Challenges of Implementing the Food and Nutrition Curriculum in Secondary Schools in Chivi district, Zimbabwe

Mandina Shadreck

Department of Educational Foundations, Management and Curriculum Studies, Midlands State University P Bag 9055 Gweru, Zimbabwe.

Abstract
The main purpose of this study was to identify the challenges to the effective implementation of the Food and Nutrition curriculum in secondary school in Chivi district of Zimbabwe. The research is imperative in that the findings of the study will assist government and other key stakeholders in education to provide support towards the implementation of Food and Nutrition curriculum focused on the identified critical challenges. The study adopted the descriptive survey research design in which 5 schools selected through purposive sampling technique. The population for this study comprised of 60 Ordinary level students in all the secondary schools in Chivi district that are offering food and nutrition as a subject at Ordinary level, 5 school heads and 3 Food and nutrition teachers. The sample comprised of 20 students, 10 parents chosen by a simple random sampling technique. The three teachers and the five school heads automatically became part of the sample. A structured questionnaire, interviews and observations were used as data collection instruments. The findings reveal the following challenges as mitigating against the effective implementation of the Food and Nutrition curriculum in Chivi district secondary schools: negative attitude by parents and students towards the subject; inadequate professional and qualified teachers for the teaching of Food and Nutrition; inadequate infrastructure and equipment in schools and where the equipment is available it being underutilized due to lack of expertise and inconsistent electrical power supply; insufficient instructional materials and books in schools; and that schools are generally poorly financed. Four key recommendations arising from the study are that quarterly awareness campaigns should be carried out in society to educate the public about the importance of Food and Nutrition as well as technical and vocational subjects in the curriculum; training programs in the form of seminars, conferences, workshops and in-service, should be organized at regular intervals to equip teachers with the requisite skills for the teaching of Food and Nutrition; school should form partnerships with the industries and corporate bodies aimed at financing the implementation of Food and Nutrition curriculum and vocational subjects in secondary schools and that adequate infrastructure, resource materials and facilities should be provided in schools for effective teaching and learning;

Keywords: food and nutrition; vocational and technical education; teaching; implementation; Zimbabwe.

INTRODUCTION
At independence in 1980, the Zimbabwean government declared education as a basic human right and worked flat out to ensure that all people of Zimbabwe had access to education (UNESCO, 2008). Having worked at full throttle translate this philosophy into reality, the focus now is on the improvement of the quality and relevance of education. Part of the efforts to make education more relevant and responsive to the needs and aspirations of the citizens saw the adoption of the two pathway Secondary education system namely the Academic and the vocational/technical to cater for the varied interests, aptitudes and the demands of the world of work of students (Munikwa, 2011). Vocational/technical education is a vital tool for individual personal development and is seen as a preparation and training for useful employment in trade, industries, agriculture, business and home making with emphasis being on preparing one for self-reliance (Azubuike, 2011). Ncube and Hlope (2011) further note that introducing a vocational element in the secondary school curriculum, especially in developing countries, is conducive to economic development. At the secondary level, vocational/technical subjects include: woodwork, metalwork, fashion and fabrics, food and nutrition, home management, computer studies, building studies and technical graphics (Zimbabwe Schools Examinations Council, ZIMSEC, 2012).

Food and Nutrition has been defined as the area of Home Economics which deals with foods and their nutritive values (ZIMSEC, 2012). Zimsec further notes that the Ordinary level Food and nutrition curriculum is a gateway to many professions such as catering and nutrition services and gives a strong foundation for further studies in food-related disciplines. The aims of the food and nutrition curriculum as stated in the ZIMSEC (2012) syllabus are as follows: (1) impart scientific knowledge of nutrition and hygiene in order to promote health for all in the developing Zimbabwean society;
(2) develop skills that encourage conservation of time, food nutrients, fuel and other resources in the planning and preparation of balanced meals;
(3) develop practical and managerial skills in the presentation and cooking of food and in food service;
(4) develop an aesthetic sense by encouraging and promoting creativity in using locally available and traditional foods;
(5) impart knowledge and encourage the comparison, use and care of various pieces of equipment and other materials based on appropriate technologies;
(6) foster co-operation and self-reliance;
(7) create a basis for further studies and future employment.

