

DISSERTATION

CONSUMER EDUCATION IN SECONDARY SCHOOLS IN BOTSWANA:
PERCEPTIONS OF HOME ECONOMICS TEACHERS

Submitted by

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In partial fulfillment of the requirements
for the Degree of Doctor of Philosophy
Colorado State University
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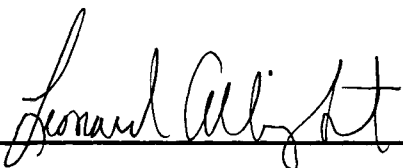
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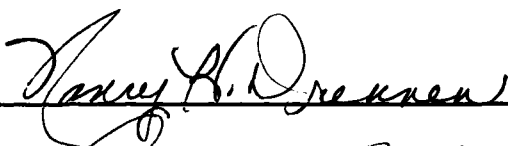
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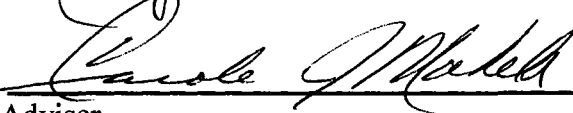
WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED
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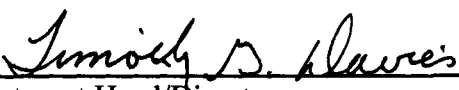


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ABSTRACT OF DISSERTATION

CONSUMER EDUCATION IN SECONDARY SCHOOLS IN BOTSWANA:
PERCEPTIONS OF HOME ECONOMICS TEACHERS

Consumer education is interdisciplinary and empowers students with decision making skills and enhances their roles as competent consumers, producers, and citizens. It empowers students to be effective managers of resources and to improve their well-being as individuals and families. The purpose of this study was to assess the perceived needs and explore the quality of the consumer education modules taught in senior secondary schools in Botswana.

Participants were home economics senior secondary school teachers from 20 schools. The schools were randomly sampled from a list of all 27 senior secondary schools in the country. The list was obtained from the Ministry of Education in Botswana. To answer the research questions, a questionnaire was developed with ideas adopted from other studies and consultation with home economics teachers and stakeholders. The questionnaire had seven content areas--issues in consumer education modules, methods and experiences used to teach consumer education, availability of resources for teaching consumer education, content of consumer education modules, students' learning activities and performance, professional development/teacher learning, and teachers' demographic profile. In addition, an observation worksheet was used to assess the classroom learning environment for consumer education. Questionnaires were

administered in person by the researcher to 101 home economics teachers. Eighty-seven questionnaires were returned and 86 (85.0%) were usable. Data was analyzed using descriptive and inferential statistics.

The findings revealed that a majority (99.0%) of the home economics/consumer education teachers were females and more than two-thirds taught in rural schools. The highest degree attained by most teachers was Bachelor of Science/Bachelor of Arts. A substantial percentage (85.7%) of the teachers majored in home economics and a small percentage (12.0%) majored in consumer education/sciences. Fifty-nine percent perceived their backgrounds as moderate for teaching consumer education.

In relation to teaching and learning resources, there were no prescribed textbooks and aids such as teachers' instructional guides and video tapes on consumer education in almost all the schools including in their libraries. Almost all schools had computer labs and each home economics department had one computer for teachers' use but there were no internet connections. Computer use was restricted to students who were enrolled in computer awareness classes. Among others, teachers expressed the need for prescribed textbook(s) with up-to-date, relevant, adequate information, related to Botswana. There were no significant differences in the availability of teaching resources between rural and urban schools.

The quality of consumer education as perceived by teachers was good in meeting goals and objectives and essentiality of objectives to students' learning. Teachers were uncertain about the comprehensiveness of content to prepare students for work and family life. All the teachers perceived themselves as competent to teach each of the objectives/topics of the modules and most said they had problems on deciding the depth

or amount of the consumer education objectives/topics to teach. There were no significant relationships of teachers' level of competency in teaching each of the objectives and their levels of education. Three common methods (group discussion, chalk board, and lecture) were used by more than 50.0% of the teachers to teach each of the consumer education objectives/topics and most common student experiences were students' presentations and research. Teachers perceived their strengths as being knowledgeable in teaching consumer education and their background/training in consumer education. Their weaknesses were the opposite of their perceived strengths. Teachers indicated that students were as interested in consumer education as they were in other topics taught and were able to apply what they learned.

The majority of teachers were not active in professional development activities despite the fact that they knew that participation in such activities could enhance their consumer knowledge and skills.

Recommendations to improve the quality of consumer education in secondary schools in Botswana were made. They included provision of teaching and learning resources to schools, for example, textbooks, teaching aids, and the internet. Others were moral and financial support for teachers' participation in professional development activities and collaboration initiatives, and that consumer education should be taught as a core subject at secondary schools and at Botswana colleges of education.

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CHAPTER I

INTRODUCTION

Consumer education is an interdisciplinary field and as such it is strengthened by integrating a variety of knowledge and skills that can be applied to social, economic, political, and daily activities. Specifically, consumer education empowers secondary school students with decision making skills and enhances their roles as consumers, producers, and citizens.

Consumer education is a process of empowering people with knowledge and skills needed by individuals and families to be assertive and consumer literate (Ukpore, 1996). Consumer education as defined by Indiana Department of Financial Institutions (n. d.). “is the process of gaining the knowledge and skills needed in managing consumer resources and taking actions to influence factors which affect consumer decisions” (p. 1). Like all forms of education, “consumer education triangle pupil, teacher, and content viewed from the perspective of today and tomorrow” (Benn, 2002, p. 172). Consumer education in schools should aim to develop students to become informed citizens who are able to make rational decisions as well as be productive members of the workforce (Idaho Division of Professional-Technical Education, 2001).

Consumer education in this study refers to the three consumer education modules contained in the home economics curriculum for senior secondary schools in Botswana. The three modules are 1) Resource Management and Consumer Education, 2) Consumer

Education and Food Service Business, and 3) Consumer Education and Textile Business. The three syllabi which contain these modules are 1) Botswana General Certificate of Secondary Education Teaching Syllabus for Home Management (Curriculum Development Division, 2002a), 2) Botswana General Certificate of Secondary Education Teaching Syllabus for Food and Nutrition (Curriculum Development Division, 2002b), and 3) Botswana General Certificate of Secondary Education Fashion and Fabrics Assessment Syllabus for Fashion and Fabrics (Examination Research and Testing Division, 2002). The three form the home economics curriculum subjects. The structure of the consumer education modules is depicted in Figure 1. The learning objectives for each of the three modules are similar. Each home economics teacher teaches a maximum of two of the three subjects. The three subjects are optional which means that students choose only one of the three modules. The integration of consumer education in the home economics curriculum in Botswana is similar to that of Nigeria. In Nigeria, consumer education is taught as a unit in three home economics subjects. The three subjects are clothing and textiles, food and nutrition, and home management (Ukpore, 2006). Unlike Nigeria where consumer education is not subject to examination, in Botswana consumer education questions are included in the national examinations which are qualifying exams for completion of senior secondary school.

According to the information from one of the Home Economics Curriculum officers the syllabi for secondary schools in Botswana are evaluated every five years by the Department of Curriculum Development and Evaluation. This means the syllabi are to be revised in 2007. The results of this study will provide informative and formative

feedback that teachers can chose to use in teaching before or after the revision of the home economics syllabi.

It is the researcher's desire to contribute to the revision process of the home economics syllabi by providing data on needs related to the consumer education modules and suggest recommendations based on this study's findings and from the literature. Building on the identified strengths and addressing the problem areas revealed by this study will improve the consumer education modules.

