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INTRODUCTION

Good health is fundamental to proper, effective and efficient learning and, consequently, to the socio-economic development of any nation. A poorly nourished nation is lethargic, and economically unproductive. In recognition of the part played by health in national development, the Ministry of Education and Culture in Zimbabwe is promoting Food and Nutrition (FN) as one of the subjects of the curriculum in secondary schools.

The teaching of FN like any other technical subject demands, apart from equipment, well trained and dedicated teachers who are alert to the rapid changes in the world today and are prepared to keep abreast of new developments by updating their own knowledge and skills. This study was undertaken to identify home economics (HE) teacher quality attributes in Zimbabwean secondary schools. Special emphasis was placed on personnel requirements for effective teaching of FN.

FOOD AND NUTRITION AS A SUBJECT

FN is generally viewed by both the public and schools as mere cooking. Its teachers are usually assigned the duties of catering when there are special functions at the school. What is paramount in people’s minds is food preparation which is the practical aspect of the subject. The theory part which is concerned with
chemical substances in foods is vaguely understood. Bennion (1980) asserts that modern nutrition is part of preventive medicine. Bennion adds that in countries where food is produced in abundance, national food consumption and nutrition surveys indicate that a substantial number of individuals apparently do not consume the recommended amounts of essential nutrients, particularly vitamin A, ascorbic acid, calcium and iron. This clearly shows that nutrition generally regarded as something which can be obtained through common sense, should be taught to properly equip future citizens on the efficient use of food to promote good health. In schools, FN is the subject which furnishes this vital nutrition knowledge.

OBJECTIVES

This study is primarily a survey of the qualifications of FN secondary school teachers in Zimbabwe. Its main concern is the quality of the FN teachers. It is also the objective of this study to assess the type of professional guidance HE teachers get from the Ministry of Education through visits by Education Officers (EOs) and through inservice courses. Finally, it was also the purpose of the study to examine the adequacy of equipment used in the teaching of FN.

THE STUDY

In 1989 the then Department of Curriculum Studies at the University of Zimbabwe carried out a survey of educational practices in secondary schools that teach technical subjects. Out of a random sample of 285 schools from a population of 1133 schools offering technical subjects, 142 (49.8%) of the sample taught various options of HE. Questionnaires were sent to the 142 schools in order to find out the educational qualifications of the HE teachers, the help given to them by the EOs, the facilities and equipment available for the teaching of the subjects and the frequency, if any, of the inservice courses conducted by EOs. Thirty-four HE teachers responded to the questionnaires.
This sample was too small to furnish information from which conclusive results could be made about the state of HE teaching in Zimbabwean secondary schools. In spite of this limitation, the sample provided sufficient data which could be used to point out some of the strengths and weaknesses of the HE education in Zimbabwean secondary schools. The data in Table 1 show the qualifications of the 34 HE teachers.

<table>
<thead>
<tr>
<th>Training Level in Home Economies</th>
<th>Government schools</th>
<th>Private schools</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>College*</td>
<td>9</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>'O'-Level</td>
<td>11</td>
<td>32</td>
<td>7</td>
</tr>
<tr>
<td>JC Level</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>64</td>
<td>12</td>
</tr>
</tbody>
</table>

*College means O-Level plus 3 to 4 years teacher Training

As evident from Table 1 there is a dearth of properly qualified HE teachers in the Zimbabwean secondary schools. Of significance is that 65 per cent of the respondents had no professional training. This can only mean there has to be much experimentation on their part. The data also show that 12 per cent of these teachers never went beyond the Zimbabwe Junior Certificate (ZJC), i.e. two years of secondary education. Such poorly qualified teachers should not be entrusted with the responsibility of teaching O-level students.
The main areas of specialization in HE reported by teachers were:

- Fashion and Fabrics (FF),
- Food and Nutrition (FN),
- both Fashion and Fabrics and Food and Nutrition (FF and FN).

Table 2 below summarises the information provided by the 34 teachers.

<table>
<thead>
<tr>
<th>Training Level</th>
<th>FF</th>
<th>FN</th>
<th>FF &amp; FN</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College*</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>'O'-Level</td>
<td>11</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>ZJC</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Missing</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>8</td>
<td>6</td>
<td>34</td>
</tr>
</tbody>
</table>

*College means O-Level plus 3 to 4 years teacher Training

Table 2 indicates that:

- 58.8 per cent of the HE teachers in the sample had done FF,
• 23.5 per cent had done FN,

• 17.7 per cent had done both FF and FN.