It is clear from the above, that the basic desire of government on Food and nutrition Education is to facilitate the process of understanding of the various nutritional needs of the developing Zimbabwean population as well as offering a scientific approach to identifying and solving food related problems in a socialist and multi-cultural Zimbabwe. Food and Nutrition is a unique subject among subjects taught in the Zimbabwean secondary school curriculum therefore its teaching should be accorded priority. Effective teaching of Food and nutrition can only take place when adequate and relevant instructional materials are used (Afolabi and Adeleke, 2010). Besides the availability of instructional resources, effective teaching and learning of food and nutrition depends on teacher expertise and pedagogical content knowledge (Orji, 2006).

STATEMENT OF THE PROBLEM
For Zimbabwe to excel nutritively there is the need for the effective implementation of the food and nutrition in both public and private secondary schools. Despite the importance of food and nutrition to the development of both individuals and the society at large, a number of schools in Chivi District have dropped it from the school curriculum for Fashion and Fabrics. It is in the light of the above, that the present study was carried out to ascertain the challenges associated with the implementation of the food and nutrition curriculum in Chivi district secondary schools.

SIGNIFICANCE OF THE STUDY
In an attempt to improve the teaching of Food and Nutrition as well as vocational subjects in Zimbabwean secondary schools and make the learning of Food and Nutrition as well as vocational subjects more attractive to students, this study makes the following important contributions to knowledge and education. Firstly, this study provides Food and Nutrition educators, curriculum planners and government with detailed information about the actual picture of Food and Nutrition teaching and learning, and educational practices in Zimbabwean schools and ways of improving the situation. This in turn can help in planning and formulating further policies for Food and Nutrition education in Zimbabwe. Secondly, the study also opens avenues for further research in the area based on the knowledge gaps other scholars will have found.

PURPOSE OF THE STUDY
The purposes of this study were to:
(i) Identify the challenges to the effective implementation of food and nutrition curriculum in Chivi district secondary schools in Zimbabwe.
(ii) Determine the strategies that can be employed to deal with these challenges

METHODOLOGY
Research Design
A descriptive survey research design was adopted in this study. A total of 5 schools were selected through purposive sampling technique from 9 secondary schools in the cluster. The three schools that were selected are offering the subject while the other two once offered it but have since dropped it from the curriculum for Fashion and fabrics.

Population and Sample
The population for this study comprised of 60 Ordinary level students in all the secondary schools in Chivi district that are offering Food and Nutrition as a subject at Ordinary level, 5 school heads and 3 Food and Nutrition teachers. The sample comprised of 20 students, 10 parents chosen by a simple random sampling technique. The three teachers and the five school heads automatically became part of the sample.

Data Collection Instruments
The instruments used for data collection were a structured questionnaire, interviews and observations. A structured questionnaire for the study, made up of 8 items consisting of a five-point rating scale, ranging from agree to strongly disagree, was employed in the data collection. The questionnaire items were face validated by three (3) experts in food science education. A reliability index of 0.92 was obtained using cronbach alpha co-efficient. The data collected via the above methods were collectively analyzed using frequencies and simple percentages.

FINDINGS AND DISCUSSION
Challenges to the Effective Implementation of Food and Nutrition Curriculum
The findings of the study revealed that lack of adequate textbooks; laboratory equipment, inadequate kitchen utensils, inadequate human resources and inadequate electrical power supplies affect the effective implementation of the food and nutrition curriculum. In cases where equipment is available it is not being fully utilized at all for food and nutrition instruction. The availability of teaching
materials and resources makes the teaching and learning of food and nutrition real to students. Knowledge acquisition by students becomes easier as teachers teach the course without difficulty. This is in agreement with Payate (2008) who notes that effective teaching of vocational subjects can take place without the adequate provision of learning facilities. Facilities needed include textbooks, classrooms, workshops, library, tools, and equipment and so on.