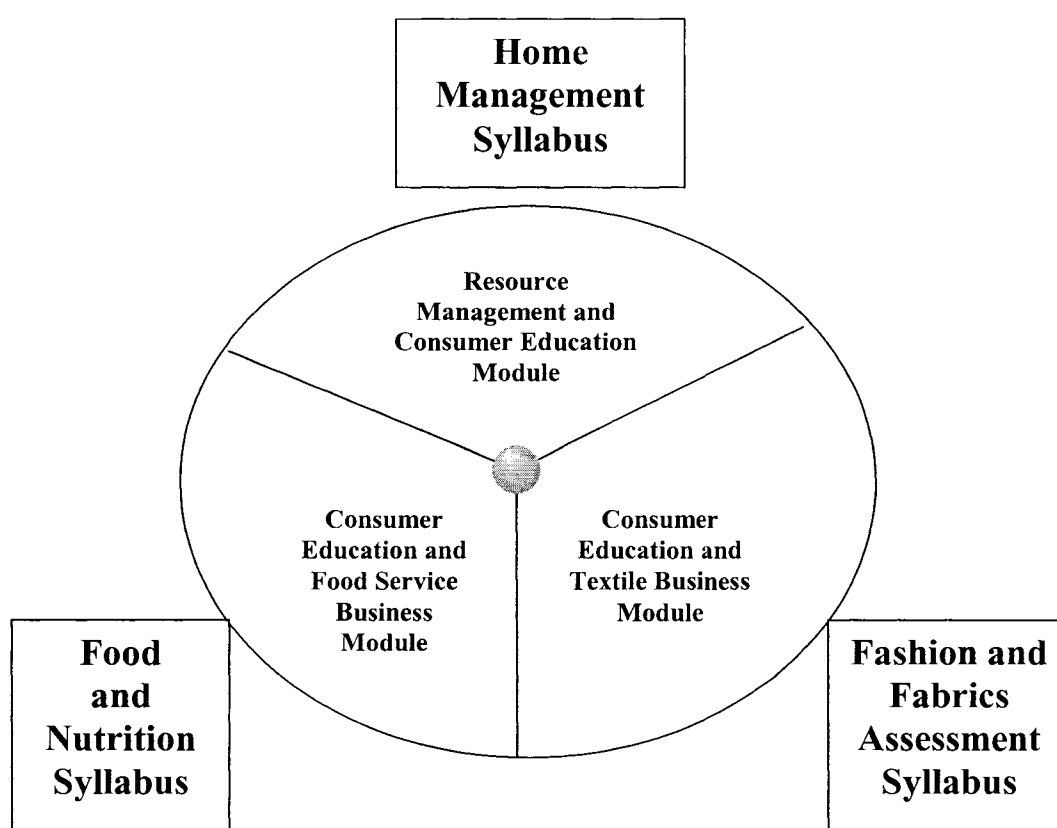


Figure 1. Teaching Syllabi and their Respective Consumer Education Modules for Senior Secondary Schools in Botswana

Goals and Objectives

The aim of consumer education in schools is to create and increase consumer awareness among youth (Curriculum Development Division, 2002a). The goal of this study was to improve the quality of the consumer education modules taught in senior secondary schools in Botswana. The specific objectives were to:

1. Identify the needs and explore the quality of the consumer education modules.
2. Provide the Ministry of Education and the Department of Curriculum Development and Evaluation with recommendations as the basis for revision and refinement of the consumer education modules.
3. Provide stakeholders with empirical data to be used to strengthen the quality of the consumer education modules.
4. Provide students with an education that suits their needs in consideration of current and future developments and emerging national and global issues.
5. Help teachers enhance their professional growth and strengthen their teaching and learning activities.

To achieve these objectives, the researcher will present a summary of the findings and recommendations to the Ministry of Education, Department of Curriculum Development and Evaluation, school principals, and heads of home economics departments in senior secondary schools. In addition, the researcher will liaise with the Ministry of Education and Department of Curriculum Development and Evaluation to arrange a workshop for selected teachers to discuss and develop an action plan for the implementation of recommendations. Summaries of the findings will be submitted to

other stakeholders such as the Consumer Affairs Department and copies of the dissertation will be deposited in Botswana libraries.

The conception of this study was prompted by an earlier study on “Adolescents’ Awareness of Consumer Rights and Responsibilities in the Marketplace: Botswana” conducted in 2003 (Peters & Makela, 2004). The purpose of that study was to determine how informed senior secondary school students (adolescents) were in understanding and practicing their consumer rights and responsibilities in the marketplace and the factors influencing their decision making. From the findings of that study, it was determined that further research was needed to examine the perceptions of consumer education teachers in relation to the consumer education modules as they teach and guide youth clubs (Makela & Peters, 2004). Hence the needs and quality of the consumer education modules as perceived by home economics teachers were explored.

Purpose

The purpose of the study was to assess the needs and explore the quality of the consumer education modules for senior secondary schools in Botswana. Assessment results and interventions will be used to improve the quality of the consumer education modules. Consumer education was introduced in 2002 in senior secondary schools (equivalent to grade 11 and 12 in the U.S.). Usually, a developed program or a plan for a project might seem to be effective when viewed on paper. Its strengths and weaknesses are often not experienced until implementation. As stated by Lee and Sampson (1990) no matter how good a program seems to work there is always room for improvement. Brandt (1988) cited by Gebo (1988) said the task of deciding what students should learn and what schools should teach is an on-going process.

Problem Statement

Continuous and rapid developments and changes in the marketplace, people's life styles, workplace, and the economy have a great impact on consumer education and the well-being of consumers at large. Due to the rapid changes in today's world, consumer education needs to be assessed regularly to embrace and address consumer issues that suit the needs of students and are in line with the social, political, economic, and environmental developments. To develop or improve a curriculum the current and future needs of students are to be determined through a needs assessment. Altschuld and Witkin (2000) defined needs assessment as a systematic process of looking at many kinds of information about a program to identify gaps between the current and desired state and set priorities based on the identified needs. A good quality program should be relevant and responsive to the needs of the recipients and society (Gebo, 1988). The newness of consumer education in Botswana senior secondary schools coupled with current developments and changes in the marketplace, lifestyle, and family life warrant an exploration of the needs and quality of the consumer education modules.

Significance

To produce competent citizens who are to function effectively as individuals and families, and in their interaction with the market and the world of work, consumer education programs should be assessed periodically to address the current and future needs of students and the environment. This is supported by Brennan and Gallagher (2002), who stated, "consumer education programs need to reflect today's complex and fast changing marketplace" (p. 228).

Due to the newness of consumer education in Botswana, currently there are few studies to explore consumer education issues except for recent work by the researcher. As a result, there is little empirical data to provide researchers, consumer educators, and stakeholders with information on consumer education as it becomes recognized and integrated in senior secondary schools.

This study was to determine and provide data on the following areas of the consumer education modules:

- a) Essentiality of consumer education learning objectives to students
- b) Quality of content
- c) Availability of resources used or to be used in teaching
- d) Textbooks used and their relevancy, comprehensiveness, appropriateness, adequacy, and recency
- e) Topics to be included in the revised modules
- f) Teaching methods, essentiality of teaching tools, and learning experiences used by teachers to enhance students' learning
- g) Teachers' competency and strengths and weaknesses in teaching
- h) Teachers' training needs in consumer education
- i) Students' learning activities and performance.

The classroom environments were also examined.

Findings and recommendations from this study will provide useful feedback to the Ministry of Education and the Department of Curriculum Development and Evaluation which are responsible for curriculum evaluations. The feedback will reveal identified needs and interventions to improve the consumer education modules. In

addition, the results will help consumer educators in secondary schools and other consumer settings improve their programs by strengthening consumer education and learning what to incorporate in programs (Makela & Peters, 2004). The findings will also add information to the body of literature on consumer education.

Framework

This study was guided by the curriculum framework for Family and Consumer Sciences in which consumer education is embedded. The framework provides guidelines for programs' concepts/content of topics, learning activities, and delivery methods, competencies for monitoring students' progress, and recommended teaching resources and textbooks. It also includes learning objectives and recommendations on the knowledge and skills needed for grade 11 and 12 students, which is equivalent to senior secondary students (Form IV and V) in Botswana (Idaho Division of Professional-Technical Education, 2001). The Idaho framework was used because it provides valuable and relevant information and guidance on consumer education standards, competencies, and content for classes equivalent to that of senior secondary schools in Botswana. The topics for the review of literature emanated from the framework.