It is to be noted that the number of respondents trained in FN, 23.5 per cent, is far less than that of the respondents trained in FF which is 58.8 per cent.

It is pertinent, at this juncture, to ask whether teachers who are inadequately prepared get sufficient help and guidance from those charged with the responsibility of promoting HE in the country. Respondents were requested to indicate the frequency of visits by EOs and the usefulness of such visits. The replies showed that visits by EOs were very rare. Fifty-three per cent had never been visited by EOs in the previous year. Those who had had visits from the EOs generally considered such visits as useful and helpful. The EOs had pointed out areas that needed improvement and made teachers aware of new developments in HE. From the information gathered, it was evident that if EOs were to visit and give proper guidance to HE teachers frequently, the latter would benefit much more by utilising the suggested teaching techniques in their subject areas.

Another area of concern to the researcher was the question of equipment. Do FN teachers have adequate and suitable equipment to help them teach the subject effectively? In this respect, 27 per cent of the respondents reported having the basic 30 items of FN equipment from the recommended list! Only 17 per cent reported they had a minimum of 4 modern stoves while 41 per cent reported they had refrigerators. Table 3 below shows percentage of adequacy reported on different items of equipment.
Table 3
Teachers’ Responses On Adequacy Of FN Equipment
(N=34)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>% Reporting</th>
<th>Equipment</th>
<th>% Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 tables</td>
<td>35</td>
<td>Cook’s Knives</td>
<td>17</td>
</tr>
<tr>
<td>Veg. Knives</td>
<td>7</td>
<td>Table Knives</td>
<td>32</td>
</tr>
<tr>
<td>Table Spurs</td>
<td>29</td>
<td>Frying Pans</td>
<td>29</td>
</tr>
<tr>
<td>Aluminium Plates</td>
<td>32</td>
<td>Wooden Spoons</td>
<td>39</td>
</tr>
<tr>
<td>Sieves</td>
<td>32</td>
<td>Mixing Bowls</td>
<td>38</td>
</tr>
<tr>
<td>Saucepans</td>
<td>29</td>
<td>Measuring Jugs</td>
<td>27</td>
</tr>
<tr>
<td>Dish Towels</td>
<td>17</td>
<td>Wash Basins</td>
<td>24</td>
</tr>
<tr>
<td>Buckets</td>
<td>12</td>
<td>Salad Bowls</td>
<td>20</td>
</tr>
<tr>
<td>Casserole Dishes</td>
<td>17</td>
<td>Pie Dishes</td>
<td>17</td>
</tr>
<tr>
<td>Patty Cake Tins</td>
<td>27</td>
<td>Baking Sheets</td>
<td>33</td>
</tr>
<tr>
<td>Deep Fat Fryer</td>
<td>29</td>
<td>Chopping Boards</td>
<td>32</td>
</tr>
<tr>
<td>Graters</td>
<td>32</td>
<td>Tea pots</td>
<td>29</td>
</tr>
<tr>
<td>Cups &amp; Saucers</td>
<td>27</td>
<td>Dinner plates</td>
<td>32</td>
</tr>
<tr>
<td>Soup Bowls</td>
<td>24</td>
<td>Ashets</td>
<td>29</td>
</tr>
</tbody>
</table>

Where equipment was inadequate, the respondents were to indicate the cause of this inadequacy. Regarding the shortage of FN equipment in secondary schools, the following data was gathered: 65 per cent of the teachers reported that the equipment was inadequate because funds were not available to replace broken or lost items. Forty-one per cent reported that some of the equipment had been lost due to theft; 3 per cent felt that the list of minimum required equipment was unrealistic.

Asked what they thought was the strongest element of the programme, 44 per cent of the respondents said it was practical skill development. They argued that pupils were being prepared for real life situations by being equipped with a practical skill. They felt the practical skill acted as a bridge between the school and the world of work. Asked what the weakest element in the programme was, about 35 per cent indicated it was lack of
equipment. The following observations were also made by some teachers:

- there is less teaching time allocated to HE (3 to 5 periods per week),
- trained FN teachers are very few,
- both theory and practical FN examinations are difficult,
- FN labs are inadequate (41% reported they had no labs at all),
- there is much theory taught in a subject that should be more practical than theoretical due to facility and equipment inadequacies,
- there are too many pupils in some FN labs in government secondary schools built to accommodate only 20 pupils per class,
- marks awarded for practical examinations are inadequate.

