political, social and economic realities (Fraenkel & Wallen, 1993). Quantitative data from the questionnaires provided basic research evidence. Data analysis was based on descriptive statistics, specifically the use of percentages and weighted means.

## RESULTS AND DISCUSSION

## Policies guiding Home Science Education in Secondary Schools

In 1985 the system of education in Kenya was changed from 7-4- 2-3 to 8- 4-4 in regard to the number of years spent in primary school, secondary school and at university (Eshiwani 1990). This followed re-commendations made in 1981 by the Presidential Working Party on the Second University (Republic of Kenya, 1981). The basis of this recommendation was that secondary school was terminal for an increasing number of youth. In order to alleviate poverty, especially in the rural areas, there was need to review the curriculum to enable school leavers at every stage be self employed, by equipping students with skills relevant to the world of work.

Prior to this change, Home Science was taught as three distinct subjects: Home Management, Foods and Nutrition and Clothing and Textiles (KIE, 1981). Students studied only one of the three subjects. After learning general Home Science in Form One and Two, they specialized from Form Three. With the 8-4- 4 system the three subjects were merged into one and named Home Science. The change to the 8-4-4 system of education was not based on any review or recommendations, and was piloted and implemented at the same time, towards the end of 1984.

However in 1988 a committee was set up to address some of the issues that had arisen since the

implementation of the 8- 4-4. The terms of reference focused on the need to improve educational quality, relevance and financing. Emphasis on teaching of science and technology was maintained.

The vocationalization of the curriculum was accompanied by several measures intended to cut government expenditure in the curriculum. Parents and communities were expected to bear the costs of building Home Science laboratories and purchasing the necessary equipment and materials for the subject (Sifuna 2004).

The curriculum was revised in 2002. The government needed to reduce student workload while ensuring that costs were reduced, emerging issues such as HIV/AIDS education, health, environment, gender and the national goal of industrialization were incorporated, and that the knowledge, skills and attitudes required at the end of the secondary school cycle were assured (KIE, 2002). Examinable subjects were reduced from 13 to 8, giving schools and students a choice in science and vocational subjects.

Two other developments in this period are important. Firstly, in 1991 the textbook policy in Kenya was liberalized, allowing independent publishers to submit textbooks to the Ministry of Education for approval for use in secondary schools. Prior to this policy official textbooks and materials were developed by KIE and published by the Jomo Kenyatta Foundation based in Nairobi (Rotich 2004). The liberalization of the textbook policy led to market driven competition with the costs of textbooks coming down and remaining relatively stable, while improving on quality. The use of locally produced textbooks also led to use of localization of content, increasing the relevance of what was being studied.

Secondly, in response to the pressure from donor agencies to reduce public sector expenditure, in 2003 the government, through the Teachers' Service Commission (TSC) stopped automatic employment of all teachers graduating from universities and teacher training colleges. The concern of donors who fund the bulk of the country's recurrent budget was justifiable, considering that between 1990 and 1997 secondary school teacher employment expanded by 58%. Approximately 75% of the education budget was spent on teachers' salaries. In the same period secondary school enrollment only increased by 7%, resulting in a low student teacher ratio of 15:1 (Kimalu et al, 2001). Instead the government instituted a policy known as curriculum based establishment (CBE) in regard to teacher employment and decentralized this employment to the school boards.

The CBE is used to determine the number of teachers a school should have, and is calculated on a recommended teaching load, based on the number of pupils and the number of streams in each class. The CBE encourages the expansion of schools in order to obtain more teachers. As per the scheme of service for graduate teachers, the load for classroom teachers is 25

40-minute periods per week (Ibid). The school boards are authorized to recruit teachers on the school payroll according to need and the TSC periodically advertises vacant positions for specific subjects.