Research Questions

The research questions were designed to determine the needs and explore the quality of the consumer education modules as perceived by home economics teachers. The research questions were:

1. What are the teachers' perceptions in relation to the needs of the consumer education modules?

2. What are the teachers' perceptions in relation to the quality of the consumer education modules?
3. Are there differences in the availability of resources for teaching consumer education modules between urban and rural schools?
4. Are there associations in teachers' competency in teaching the 12 consumer education objectives/topics and their levels of education?
5. Are there differences in the use of community resources for consumer education in urban and rural schools?

Demographic variables to profile the home economics teachers include gender, academic qualifications, and school location. The variables will be used in statistical analyses to determine whether there are associations among them and other variables.

Delimitations

Instead of examining the whole curriculum for home economics, the scope of this study was limited to 12 learning objectives for the three consumer education modules. Both rural and urban schools were included in the sample.

Assumptions

The researchers' assumed that some teachers would feel uncomfortable to honestly respond to the questions that required them to rate their competency and weaknesses in teaching consumer education modules. The researcher also assumed that because questionnaires were to be administered in person during the beginning of the semester before teachers become busy with students' examinations and other school demands, the return rate would be high.

Researcher's Perspective

The researcher has a BS in Consumer Economics, MS in Design, Merchandising and Consumer Sciences and is currently pursuing a Ph. D. in Education and Human Resource Development (Interdisciplinary Studies, with special emphases on Family and Consumer Sciences). I have a wealth of experience in consumerism gained through mediation of consumer complaints, formulation of consumer protection regulations and policies, mobilizing consumer groups, and designing and teaching consumer education programs for public, secondary schools, and the University of Botswana. I worked for 20 years as a civil servant and was Senior Commercial Officer and head of the Consumer Education Unit of then Ministry of Commerce and Industry. In 1999 I joined the University of Botswana as a lecturer and I am currently on study leave.

Considering the importance of consumer education especially to vulnerable populations such as adolescents, my opinion is that at senior secondary school level it should be offered as a core subject so that all students could be consumer literate. Consumer education empowers students to know and exercise their rights and responsibilities which are powerful tools for the effective functioning of consumers in the marketplace. In addition, consumer education empowers students with decision making skills to make informed and wise decisions that enhance their wellbeing and that of the society as a whole. Introduction of consumer education as a core subject in secondary schools will give all students the opportunity to grow and develop as consumer literate individuals and eventually become part of a consumer literate society.

I personally value consumer education from experience in working with consumer groups because I observed that consumers who know and exercise their consumer rights

are assertive and successfully redress problems and unfair practices they face in the marketplace. For consumer education to gain momentum there should be collaboration among schools, government and non government consumer education agencies and organizations. The researcher's goal toward consumer education is to liaise with home economics teachers in both junior and senior secondary schools, consumer advocates, and the Consumer Affairs Department to discuss the way forward for consumer education in Botswana.

Definitions

Competent – the teachers self evaluation of being prepared and comfortable in teaching.

Consumer awareness – being exposed and knowledgeable about consumer rights and responsibilities and making informed decisions.

Consumer education topics – topics relating to consumers that are taught or to be taught in the Resource Management and Consumer Education, Consumer Education and Food and Nutrition Service Business, and Consumer Education and Textiles Business modules

Consumer literacy – the abilities to read, understand, make rational decisions, and analyze consumer information and related issues.

Evaluation – a “process of systematically determining the quality of a school program and how the program can be improved” (Sanders, 2000, p. 1).

Explore – examination of information that can help to improve the quality of the consumer education modules.

Home economics teachers – teachers who either teach Home Management, Food and Nutrition, or Fashion and Fabrics syllabi in Botswana senior secondary schools.

Modules – the consumer education components (Resource Management and Consumer Education, Consumer Education and Food Service Business, and Consumer Education and Textile Business modules) taught in the three home economics syllabi. The content of the modules are learning objectives.

Needs – Requisite of unavailable resources to enhance teaching and learning.

Needs assessment – a systematic process of looking at many kinds of information about a program to identify gaps between the current and desired states and set priorities based on the identified needs (Altsculd & Witkin, 2000).

Perceptions – the views of participants.

Quality – adequately meeting or exceeding expectations or set standards.

Senior secondary schools – Botswana’s highest education at secondary level, form IV and V classes, after which graduates qualify for college and university levels. Form IV and V classes are equivalent to grade 11 and 12, respectively, in the U. S. school system.

Syllabi – teaching guides designed for Botswana General Certificate of Secondary education teaching. The syllabi contain the modules, the learning objectives, and the students’ assessment grid.

CHAPTER II

REVIEW OF LITERATURE

The literature review for this study focuses on pertinent areas that have an impact on the quality and improvement of consumer education. The covered areas include definition and the role of consumer education, consumer decision making, consumer education in secondary schools, socialization of children as consumers, background of consumer education in Botswana, and quality of consumer education.

Consumer education, being interdisciplinary in nature, should be regarded as one of the important programs taught in all schools as a general subject. Inclusion of consumer education in schools has been long advocated by consumer advocates and organizations. According to Knapp (1990) as cited by Bonner (1992), there is a consensus that nations must pay more attention to consumer education and that consumer literacy benefits individuals, society, and business.

What is Consumer Education?

Consumer education relates to everyday and practical issues and tasks such as decision making, purchasing and consumption (utilization of goods and services). It is interrelated and applicable to a variety of subjects. It encompasses attitudes, knowledge, and skills needed to be an effective consumer. Consumer education is based on the principles of the international recognized consumer rights which were first stated in part by the former President of the United States, John F. Kennedy in 1962 and the

Consumers International (Garman, 2003). Consumer rights are the basis of consumer education. They empower consumers to protect and enhance their interests in the marketplace (Garman, 1996). The objectives of consumer education are associated with the right to consumer education which means that each individual has “the right to acquire knowledge and skills needed to make informed, confident choices about goods and services, while being aware of basic consumer rights and responsibilities and how to act on them” (Consumers International, n.d.). Without this right, other consumer rights which empower consumers to be aware and act accordingly to enhance their well being and satisfaction cannot be realized (Garman, 1996). Consumers who are provided with information on products and services and exercise their rights and responsibilities are likely to make more effective purchases and to resolve consumer problems (Brennan & Gallagher, 2002).

Consumer education as defined by Indiana Department of Financial Institutions (n.d.) “is the process of gaining knowledge and skills needed in managing consumer resources and taking action to influence the factors which affect consumer decisions” (p. 1). Thoresen (as cited by Briem, 2005) defined consumer education as “an interdisciplinary field dealing with knowledge, skills and behavior, linked to being a consumer today” (p. 1). Both definitions highlight consumer knowledge and skills as the gist of consumer education. Consumer education is not simply a matter of following a prescribed mass of material or memorizing it. It scrutinizes the real situations to understand the clear concepts and effective procedures (Citizen Consumer Action Group, 2002-2003). Consumer education aims at building a consumer society that is capable of improving the quality of life of all citizens by equipping students with concepts,

procedures, and developing attitudes that help build a fair and responsible society. It provides students with tools that enable them to become aware, critical, responsible, and supportive consumers within their societies and globally. It contributes to the integrated development of students (Martin & Trimboli, 2001).

Consumer education empowers students to reach their full potential and prepare them to lead full and productive lives as citizens and workers of the 21st century (Delaware Department of Education, 2003). It empowers students to act as discriminating consumers capable of making informed choices of goods and services and to exercise their rights and responsibilities (United Nations, 1986). Consumer education can be summed up as an empowerment tool that equips individuals with knowledge and skills that enable them to function and act as independent, critical and aware, consumers confident to take action (Thoresen, 2002).