All these factors adversely affect the implementation of the FN curriculum. Although the Ministry of Education and Culture has embarked on a programme aimed at improving the quality of learning, above factors are hurdles to achieving quality learning. As a practical subject, FN should be taught in proper labs with adequate equipment to enhance the demonstration method of teaching, which is regarded as the best method of teaching a skill. It is hoped that some of these problems will be critically examined to effect improvement in the teaching of FN.

Some respondents also suggested that there should be seminars in HE, aimed at improving the academic and professional skills of teachers. Such seminars are particularly necessary for the untrained teachers.
Common Problems Faced By HE Teachers

In the study, HE teachers indicated that they had problems in the following areas:

National Syllabus interpretation.

About 70 per cent of the respondents reported they had some problems with syllabus interpretation while only about 27 per cent indicated they had no problems. It appears that lack of training is the main reason why the majority of teachers have problems in interpreting the syllabus.

Scheming.

About 70 per cent of the teachers reported they did not have problems with scheming. It may be that in many schools scheming was done in groups or at departmental level such that teachers who did not know how to scheme were helped by those who knew. However, about 30 per cent reported having problems, to some extent.

Developing Appropriate Lesson Plans.

About 55 per cent of the teachers indicated they did not have problems in developing appropriate lesson plans. Thirty-five per cent stated they had some problems and of these 3 per cent reported they had a great deal of problems. It is evident that some HE teachers who reported not having problems with scheming found planning quite difficult.

Relating Theory to Practice.

About 55 per cent of the respondents indicated they had no problems at all in relating theory to practice, while 40 per cent reported they experienced some problems. Five per cent of the sample did not respond.
Catering for Individual Students.

About 80 per cent of the teachers expressed they had problems in catering for individual needs. The large percentage of teachers who reported they had problems should be of concern to supervisors and educational planners.

Completing Coursework in Time Allocated.

About 80 per cent of the teachers reported they did not complete coursework in time. The danger might be that some topics are skipped or superficially covered in an effort to complete the whole syllabus. As a result, both the teacher and the students may be frustrated.

SUMMARY

In Zimbabwe, the Ministry of Education and Culture is focusing on building a strong healthy nation through nutrition education in the secondary schools. This focus is clearly spelt out in the aims of the ZJC Food and Nutrition and Cookery and Nutrition syllabi. In the FN syllabi, the aims are stated as to develop:

1. a scientific knowledge of nutrition and health in order to promote health for all in Zimbabwe;

2. an understanding of varying cultural backgrounds and customs in relation to food and nutrition;

3. creativity in the use of locally available and traditional foods;

4. practical skills for the planning, preparation, cooking and serving of balanced meals;

5. skills and knowledge that promote economical use of time, fuel and food nutrients;
6. an aesthetic sense in the presentation of food;

7. the ability to use and care for utensils and equipment;

8. skills that could help students to take initiative, to be self-reliant, and co-operative;

9. a sound foundation in the field of Food and Nutrition such as further studies and future employment;

In addition, the syllabi are intended to give pupils the opportunity to develop an interest in FN through the study of simple nutrition and practical preparation of local and foreign foods with a focus on man's nutritional needs and his management of time and money and to provide a course which may be developed along individual lines.

In the FN Syllabus, an individual is sensitized to basic nutritional needs which may be personal, communal or societal.

This study revealed that the majority of the FN teachers are inadequately prepared for the task. Of the 34 HE teachers in the sample, 32 per cent were qualified to teach at 'O'-Level while 53 per cent were teaching at the level of their own qualification, namely 'O'-Level.

The types of problems HE teachers face reflect, in part, the inadequacy of their preparation as teachers. Seventy per cent of the respondents indicated they had problems with syllabus interpretation while 55 per cent experienced problems in relating theory to practice; 80 per cent expressed they had problems in catering for individual students and another 80 per cent did not complete coursework in allocated time. All these problems tend to build up frustration in HE teachers.

Regarding the level of commitment to practical subjects by teachers and students, Lauglo and Narman (1988) observed that these sub-
jects suffer from demoralization among teachers and pupils alike so that given an opportunity, both groups would veer towards better rewarded activities. This situation is further worsened by the fact that practical subjects seem not to be attractive to both parents and students. To promote these subjects, they should be structured to challenge both the learner and the teacher. In particular, FN should be viewed as a major vehicle through which new knowledge and technical skills relating to food preparation and utilization may be introduced into the Zimbabwean society so as to promote good health.

REFERENCES