## National and educational goals

The 1997-2001 Development Plan (Republic of Kenya, 1996) was geared towards transforming Kenya from an agrarian economy to a newly industrialized country by 2020. The plan was based on policies and strategies of Sessional Paper 2 of 1996 on Industrial Transformation to the Year 2020 (Republic of Kenya, 1996) . The government wanted to facilitate the private sector to be able to invest more in productive activities. The goals of education as set out in the 2002 syllabus are:
1.  Fostering nationalism, patriotism and promoting national unity
2.  Promoting the economic, technological and industrial needs for national development
3.  Promoting individual development and self fulfillment
4.  Promoting sound moral and religious values
5.  Promoting social equity and responsibility
6.  Promoting respect for, and development of Kenya's rich and varied cultures
7.  Promoting international consciousness and foster positive attitudes towards other nations
8.  Promote positive attitudes towards good health and environmental protection
This was the first syllabus to include the goals of education and try show how they matched with the objectives of Home Science.

## Sociopolitical structures

In 1998 the government set up a commission of inquiry into the education system of Kenya (Republic of Kenya, 2000). The mandate of the commission was to recommend ways of enabling the education system to achieve national unity and mutual social responsibility, and to speed up industrial and technological development. The resultant report came to be known by the acronym TIQET that stood for Total Integrated Quality Education and Training. Learning was to be lifelong and relevant.

The revision of the curriculum carried out in 2002 was intended to address the issue of overload by reducing the number of subjects and the content in Home Science, reorganizing the syllabus in such a way that better mastery of the knowledge, skills and attitudes required at the end of the secondary school cycle were assured. The issue of cost was also addressed so that the resources required to implement the curriculum were obtainable locally at low cost or could be improvised. The MoE also gave consideration to emerging issues such as HIV/AIDS

education, health, environment, gender and the national goal of industrialization (KIE, 2002)

In 2003 free primary education was rolled out and continues to be the focus of Government efforts. The achievement of Universal Primary Education still remains a challenge but with the increased enrollments at primary school the secondary schools are also affected. The large numbers of students joining secondary schools have seen enrollment numbers in secondary schools and led to increased class sizes. Overcrowding is a problem and facilities usually inadequate. For practical-oriented subjects such as Home Science this has a direct impact because inadequate facilities lead to poor skills acquisition.

## Economy

The TIQET report was never implemented. The Government and the MoE and Human Resource Development argued that report was too costly to implement and that it would require extensive structural and institutional adjustments (Abagi et al, 2000). However, several of the recommendations from the report influence the changes that occurred in 2002.
Several authors have argued that the cost factor was only one of the reasons for not implementing the TIQET report (Abagi et al, 2000; Amutabi, 2004; The World Bank, 2004; Makori, 2005; Nyaberi, 2009). Political expediency also played a role. Abagi et al (2000) calculated that only 100 of the 558 recommendations had major financial implications. Rather they state that implementing the TIQET report would have required a major shift in commitment to change and an overhaul of policy making process in education. Indeed the commission observed that the problems being experienced had more to do with the content of education rather than the structure itself (Republic of Kenya, 2000).

## Interest Groups

The revision of the curriculum in 2002 reduced the examinable subjects from 13 to 8, giving schools and students a choice in science and vocational subjects. The changes were influenced by the growing concern over the crowded syllabus, the lack of employment opportunities and the awareness that the 8-4-4 was not meeting its objectives (Makori, 2005).

## Implementation of Home Science Education in Secondary Schools

Implementation of Home Science was assessed through the use of questionnaires issued to 29 Home Science teachers and analyzed using descriptive statistics.

## Teacher Competence

The age range of the respondents was between 35 and 46 years with a modal age of 43 years. Their teaching experience ranged from 10 to 22 years. 86.2% of the respondents had studied up to Bachelor's degree level, while the rest studied up to had diploma level. Three of the teachers had not studied Home Science at secondary school level, which means that they only studied the subject in the three or four years of their professional training. The three respondents stated that their training was inadequate. Since they had more than 18 years teaching experience it may be surmised that they were in secondary school during the 7-4- 2-3 system of education and only studied one of the three Home Science subjects.