Consumer Decision Making

Since we now live in a global village characterized by expansion of market activities, trade liberalization, and others, we face more complex consumer decisions and more complexity in decision-making than ever before. Due to less authoritarian parenting styles, the balance of power shifts in almost all families with adolescents taking a more leading role in family decision making irrespective of their immaturity in decision making skills. According to Teenage Research Unlimited recent survey, more than 40 percent of teenagers regard their opinion as crucial in making family decision (Pickett & Fuller, 2003).

Du Plessies, Rousseau, and Blem (1991) defined consumer decision-making as “the behavior patterns of consumers that precede, determine, and follow the decision

process for the acquisition of need satisfying products, ideas or services” (p. 11).

Consumer decision-making is one skill that is highly practical and needed in all settings for problem solving. Making poor or uninformed decisions can negatively impact policy making; political, social, economic and family settings; and individual lives with alarming emotional and financial costs.

Consumer decision making covers critical thinking skills related to consumers' goals, needs, wants, and the effects of attitudes, advertising, information, and opportunity costs on consumer behavior. To reap the greatest rewards from the money consumers spend for consumption of goods and services, they have to make informed and rational consumer decisions (Miller & Stafford, 2001). To make wise and informed decisions one needs to have realistic and sound goals, and adequate and accurate information. Making rational choices requires careful consideration of alternatives that might satisfy a need (Posavac, Sanbonmatsu, & Ho, 2002).

Studies have indicated that many adolescents often do not have requisite skills needed to make accurate, effective and self-beneficial decisions and they are not aware of choices when making decisions (Polk & Evans, 1999). Although adolescents are said to have achieved a reasonable degree of decision-making competence by age 15, they are incompetent to consistently apply sound decision-making skills especially when dealing with a stressful conflict situation (Mann, Harmoni, & Power, 1989). The authors further noted that younger adolescents are less able to identify options, understand or predict risks and benefits, and accurately assess information received from sources that may have vested interest in the decision compared to adults. Jacobs and Ganzel (1993) reported that even when youth are equipped with information processing decision-making skills,

because they are not emotionally at full maturity their motivation and ability to make decisions differ from adults. Macchiette and Roy (1994 as cited by Cui & Pravat, 2003) supported this by saying that unlike adults, children do not have experience and are not mature enough to critically process commercial information.

Mincemoyer and Perkins (2003) recognized that to enhance adolescents' decision-making abilities, consumer education teachers should include real life and problem solving activities which encourage critical thinking. Instruction in decision making should start in early adolescence (ages 12-14). Teaching adolescents decision-making skills can improve adolescents' reasoning habits.

A study conducted in Botswana to determine factors that influence adolescents' (senior secondary school students) purchasing decisions found that most adolescents' purchasing decisions were likely to be influenced by appropriate factors (quality and price of products and service of the shop) (Makela & Peters, 2004). More than 98.0% of the students either strongly agreed or agreed that their purchasing behavior was influenced by quality of a product, 93.0% strongly agreed or agreed that their purchasing decision was influenced by price of a product, and 79% of the students either strongly agreed or agreed that their decisions were influenced by service of the store.

A study conducted in Malaysia found that most adolescents were not adequately prepared to make critical purchasing decisions. Their purchasing decisions were significantly influenced by peers, print media, and television commercials (Kamaruddin & Mokhlis, 2003). In this rapidly changing world, youth need to be equipped with skills to guide them as they make decisions.

Adolescents Decision Making in the Marketplace

Secondary school students are adolescents and adolescents are very impulsive by nature. Due to their impulsiveness and exposure to the emergence of various unfamiliar and sophisticated goods and services attractive to their lifestyles, they purchase a wide range of products such as games, fashionable music, electronics, entertainment accessories, clothing, and others. Stimulated by changing lifestyles, adolescents today are granted greater freedom from their parents to make their own shopping and consumption decisions (Pickett & Fuller, 2003). As a result, adolescents' buying power has increased rapidly as more of them enter the marketplace. This is not surprising when considering that shopping has become one of the leisure activities most often participated in by youth (Kamaruddin & Mokhlis, 2003). A survey by Teenage Research Unlimited reported that in 2002, adolescents in the United States spent over \$172 billion. Teenagers and adolescents spend 98 percent of their money rather than saving it (Porter, 2003).

Adolescents consume to compete, impress peers, and be brand loyal. Their consumption behavior is characterized by high expenditure and conspicuous patterns. Thoresen (2002) noted that children including youth are too preoccupied with clothing, fashions, and brands. Adolescents' sustainability as long-term customers expose them to be the most at risk population targeted by entrepreneurs as present and future customers. Today, children are viewed as a viable and lucrative market by all type of businesses (McNeal, 1990).

To lure adolescents into unwarranted shopping, entrepreneurs spend large sums of money conducting research to determine adolescents' purchasing behavior, product preferences, and explore effective advertising strategies they can use to entice them

(Lachance, Beaudoin, & Robitaille, 2003; Perner, n.d.). Entrepreneurs know that advertisements are effective when repeated extensively and consumers, especially young ones, are persuaded by emotional or symbolic appeals. Most of such advertisements are persuasive rather than informative.

Marketers are interested in exploring the consumption patterns of adolescents yet little effort is made to educate them about their vulnerability in the marketplace. The media used most for commercial advertisements are television and the internet. According to Demner (2001) internet use has increased in recent years so much that access providers have difficulties to cope with new demands for services. Due to the growth in children's access to the internet, thousands of child oriented Web sites have sprung up, and many are laden with commercial promotion (Austen, 1999; Montgomery & Pasnik, 1996 both as cited by Kunke, Wilcox, et al., 2004).

Internet cafes exist in almost all countries including developing countries such as Botswana. Statistics indicated that in 2002, there were 60,000 internet users in Botswana which has a population of 1.6 million. (*The world fact book - Botswana*, 2002). It is likely that a substantial number of the internet users are children and adolescents (students). *Vision 2016* states that by year 2016, "all schools in Botswana will have access to a computer and to computer based communications such as the internet" (Presidential Task Group, 1997, p. 5). The implication is increased numbers of youth exposed to internet commercial sales and purchases. Students need to be educated to distinguish misleading from informative advertisements and to avoid impulsive buying.

Aggressive marketing of easy credit and cash loans, as is the case in Botswana, may have serious repercussions for both young and adult consumers. In Botswana there is

a tremendous increase in legal cash loan schemes which unlike commercial banks have easy borrowing terms which accommodate low income and marginalized consumers. Because of easy borrowing terms, consumers who have pressing needs or are desperate for cash are compelled to borrow without consideration or awareness of the costs and benefits of the transactions. These cash loan schemes charge customers exorbitant interests compared to the banks' interest rates. Such practices create serious financial problems for consumers and leave them in worse financial situations than before.

The vulnerability of adolescents in the marketplace challenges consumer educators, especially schools to educate students to be fully informed consumers who are aware of market conditions and advertising strategies. Consumer education needs to incorporate information about unfair and costly businesses practices and scams and how to avoid them. For individuals to act wisely in the marketplace, they should gain a better understanding of how the market works (Consumer Guidance Society of India, n.d.).

Consumer education in Botswana should aim at preparing adolescents to readily meet the market challenges by empowering them to make good decisions, be assertive in addressing market imbalances, promote and protect their interests in the marketplace, and to enhance their quality of life. As noted by Garman (2003) consumer education empowers adolescents to be informed citizens and ultimately help raise the level of living for all consumers while also contributing to the improvement of morality in the marketplace.

The Impact of HIV and AIDS to Children as Consumers

In their effort to empower students with consumer decision-making skills, teachers should consider the impact of emerging developments and catastrophes such as

HIV and AIDS to children as consumers. HIV and AIDS are recognized globally as a threat to children and their families and the leading cause of death for people aged 15 to 49 (*Children on the Brink*, 2004). About two million children under the age of 15 are living with HIV and AIDS (Kanabus & Fredriksson-Bass, n.d.). According to *Children on the Brink*, sub-Saharan Africa is the most affected and has the highest proportion of children who are orphans. In 2003, about 12.3 percent of 43 million children were orphaned by AIDS, an increase of more than one-third since 1990. The number of orphans due to AIDS is projected to continue to rise through 2010. Statistics show that more than half of all orphans in the region are adolescents (*Children on the Brink*, 2004).