No vocational program can be complete without adequate facilities. Hence, for skills training to be implemented effectively, enough training facilities have to be provided. Being a practical subject, Food and nutrition instruction/teaching is more effective when laboratory materials are available and when they are well used. McDonnell et al (2007), argues that practical classes are designed to complement materials dealt with in lectures and give student’s practical experiences which will be invaluable in their future careers.

The school heads and teachers who participated in the study also cited insufficient funding as a challenge hindering the effective implementation of the food and nutrition curriculum. The majority of these schools are located in poor socioeconomic rural environments hence cannot raise adequate funds through levies and tuition fees to fund the implementation of the food and nutrition curriculum. Hence some of the schools have dropped the subject in favor of the cheaper to implement fashion and fabrics curriculum. Students on the other hand have lamented inadequate hands on experiences and inadequate textbooks as affecting their learning. Observations have also revealed a pupil textbook ratio of 5 pupils per book and poor infrastructure. The findings seem to indicate that lack of funds to procure materials, consumable, utensils and equipment constituted problems to the teaching and learning of Food and nutrition. Studies by Ogwo and Oranu (2006) also found that inadequate instructional materials and unwillingness of teachers to improvise is a great impediment to Home Economics instruction. Mobegi and Ondingi (2011) have also noted that schools with adequate facilities such as laboratories and textbooks stand a better chance of performing well in examinations than poorly equipped schools. Inadequate funding on the other hand results in inadequate supply of teaching and learning materials and equipment consequently leading to low performance of students in the subject (Gogo, 2002).

Teachers who teach practical (vocational) subjects such as Food and nutrition Technical teachers must be highly trained and acquire enough skills in order to make them capable of communicating their skill to others effectively (Uwaifo and Uwaifo, 2009). The findings have also revealed that 33% of the teachers were qualified to teach the subject while 67% were under qualified. Such findings are consistent with Kiadese (2011) who found out that problems such as poor school infrastructure, lack of qualified teachers, poorly equipped workshops and laboratories affect the teaching of prevocational subjects. The study has also shown that teacher quantity and quality also presents great problems to the teaching and learning of Food and nutrition. The findings indicate that there are inadequate Food and nutrition teachers in the schools, on the other hand the available ones are not adequately trained and hence lack the innovativeness and resourcefulness entailed in the teaching and learning of Food and nutrition.

The other challenge identified was that of poor societal perception. The majority of the parents (80%) and students (75%) who participated in the study have a negative attitude towards practical(vocational) subjects and look down on vocational and technical education teachers and regard those who practice it as failures in life. This attitude has continued to institute a stumbling block to the progress of implementation. This finding is in consonance with those of Uwaifo and Uwaifo (2009) who established that in Nigeria there is still a strong tendency towards white-collar job as a result of low status associated with most kind of vocational and technical education and because of this cold attitude towards vocational and technical education that, some decision makers did not think it was sufficiently important to deserve funding. Anene-Okeakwa (2002), has observed that many students hate Home Economics as a subject in the school; some have little interest in the subject that they drop it half way into their studies mainly because of general societal attitudes that see vocational subjects as subjects for the under achievers and girls (Owolabi et al. 1991). Most parents and students were not aware of the importance of Food and nutrition to socio-economic advancement of the nation and such negative attitudes of the students and parents are likely to hinder effective learning of the subject.

**Addressing the challenges**

The negative attitude of many parents towards practical subjects should be changed by educating the parents about the importance of vocational subjects in the learners’ curriculum. The schools should conduct awareness campaigns towards enlightening the general public on the need for their children to be vocationally oriented in light of the prevailing economic circumstances of the nation and the unemployment rate which is on the increase. Dike (2009), notes that vocational and technical education is designed to develop occupational skills to give individuals the skills to “live, learn and work as productive citizens in a global society” while for Obanya (2007), vocational and technical education is
part of integral development of the ‘three Hs’ - the head, the heart, and the hands which must not be neglected, as doing that will amount to a denial of an individual’s integrated personality development.