In-service training is an important component of professional growth. The capacity to implement change depends upon a teacher's professional development. (Blenkin et al., 1997, Indoshi 1999). The findings in this study indicate that Home Science teachers rely largely on knowledge acquired during initial professional training and on their classroom experience. Smit (2001) found out that teachers who had not attended in-service training after their initial training tended to teach the way they had been trained regardless of changes in content and innovations in methodology. Despite the fact that all respondents had more than ten years teaching experience, none of them had attended postgraduate training. Only 34.5% of the respondents had attended in-service training, despite its importance in upgrading teacher competence.

A teacher's competence may be impacted upon by changes in policy and, subsequently, on the syllabus because it reflects on ability to teach new skills or use new techniques. 61.5% of the respondents indicated that they had to learn new skills and 52%, which is more than half the respondents, felt less confident about their teaching skills. Since the respondents were experienced teachers this finding underscores the need for postgraduate qualifications and attendance at in-service courses to upgrade initial training.

## Departmental Organization

Home Science falls under the Department of Technical and Creative Arts. The Departmental heads are either appointed by the TSC, while some schools appoint a senior teacher to head the department. This means that the departmental head may not necessarily teach Home Science. The highest number of Home science teachers was 3 in a school, with an average of 1.4 teachers per school. The mean number of lessons per teacher per week was 15.76, with a maximum of 28 Home Science lessons per week and a low of 7 lessons per week. Besides teaching Home Science, the teachers also had an average of 5 other lessons per week in other subjects.

The Teachers Service Commission recommends an average of 25 lessons per week (Kimalu et al, 2001). Only 2 respondents met the minimal requirement. This raises the question of underutilization of manpower. The perception of almost half (44.8%) of the respondents was that the number of teachers was inadequate. Therefore the perceptions of adequacy or inadequacy were not pegged on the number of teachers in the school, or the number of lessons taught per week.

## Class Size

Teaching load can also be considered against of number of students taught. Forms One and Two, had an average high of 92.5 students, and an average low of 7, while the upper classes had an average high of 42 and an average low of 3 students. The number of students per class was reduced to less than half by the time the students reached Form Four. Overall the teachers had an average number of 24.6 students per class.

Only one of the sampled schools had a formal written down policy for selection of Home Science student. Those students in one stream took Home Science while the other stream took Agriculture. Two respondents indicated that while there was no written policy, class sizes were limited to 15-25 students who were registered on a first-come first-served basis. Their class size was dictated by the facilities available for Home Science.

Another factor that determined class size was the perceptions of the students. Teachers were asked whether the changes that had taken place in Home Science had any bearing on the class sizes. 24.1% of the teachers indicated that the changes had discouraged learners from taking up the subject. However 62.1% stated that more students were taking up the subject since they perceived it to be easy.

The variance in class sizes from year to year has implications for effective resource use. Assuming the school had fully equipped Home Science facilities, in some years the resources would be overstretched, in others underutilized.

**Table 1.**          Facilities Available for Home Science

| Facility/Resource | Adequate | Inadequate | Not available | Mean weight |
|---|---|---|---|---|
| Home Science laboratory | 15 | 12 | 2 | 2.44 |
| Sewing machines | 20 | 9 | 0 | 2.70 |
| Basic sewing tools | 23 | 6 | 0 | 2.79 |
| Work tables | 20 | 6 | 3 | 2.58 |
| Mirrors | 29 | 0 | 0 | 3.00 |
| Ironing equipment | 29 | 0 | 0 | 3.00 |
| L aundry work equipment | 27 | 2 | 0 | 2.93 |
| Food store | 25 | 1 | 3 | 2.75 |
| Cookers/jikos | 19 | 10 | 0 | 2.65 |
| Refrigerator | 18 | 0 | 11 | 2.24 |
| Basic cooking tools | 20 | 5 | 2 | 2.48 |
| Basic house care tools | 29 | 0 | 0 | 3.00 |
| First Aid Kit | 25 | 2 | 2 | 2.79 |
| Fire extinguishers | 5 | 0 | 24 | 1.51 |