Among the sub-Saharan Africa regions Botswana is one of the countries hard hit by HIV and AIDS epidemic (a prevalence rate of 36.5% in 2003 and 60, 000 registered orphans) (Fredriksson-Bass & Kanabus, n.d.). It is projected that Botswana will have about 200,000 orphans in 2010 if the current situation is not reversed. This is threatening when considering the country's population of 1.6 million.

HIV and AIDS have created child headed families in Botswana and neighboring countries, making children responsible for their siblings and decision makers for personal, family, financial, and material resources. Emerging responsibilities of children for siblings as heads due to the HIV and AIDS are likely to reinforce and re-shape the way adolescents interact with the market.

In African traditional culture, children depend entirely on their parents for a multiple of decision making activities including family and consumption decisions (*Children on the Brink*, 2004). Due to AIDS they now carry the burden of being influencers, decision makers, and purchasers of goods and services. No one can imagine

the difficulties and confusion faced by children who must learn the responsibilities of adulthood without parental guidance through the premature and sudden transition into the need to discharge family and adult roles and decisions.

Culturally Botswana still adheres to extended family patterns where relatives are expected to be responsible and take care of the orphans. *Children on the Brink* (2004) noted that the trend seems to indicate that these children prefer to remain in their parents' households rather than moving to their relatives' compounds.

The projected increase of orphans in Botswana by year 2010, adult roles, and other decision making responsibilities faced by orphans as heads of families justify incorporating consumer decision making skills to enable children to make informed decisions. Consumer decision making should prepare children on what to expect as heads of families, decision influencers, decision makers, and purchasers of goods and services to meet consumer related challenges. Preparation of students for their new roles due to AIDS needs to be highlighted in consumer decision-making lessons. There is a need to educate youth on personal finance, including saving, consumption, and banking reconciliation because as heads of family members they now hold the purse strings. Personal finance is grounded in the ability to make good decisions.

Importance of Consumer Education in Secondary Schools

Consumer education is a foundation on which students may begin to build their personal lives and a more responsive and human world. The importance of consumer education was stressed in 1971 by U. S. President Johnson when he said to make wise and informed market decisions consumer education should begin at childhood and continue (Hellman-Tuitert, 1999). Consumer education is very important because the

well-being of the economy, individuals, families, and society depend on consumers being savvy (Indiana Department of Financial Institutions, n.d.).

The main goal of consumer education in schools is to educate students to be independent, discriminating, and informed consumers. As stated by Indiana Department of Financial Institutions (n.d.) the objectives of consumer education include helping students:

- Acquire knowledge to act wisely and make informed decisions. For example, knowledge of consumer rights and responsibilities in the marketplace.
- Develop an understanding of the role of consumers as citizens and individuals. For example, understanding the role of citizens as entrepreneurs, employees, and individual consumers.
- Gain consumer knowledge and skills and exercise consumer rights and responsibilities. For example, distinguish misleading from formative advertisements and shop wisely by comparing prices, quality, quantity, etc.
- Appreciate importance to be an informed consumer. Consumer education builds an informed and consumer literate society able to make wise financial, purchasing, and consumption decisions (be consumer and financial literate).

Consumer literate adolescents are expected to significantly make an impact by advocating for consumers and disseminating information to consumers at large to create and increase consumer awareness (Botswana Government, 1990). The information can be passed to the rest of the society through various means including newsletters, workshops, and consumer groups/organizations.

In past decades, the marketplaces had few businesses and goods and services, and close seller to buyer relationships making consumption transactions less complicated to the consumer. Today's markets are characterized by new developments and changes in national and global societies. The new developments and changes include the use of technology, sale of unfamiliar and complex products and services, aggressive advertising, and unethical practices in the marketplace. These changes require consumer literate individuals who are assertive, take responsibility, and exercise their consumer rights by taking action to redress imbalances (Briem, 2005).

Given emerging developments and consumption patterns in today's world, consumer knowledge and skills are a prerequisite for active citizenship and full participation of consumers within society (National Consumer Council (NCC), n.d.). Consumer education is the appropriate subject to develop knowledge of issues and skills to make informed and wise purchasing and consumption decisions. It stimulates students' awareness and sensitivity to consumer issues and conscious consumption, which contributes to sustainability of resources for present and future generations.

Consumer Education and Socialization of Children as Consumers

People are born with needs but are not born as consumers. They are socialized to become consumers (Bjurstrom, 2002). Socialization of children into consumerism like any other socialization process is a learning process. Parents are the most and primary agents of socialization of children (McNeal, 2000). It is in the home where the greatest impact on consumer behavior takes place as children observe and participate in the consumption or use of a product or service. Children observe their parents' behavior and process before a product is purchased. For example, they may observe their parents

checking expiry dates, reading labels, and choosing one brand over another. They may not conceptualize why the behavior is done, but they are likely to emulate the behavior when they start to interact with the market. Socialization of children in consumer concepts and issues at early ages will introduce them to consumerism. It will make it easier for students to understand consumer education concepts at school because of the basic knowledge, skills, and experiences gained since childhood.

Onyewadume (2002) noted that parents as the first socialization agents of children have great potential to influence their children's learning. Learning is viewed as a form of socialization in which the learner is initiated into the values, norms, ethics, methods, concepts, and language of consumer education by family and community members (Ramorogo, 2002). Parents play an important role in the socialization of children and as such their socialization responsibilities should extend to encompass:

consumer knowledge, skills, and values as children mature through childhood and adolescence. Consumer socialization should be regarded as a series of stages, as children grow older and mature in cognitive and social terms. These stages include children's knowledge of products, brands, advertising, shopping, pricing, decision-making strategies, parental influence strategies, and consumption motives and values (Roedder, 1999, p. 183).

Parents can socialize children in consumer education by giving them money and responsibility for their purchases and savings. This will enhance children's problem solving and decision-making skills because money is never enough and, therefore, children will have to learn to prioritize and make alternative decisions based on the amount of money they plan to use. This process will also teach them to differentiate needs from wants (another concept of consumer education).

Socialization of children as consumers in families can influence them to become consumers who are aware and critical of goods and services. Consumers who exercise the responsibility of critical awareness examine products for quality, defects, expiry dates and other attributes before buying. In contrast, a study conducted of senior secondary students in Botswana found that 73.0% of 2,912 students bought expired products (Peters & Makela, 2004).

Children who are socialized are likely to apply and practice consumer skills they learn throughout their lives. For example, my son, at age, ten, is very sensitive and particular about expired products and always checks expiry dates and refuses to eat any product whose expiry date is past. This example shows that if children are socialized in consumer issues, in the long run, consumer literacy could be developed. Socialization of children as consumers coupled with consumer education knowledge and skills gained in schools and from other consumer education sources could eventually lead to the realization of a literate consumer society.

Introduction of Consumer Education in Botswana

As stated consumer education is a fairly new field in Botswana, initiated and implemented by the government in 1990. It came as a result of the implementation of *The Revised National Policy on Incomes, Employment, Prices and Profits*, (Botswana Government, 1990). Consumer education was introduced to replace price control regulations, which were found to be too narrow and ineffective to promote and protect the interests of consumers in the marketplace. To achieve this goal, the government established the Consumer Education Unit within the then Ministry of Commerce and Industry. The educational mission was to create awareness among consumers by

educating them about their rights and responsibilities in the marketplace and other consumer related issues.

Initially, consumer education programs were targeting people in their communities. Consumer education programs and information dissemination to the public was done informally by consumer education officers of the Consumer Education Unit. The strategies used by the consumer education officers to create consumer awareness among the public were workshops held on school premises and Kgotla meetings (a gathering summoned by the chief). Most in the audiences were elderly people with a few out of school/dropout youths. As time went by, the consumer education officers expanded their education strategies by making sporadic presentations to some of the secondary schools and encouraging students to form consumer youth clubs. Although few youth clubs were formed, the coverage was not adequate because not all schools or classes received the information and the presentations were not regularly scheduled and follow-ups were not made.