Thus, for the food and nutrition to be fully implemented, parents and students as stakeholders have to be made aware of such programs and their importance; they must become interested in practical subjects. The teaching and learning of Food and Nutrition, just like other vocational subjects are an expensive programme, especially the inevitable aspect of providing for quality resources (teachers, relevant classroom interactions, laboratories) and facilities. The programme is practical oriented, where emphasis is on skills acquisition. Therefore, the desired objectives cannot be achieved without making provision for these basic resources in the right proportion. It is therefore imperative that school form partnerships with industry and commerce so that they can get funding for resourcing the implementation of the programme. In Columbia The National Federation of Colombian Coffee Growers a private is involved in equipping health centers and rural schools, carrying out programs for social benefit, and working to improve the quality of rural education (Patroinos and Sosale, 2007). Uwaifo and Uwaifo (2009) notes that most vocational and technical Education institutions in developed countries are sponsored or supported by industries, corporate bodies or organizations in addition to government funding to enable these institutions execute their vocational based programme and research projects and also provide the needed physical resources adequately. Such an idea could also be encouraged in Zimbabwean secondary schools offering vocational subjects where such organizations sponsor the implementation of these subjects in the schools.

The government should ensure that teachers who teach Food and Nutrition are adequately in serviced, staff developed and assisted obtain the highest qualifications and skills possible in the field so that they can be able to impart these to the leaner. Food and nutrition skills are needed not just for the home and classroom, but for the job market. Students are supposed to learn practical skills which would be useful to them in higher education or enable them get jobs in industries or other formal sectors of the economy. Research by Uko-Aviomah (2005) indicated that students’ poor performance at the end of a school year is attributable to factors relating to the skill and effectiveness of the teachers. If teachers are weak in content knowledge and pedagogical competence so vital for effective learning, then the limits of achievements of learners will equally be weak. Thus teachers are central to the successful and effective implementation of the Food and Nutrition curriculum at secondary level thus they are not to be neglected but equipped with the requisite skills and knowledge hence they should be sent in service training in the universities to enhance their capacity and classroom performance.

LIMITATION OF THE STUDY
The participants in the study are a sample of Food and Nutrition teachers teaching in one education district in Zimbabwe, and thus, are not representative of all Food and Nutrition teachers throughout the country. A larger sample representative of all education districts, schools and teachers that offer Food and Nutrition in the country would be recommended.

CONCLUSION
This study has made attempts to examine some of the challenges encountered in the effective implementation of Food and nutrition curriculum in Chivi district secondary schools in Zimbabwe. From the findings of the study the researcher concludes that the following challenges are militating against the effective implementation of the Food and Nutrition curriculum in Chivi district secondary schools: negative attitude by parents and students towards the subject; inadequate professional and qualified teachers for the teaching of Food and Nutrition; inadequate infrastructure and equipment in schools and where the equipment is available it being underutilized due to lack of expertise and inconsistent electrical power supply; insufficient instructional materials and books in schools; and that schools are generally poorly financed.

RECOMMENDATIONS
The following recommendations are made based on the findings of the present study:

(i) School should explore the use of other sources of power such as solar and gas rather than to rely on electricity to power their equipment.

(ii) Schools should also consider the preparation of traditional menus based on their availability in their localities rather than rely on perishable foods that require refrigeration.

(iii) Quarterly awareness campaigns should be carried out in society to educate the public about the importance of Food and Nutrition as well as technical and vocational subjects in the curriculum.

(iv) Training programs in form of seminars, conferences, workshops and in-servicing, should be organized at regular intervals to equip teachers with the requisite skills for the teaching of Food and Nutrition.

(v) School should form partnerships with the industries and corporate bodies aimed at financing the implementation of Food and Nutrition curriculum and vocational subjects in secondary schools.
(vi) Adequate infrastructure, resource materials and facilities should be provided in schools for effective teaching and learning;

REFERENCES