## Facilities for Home Science

Class size in relation to the facilities, materials and equipment available for Home Science is an important aspect of policy implementation. Each learner in a Home Science class needs equipment and materials to practice concepts taught. If the teacher does not have well equipped laboratories and access to materials needed to carry out practical classes she may resort to theoretical coverage of the syllabus. Respondents were asked to comment on the adequacy of resources and facilities for Home Science in their schools. Their responses are set out above (Table 1)

Most schools have adequate facilities for Home Science in each category. The greatest area of inadequacy was perceived to be in not having fire extinguishers (1.51) and lacking a refrigerator (2.24). Since Home Science practical work involves the use of heat for cooking, cleaning and laundry work, the need for proper protection in the form of fire extinguishers is paramount. Many schools in the rural areas do not have electricity, and therefore cannot buy refrigerators. Lack of equipment impacts directly on learners' acquisition of practical skills, and raises questions about how effectively the learners can be taught.

Two schools had no laboratory at all, twelve had inadequate laboratories. The reasons given included too many students for the room provided, sharing of science laboratory and using rooms such as the dining room or empty classrooms that was not equipped as Home Science laboratories.

## Time Allocation

Home Science is allocated three lessons per week in Form One and Two and Four lessons per week in Form Three and Four. Teachers were asked whether this time is too little, too much or appropriate. While the majority of teachers (75.9%) agreed that in comparison to other subjects, Home Science was allocated enough time, only 10.3% felt that the time was appropriate for the syllabus content, while 89.6% felt it was too little. The policy decision that resulted in reduction of time allocated to Home Science is therefore perceived negatively.

## Practical Lessons

As a prevocational subject practice of the principles learnt in class is central to attaining the required competencies in Home Science. The Secondary Home Science teachers' guides suggest practical activities for most lessons, and give guidance to the teacher as to the resources that can be used to achieve this. However given the limitations on resources and time noted above, teachers acknowledged that they did not follow the syllabus closely in this regard. Only 10.3% of the teachers carried out practical lessons in Form One and Two while 89.7% admitted that they chose how much time to allocate to practical lessons. They felt that by covering most topics theoretically they can finish the syllabus. Teachers who take these short cuts may feel that they are driven by the lack of time and resources but the result is that the students are denied a chance to gain the very skills that they need for Home Science.

## Evaluation of Students

The 2003 Home Science Teachers' Guides suggest several methods of evaluating students. These include oral questions, written tests, use of revision exercises and practical activities. Teachers indicated use of the assessment methods in terms of frequency:

**Table 2.** Frequency of Use of Assessment Methods

| Assessment Method | Very Frequently | Frequently | Sometimes | Rarely | Never | Mean Weight |
|---|---|---|---|---|---|---|
| Oral questions | 29 | 0 | 0 | 0 | 0 | 5.00 |
| Written tests | 12 | 8 | 9 | 0 | 0 | 4.10 |
| Revision exercises | 23 | 6 | 0 | 0 | 0 | 4.79 |
| Practical work- clothing & textiles | 7 | 2 | 8 | 12 | 0 | 3.14 |
| Practical work- Home Management | 2 | 3 | 10 | 15 | 0 | 2.82 |
| Practical work- Foods & Nutrition | 14 | 7 | 5 | 0 | 0 | 3.89 |
| Project work- Clothing & Textiles | 0 | 0 | 19 | 7 | 3 | 2.55 |

Table 2 above shows that the teachers rely mainly on classroom oral questions (mean weight=5.00) and on tests and exercises. Their practical testing is lowest for clothing and textiles (2.55) and for Home Management (2.82).

One of the major changes in Home Science education in 2002 was the reduction of practical work, and the restructuring of the KNEC examinations, specifically in the projects, in Paper 441/1 and 441/3. Students no longer have to construct an outfit in Form Three and Four for external assessment at the end of Form Four. Paper 441/3 is also internally assessed. The result is that teachers are not concerned about the practical application of the skills related to Clothing and Textiles and Foods and Nutrition. This is an unfortunate development.