Before 1990, consumer education was not incorporated in the schools' syllabi as a subject on its own. Instead, some elements were incorporated in subjects such as commerce, economics, social and business studies. From the researcher's perspective this was the case because consumer education was not yet a familiar and recognized concept. As stated by Schuh and Kitson (2003) in most countries consumer education is integrated in other subjects and taught as across-curricular subject (p. 221). McRee (1986) supported this by saying, consumer education content has usually been infused in home economics, social studies, business, and other areas.

Consumers International (CI), consumer groups in Africa, and consumer activists lobbied for the introduction of consumer education in schools from primary to tertiary education especially in developing countries. The United Nations *Guidelines for Consumer Protection* adopted by the General Assembly in 1985 also played an important role in advocating for the inclusion of consumer education as a subject on its own in schools' syllabi to increase the level of consumer literacy. The guidelines on education and information programs stated

Governments should develop or encourage the development of general consumer education and information programs bearing in mind the cultural traditions of the people concerned. Consumer education should, where appropriate become an integral part of the basic curriculum of the educational system, preferably as a component of the existing subjects (United Nations, 1986, p. 5).

In response to these organizations' efforts, consumer education was introduced in Botswana Junior Secondary Schools (Curriculum Development Division, 1996), Senior Secondary Schools (Curriculum Development Division, 2002a), and the University of Botswana (University of Botswana, 2002). The curriculum or syllabi were developed by three separate Task Forces formed by the Curriculum Development Division (Curriculum Development Division, 2002a; 2002b). Each of the Task Forces developed one of the syllabuses.

The number of students enrolled in Home Management is increasing every year while the number for Food and Nutrition is decreasing. Enrollment for Home Management increased by 38.5% from 2003 to 2004, and by 17.3% from 2004 to 2005. The enrollment for Food and Nutrition decreased by 14.8% from 2002 to 2003, and by 0.5% from 2003 to 2004. Fashion and Fabrics decreased by 14.2% from 2002 to 2003, and increased by 11.9% from 2003 to 2004. Table 1 shows the number of students

enrolled in each of the three home economics areas in which the consumer education modules are embedded.

Table 1.

Students Enrolled in Each of the Three Home Economics Area of Study

Year	Area of Study		
	Home Management Number of students	Fashion and Fabrics Number of students	Food and Nutrition Number of students
2005	1, 216	-	-
2004	1,037	997	2,226
2003	749	891	2,238
2002	-	1,038	2,626

Source: Examinations, Research and Testing Division, Botswana (2004).

Objectives of the Consumer Education Modules in Botswana Senior Secondary Schools

The general objectives of the consumer education modules in Botswana senior secondary schools are that students should:

1. Develop awareness and appreciation of consumer rights and responsibilities
2. Enhance decision making and to acquire knowledge and apply skills in making informed decisions (Curriculum Development Division, 2002a).

The learning objectives for the three consumer education modules - Resource Management and Consumer Education, Consumer Education and Food Service Business, and Consumer Education and Textile Business - to be examined in this study are to:

1. Explain the term consumerism
2. Explain the concept of consumer protection
3. Explain the importance of consumer education

4. Explain/outline consumer rights and responsibilities
 5. Investigate different ways of purchasing goods and services (e.g., cash, credit (lay by hire purchase, credit cards, etc.)).
 6. Explain factors that influence selection of goods and services (psychological, economical, and physical)
 7. Investigate agencies, organizations available to redress consumer related problems
 8. Outline procedures for lodging consumer complaints
 9. Differentiate between consumer, producer, goods and services
 10. Explain factors that influence consumer decision making
 11. Compare and discuss/explain the price of food/textile products with reference to shopping facilities available (wholesale, small general dealers, departmental stores, etc.)
 12. Discuss/explain measures in place to advocate consumer protection (e.g., Botswana Bureau of Standards, Consumer Education Unit, etc.)
- (Curriculum Development Division, 2000; 2002; Examination Research and Testing Division 2002).

Bloom's Taxonomy is widely used by most educational institutions and was used by the Task Forces to design and develop the learning objectives of the consumer education modules for senior secondary schools in Botswana. According to the New Jersey Department of Education (2005) each content area should focus on the development of higher order thinking skills. Teachers should engage students in higher order thinking skills across disciplines. According to the revised Bloom's Taxonomy,

learning outcomes are to reflect students' knowledge (level I), understanding (level II), and ability to apply (level III), analyze (level IV) evaluate (level V), and synthesize (level VI) what they were taught (Anderson & Krathwohl, 2001). In other words, students' knowledge and understanding are progressively demonstrated or tested by using simple to complex or lower to higher level order thinking processes.

Examination of the consumer education modules' objectives show that level II, a low order level of thinking, was used for 6 of the 12 consumer education objectives. Objectives 5, 7, 8, 9, and 11 are of high order levels, III, IV, and V. Objectives 4 and 12 are of both high and low levels of thinking. Level I (knowledge) and level VI (synthesis) were not used.

Promotion of Consumer Education by Consumer Youth Clubs

Consumers who are aware of their rights and responsibilities are more likely to unite and form powerful consumer organizations and lobby for policies and regulations that ensure people get universal access to affordable and essential goods and services (Consumers International Regional Office for Africa, 2004). Formation of consumer youth clubs in schools can significantly enhance consumer knowledge and skills. Consumer youth clubs complement the consumer education program with activities and information that may not have been gained either from schools or families. "Although each organization has its own specific mission, the overall purpose of consumer youth groups is to provide an opportunity outside of the school and home to bring youth together in order to develop specific subject matter knowledge and life skills" (Lerner, 1993, p. 161). A study on "Adolescents' Awareness of Consumer Rights and Responsibilities in the Marketplace: Botswana" found that only 3% of the 3, 015 students

were members of consumer youth clubs but a high portion 81% of 3,014 students were interested in becoming members of consumer youth clubs (Peters & Makela, 2004).

The most effective consumer action is through the formation of consumer groups. Voices of consumers as a group have greater impact in promoting and protecting consumer interests than individual voices. Formation of consumer groups is in line with the responsibility of solidarity and the notion of “united we stand, divided we fall”. Group action has more impact in affecting change than individual efforts.

Quality of Consumer Education

According to Botswana *Vision 2016* “by the year 2016, Botswana will have a system of quality education that is to adapt to the changing needs of the country as the world around us changes” (Presidential Task Group, 1997, p. 5). The Presidential Task Group revealed that despite the fact that the country has achieved a significant improvement in the quality of education facilities, the pace of educational change is slower than that of national development. The government has a challenge to improve the quality of education. The findings and recommendations of this study will lead to the improvement of the quality of consumer education in senior secondary schools. As noted by Kyle (2002) the purpose of school programs is not merely to help students achieve academically, but to prepare students to lead fulfilling lives. This effort could be achieved by offering relevant and quality education programs responsive to current and future needs of students.

A quality consumer education curriculum should reflect today’s complex and fast changing marketplace (Brennan & Gallagher, 2002) and the impact of new developments and emerging national and global consumer issues such as the growth of electronic

shopping, sophistication of goods and services offered in the marketplace, and HIV and AIDS. It should be concerned about quality of life and safe environment.

A quality consumer education program must respond to the challenge of developing knowledge, to deal with areas and issues that are gaining focus in today's world. In the context of sustainable consumption, education should begin to focus on strengthening consumer awareness in the constantly changing society (Citizen Consumer Action Group, 2002-2003, p. 5).

According to the United Nations Educational Scientific and Cultural Organization (UNESCO), (2005) a quality education must facilitate learning in terms of creativity, values for democratic citizenship, life skills, as well as knowledge and cognitive skills within a safe and learner friendly environment. Reorienting education to improve the quality outcomes requires education systems that are structured and equipped to educate learners to meet the challenges of the 21st century. This remains a significant challenge even in highly resourced countries where levels of learning achievement are becoming a serious problem (p. 23).

Research shows that a quality curriculum has a number of common characteristics. A curriculum may be doing well in some areas but need help in others (Bergeson, 2005). The quality of a curriculum is determined by the appropriateness of the goals and objectives in meeting the needs of its recipients. The objectives should be realistic, measurable, achievable, and aligned to the goals of the curriculum. A quality education curriculum prepares students to sustain and continue to apply the knowledge and skills gained from school.

Other indicators of the quality of an education curriculum include quality of content and the learning environment, teachers' preparation and competency, and students' performance. A quality education requires competent teachers in terms of

qualifications, experience, knowledge and skills, and effective dispositions (Peters & Afimikhe, 2002). These issues will be discussed in detail in subsequent sections.

According to Garman (1996) a quality consumer education program should develop informed citizen consumers who are able to exercise and protect their legal and moral rights as consumers in marketplace transactions. A quality consumer education curriculum ensures lifelong learning by preparing graduates for entering post-secondary schooling, delivering effective and competent services, and improving their well-being as individuals, family members, and society.

Content of the Consumer Education Modules

Rapid societal changes, including innovations in technology, information exchange, and communications, have increased the demand for internationally competitive workers and for educational systems designed to meet the demand (New Jersey Department of Education, 2005). Consumer education content for the 21st century should be relevant to the needs and prepare students for post secondary education and employment (New Jersey Department of Education). To compete in this global information based economy, consumer education content should equip students with knowledge and skills that will enable them to identify and solve problems, use appropriate tools, reason effectively, and apply critical thinking skills.

As cited by Good (2002), Reagan and Clark (1984) studied Louisiana secondary school Family and Consumer Science teachers and a group of consumers statewide to determine what each group perceived as important content to address in consumer education courses at the secondary school level. The topics chosen as most important

were goals, decision making and satisfaction of wants, investments, and consumer protection.

Studies show that knowledge of what to teach is very important (New Jersey Department of Education, 2005; Oklahoma Commission for Teacher Preparation, 2004) and that successful teaching and achievement of desired students' outcomes depend on quality of content.

Learning Environment

Learning environment is a broad term that encompasses various settings within the school and beyond. Learning environment within the school or internal environments focus on administrators, teachers, and students (Afimikhe, Adenyika, & Peters, 2001).

Ford et al. (1996) view learning environment as a community with its own culture, values, and resources to support student learning which shapes the attitudes of staff and students alike. The learning environment is a totality of the context in which learning takes place at schools. A study by Walberg, Fraser, and Welch (1986) indicated that learning environment was an important influence on students' outcomes. Teachers and school management are expected to improve learning opportunities to make life long learning a reality. Bergeson (2005) reported that

For a program to be successful, the school should have a safe, civil, healthy, and intellectually stimulating learning environment where students feel respected and connected with the staff and are engaged in learning (p. 1).

Learning environments facilitate students' learning and their perceptions are very useful in improving and sustaining conducive learning environments (Afimikhe, Adenyika, & Peters, 2001).

With current changes in technology leading to globalization and unprecedented explosion of knowledge, learning environments should provide support for students' learning, be sensitive to students' needs and include learning activities to enable students access and preparation for the labor market. A conducive learning environment should have support services and provide material resources that supplement what is being taught. In addition, learning environments should have common infrastructure such as libraries, classrooms, and counseling and recreation services. They should also have subject dependent services such as laboratories, lecture/demonstrator support, peer support, and learning components such as instruction, assessment, and access to information and resources (Afimikhe, Adenyika, & Peters, 2001).

School administration is to help teachers create high achieving learning environments for all students where curriculum and instruction techniques combine to support learning. It is the teachers' responsibility to create a conducive learning environment by making teaching and learning interesting to students by the way he/she interacts and delivers the material. To make learning environments appealing to students, teachers should implement effective classroom management strategies which meet diverse needs of students. Teachers should vary teaching techniques and instructions to accommodate students' diverse learning styles (Family and Consumer Science Education, 2002). They should engage students in a variety of learning activities that are challenging and aligned with the learning goals, promote active and engaged learning, and draw on the culture, life experiences, and knowledge of all students.

In a supportive learning environment students are motivated to explore, solve problems, and integrate their own knowledge and experiences with academic activities.

The classroom is part of the learning environment and has to be suitable for teaching and learning. It should be well ventilated and have appropriate desks and chairs for students.

Studies have indicated that learning environments are good predictors of the quality of learning that takes place in school (Fraser, 1991). The quality of a learning environment is reflected in how well learners are enabled to absorb, analyze, and articulate ideas (Afimikhe, Adenyika, & Peters, 2001). The learning environment affects learning outcomes because if the environment is not conducive, learning might not occur.

Professional Development

Professional development for teachers is the key to developing the capacity to teach and communicate using a wide range of teaching strategies adapted to students needs, being knowledgeable of teaching and learning, and having a good knowledge of subject matter (Haslam & Seremet, 2001). The four characteristics of professional development identified by Haslam & Seremet are:

1. Focus on knowledge and content specific pedagogy,
2. Engage teachers and principals as active learners and problem solvers,
3. Provide learning opportunities that are embedded in the daily work of teachers and principals, and
4. Depend on research and examples of best practices

Both skilled and semi-skilled teachers need to be constantly engaged in professional development activities to improve and maintain quality standards of teaching.

Today, teacher quality is on the national agenda as never before. Emphasis is constantly placed on teacher accountability and students results. Schools that only focus on high-stake consequences tied to testing, and have neglected to include professional development for teachers, place limitations on their students' achievement. For teachers to have impact, they must be

provided quality professional development that allows them to grow as educators and professionals (Oklahoma Commission for Teacher Preparation, 2004, p. 1).

Reform efforts in education are dramatically raising expectations for both students and teachers. These reform initiatives challenge educators to master new skills and responsibilities and to change their practices. To meet these new expectations, teachers need to improve their content knowledge and learn new methods of teaching.

They need more time to work with colleagues, to critically examine the new standards being proposed, and to revise curriculum. They need opportunities to develop, master, and reflect on new approaches to working with children. All of these activities fall under the general heading of professional development (Corcoran, 1995, p.1).

School administrators play an important role in sustaining teacher development and life long learning by providing teachers opportunities for professional growth which in turn improves the quality of education. Professional development activities provide teachers the opportunity to explore, discuss, plan, and implement creative ways to enhance students' learning. This could be achieved when schools and teachers make high quality and sustainable professional development a priority (New Jersey Department of Education, 2005). Teachers need to be supported morally and resource wise (time and money) to participate and organize professional growth activities such as in-service training, consumer education workshops/seminars, conferences, and affiliations with consumer organizations. Teachers should also make effort to develop themselves through collaboration and networking.

Corcoran (1995) noted that policymakers have paid little attention to the form, content or quality of professional development. Lack of support, a sense of professional community, and staff development opportunities makes it more difficult for teachers to

learn and implement new techniques. Although Corcoran noted lack of commitment or support of policymakers in professional development, Darling-Hammond (1998) said policymakers regard quality teaching and the recruitment of well-prepared teachers the number one education priority. Professional development prepares teachers to be competent and effective in discharging their duties.

Due to shortages of teachers or introduction of new subjects to the curriculum, some teachers find themselves teaching subjects that are completely new to them. This may lead to lack of adequate knowledge of the subject content. Even for teachers who may have knowledge of the subject content, knowledge is not static and needs to be continuously developed. Today's teachers need to be adequately prepared and competent to meet the new challenges they are facing in the teaching arena.