The Home Science theory paper 441/1 is composed of objective type and short essay questions from topics throughout the syllabus. Teachers had a strong perception of their satisfaction with the way the examination is evaluated at 2.62. Paper 441/2 Clothing and Textiles Practical had the lowest satisfaction in terms of evaluation; at 1.24 this is the lower end of the strong range on a 3-point Likert scale. Respondents stated that the accuracy and speed levels expected of the students were too high, and that the skills the students were expected to display were too wide in scope. This meant that in four years the learners had not enough time to develop competency in the skills required for the test. This calls for a review of the time allocated to practical work and perhaps an increase in the number of Home Science lessons in a week.

This finding is supported by the Kenya National Examination Council analysis of the 2008 KCSE examination. The mean score in the paper was 35/70 or 50%, while in Paper One the mean score was 47% (KNEC, 2009). If teachers are concentrating more on theoretical skills then there is likelihood that the learners are not getting enough practice in clothing and textiles. The KNEC recommended that candidates needed to have more practical work done in needlework processes.

The internal assessment of 441/3 Foods and Nutrition Practical was felt to be satisfactory to 19 of the teachers for the planning session and to 18 of the teachers for the actual practical. The teachers acknowledged that the learners were more at ease during the examination because their teachers were familiar. Those teachers who were not satisfied with the internal assessment stated that there was a tendency for teachers to favor their students and award high marks. In addition the lack of an external examiner meant that standardization could not be guaranteed.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Contextual analysis was used to trace the policy changes in education in Kenya and related to the practice of Home Science education in Secondary schools. Policies were examined under four main themes: national/educational policy; socio-political structures; economy and interest groups. It was noted that while Kenya's education system has undergone several reviews with an aim of aligning education provision to the development needs of the country, the changes were implemented without due consideration of Home Science as a subject.

The result of the changes that occurred in Home Science has led to a leaning towards theory rather than practical work, emphasizing the preparation of the student for passing examinations. With the 8-4-4 it was expected that the curriculum would enable learners to gain practical skills that would accelerate development, especially in the rural areas. Vocational subjects such as Home Science were seen as key to imparting the knowledge and skills necessary to achieving this goal.

The study concluded that sector-wide change does not take into account the needs of individual subjects in the curriculum. The changes that are instituted are therefore incidental rather than deliberate. For example when textbook production was liberalized local authors were able to provide Home Science textbooks that are relevant to the student audience for whom they are intended. This was a positive policy decision that was specific to all school textbooks. On the other hand, when the government stopped direct hiring of all graduate teachers through the TSC and the TSC set the minimum number

of lessons per week at 25, there was an incidental effect on Home Science. The policy only looked at cost factors and did not take into consideration the number of Home Science lessons per week possible in a single or even double streamed school, which is 14 and 18 lessons respectively. Neither does the policy take into consideration the unique nature of vocational subjects. Home Science teachers are forced to teach subjects for which they are not trained in order to retain their jobs.

The current education policies and practices put into doubt the place of vocational subjects such as Home Science in Kenya. The process of change over the years shows that little consideration has been given to global trends in Home Science. As has been noted previously the global trend have shifted to Home Science as Human Ecology while in Kenya change has mostly been in semantics rather than in content, Review of Home Science education needs to take into consideration what is going on globally. If Kenya hopes to use technology to industrialize the nation, Home Science is well placed to be a part of this development because Home Science encompasses skills that are directly useful to generate employment through the use of applied technology. In a country that places great emphasis on the passing of examinations and entry into university relegating the Home Science to diploma and certificate level institutions effectively discourages most students from pursuing careers in this field.

## Recommendations

The findings of this study have implications for both policy and practice. The policy-making process in Kenya continues to be centralized and bureaucratic, relying on a small team of 'experts' to make inquiries into current practice and recommend changes. Since the resultant policies are broad-based rather than subject-specific, the result has been that there is a mismatch between the country's development goals and Home Science practice. It is therefore recommended that:

i.     The Ministry of Education should consider conducting a comprehensive review of Home Science Education.

ii.    The Ministry of Education should incorporate curriculum implementers at all stages of the policy making process.

iii.   Home Science education should be reviewed to make it more relevant to the developmental goals of the country.

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