Teacher Preparation

Teacher preparation encompasses crucial content and teaching practices such as recognition of diversity among learners, classroom management, knowledge of subject content, and utilization of varied resources to engage learners in the learning process, application of various pedagogies and techniques, and assessment strategies among others. According to Vail and Mandiloff (1995) preparation and development of teachers are critical as teachers are change agents in classrooms. Teachers as agents of education implementation are central to the education system and can make or break the system depending on how they were prepared (Botswana Government, 1994). Teacher preparation should aim at providing candidates with the knowledge, skills, and dispositions required to successfully interact with diverse students (Oklahoma Commission for Teacher Preparation, 2004).

As noted by Frantz (1997) preparation of the workforce is an issue of critical concern not only to developing but developed countries as well. Education is a key ingredient for preparing a well qualified and productive workforce if the society is to advance (Frantz). A vital component of preparing well qualified workers is teachers with abilities to link learning with workplace. However, policymakers seem to overlook teacher preparation and its importance in preparing a competitive workforce. Schools' authorities, like teachers, should recognize their roles in preparing youth for academics and employment as part of their primary responsibility and they must be fully committed to program quality and high standards of performance for both teachers and students (Frantz).

Curry (1970 as cited by McRee, 1986) noted that teacher preparation plays a significant role in determining student understanding of consumer education concepts. Curry studied the contributions of home economics teachers to student understanding of consumer education concepts. The teacher variables considered were level of preparation, recency of preparation, specialization in consumer economics, and years of experience. Results revealed that the level of preparation of the home economics teachers was significant in determining student understanding of consumer concepts. Studies conducted by English (1974) and Crossno (1975) on perceptions of home economics teachers at the secondary level found that the educators recognized their inadequate backgrounds to teach consumer education and that most of them, 319 of 515 had no consumer education training.

A study conducted in North Ireland by Edwards (2002) revealed that many teachers in primary and secondary schools reported that there was a significant need for

training in the areas of consumer legislation and consumer rights. The participants reported that the most difficult consumer education topics to teach and learn were those dealing with legal requirements and entitlements. Resources and advice in these areas were difficult to make interesting to students and the teachers expressed a lack of confidence that they had the most current information.

Teachers' Competency in Teaching Consumer Education

Teacher competency is one of the important education aspects leading to the achievement of programs' objectives. According to the theory of teacher competency effective programs depend on quality teaching (Bureau of Adult Basic and Literacy Education, 2006). Competencies consist of a combination of knowledge, understanding, skills, and abilities needed to perform a task or function in the work setting.

Training of competent teachers has been a concern to educators and society for many years (Yahnke, 1994). According to Darling-Hammond (1998) parents want their children to be taught by competent teachers and industries want competent graduates. Teachers' qualifications and knowledge have more impact on students' learning than any other single factor.

Although sustainability of teacher competency might be costly in terms of money and time, the benefits of investing in teachers' competency to strengthen consumer education base may outweigh the costs (McRee, 1986). The author further stated that sustaining teacher competence is very important especially in times where schools strive for quality education.

The enhancement of the status and motivation of teachers to enable them to discharge their duties competently and effectively cannot be overemphasized (Botswana

Government, 1994). When preparing information for delivery, a competent teacher is expected to consider the diversity of the learners, that is, their experiences, ages, maturities, abilities, and disabilities.

As reported by Bonner (1992) measuring teacher competency helps to determine teachers' strengths and weaknesses and apply corrective remedies. Borich and Fenton (1977) described three forms of teacher competencies. They are knowledge, performance, and consequence competencies. Knowledge competencies specify cognitive understandings the teacher is expected to demonstrate. Performance competencies specify teaching processes the teacher is expected to demonstrate, and consequence competencies specify student behaviors that are viewed as evidence of teaching effectiveness. The three competencies are interrelated and work together in sequence to build a comprehensive array of both teacher and student outcomes in the classroom. In other words, knowledge competencies must first occur to attain performance competencies and performance competencies are needed for the attainment of consequence competencies. This suggests that without knowledge of the subject matter the other two competencies may not be achieved. To a certain extent this affects the quality of a program because students will not perform as expected. Teacher competency is important in enhancing the quality of education programs and students achievement. Therefore, school management should provide resources to support and prepare teachers to be competent.

Many studies have indicated the importance of teacher competency in consumer education. McRee (1986) noted that competent consumer educators help students to make rational decisions. Davis (1977) said to improve student competence in the field, teacher competence must first be improved.

Assessment of Students' Performance

Assessment of students' performance is based on standards. Nikolay, Grady, Stenfonek, and Strom (1997) and Ramatsui (2003) said standards guide students and teachers on what is to be taught and assessed. Studies of schools show that one of the pertinent developments in improving the results of education is being clear about standards. Having standards for students and teachers makes it possible to develop rigorous valid and reliable assessments (Benson, 1997). Allenspach described assessment as a tool used to determine attainment of the goals of education, learners' progress, and how improvements can be made to meet the goals. "Student assessment is an integral part of education inside and outside classroom" (1996, p.12).

Assessment provides performance data to all parties (students, teachers, parents, stakeholders, and employers) about the achievements of learners. It enables both students and teachers to know whether or not the content is mastered after a unit of instruction.

For learners it:

- Promotes efficient learning by focusing the students' attention on what is important
- Promotes retention and transfer learning
- Motivates learning by communicating progress concerning what a student knows and is able to do
- Shows evidence of skills and competencies mastered

For teachers it:

- Provides formative and summative data about student learning and attainment, specifically students' competency gain

- Provides diagnostic data to improve learning
- Assists instructional planning by providing informed feedback
- Helps determine teaching effectiveness
- Helps to determine whether the program is achieving desired goals

(Allenspach 1996). Students' performance partly reflects the quality of a program.

The data from assessments reveal the areas where emphasis is needed to improve teaching and learning (Benson, 1997). This shows that assessment should not be viewed as judgment but as a learning opportunity. Allenspach (1996) divides assessment into four parts. These are:

1. Conventional or traditional assessment: Paper-pencil or electronic testing characterized by multiple choice, true/false, matching, and short answers that are to be completed within a specific amount of time.
2. Authentic assessment: It engages students in applying knowledge and skills as used in the real world. It is similar to performance assessment because it requires a student to go beyond recall and demonstrate significant worthwhile knowledge and understanding through a product, performance, or exhibition. The assessment has an authentic task and a scoring rubric that are tied to an outcome and are clear to the student.
3. Performance assessment: It encompasses many characteristics of both authentic and alternative assessments and provides students with opportunities to demonstrate their understanding and to thoughtfully apply knowledge, skills and habits of mind in a variety of structured situations.

These assessments often occur over time and result in a tangible product or observable performance.

4. Alternative assessment: It applies to any and all assessments that require skills in ways other than the conventional methods used within a classroom or school.

The three main objectives used to assess students' performance at all levels including consumer education modules in Botswana are:

1. Knowledge and understanding
2. Handling information and solving problems, and
3. Practical skills and their application (Ministry of Education, 2003).

These three objectives are the basis for assessing the overall performance of home economics students in Botswana General Certificate of Secondary Education (national examinations for senior secondary schools in Botswana). National examinations are qualifying exams written by senior secondary school students during their two years of study (Form IV and Form V). The examinations are composed of one written paper (paper 1) worth 100 marks, a project (paper 2) worth 50 marks, and an individual study (paper 3) worth 100 marks. The weighting and percentages for each paper and assessment objective are shown on the assessment grid (See Table 2).

Table 2.

Assessment Grid for the National Examinations for Botswana Senior Secondary Schools				
Paper	Weighting	Knowledge and understanding	Handling information	Practical skills
1	50%	40	40	20
2	20%	10	15	25
3	30%	20	40	40

Source: Ministry of Education, Botswana (2003)

Paper 1 has three compulsory sections, A, B, and C, each with short answer questions, four structured questions, and two essay questions, respectively. Paper 2, the project is a classroom and laboratory based paper. Students start to work on their projects during the third term of Form IV and complete during the first term of Form V. Paper 3, an individual study is a research based problem solving activity. Students come up with a theme, analyze it and identify a problem. It starts during the second term of the final year (Ministry of Education, 2003).

Botswana General Certificate of Secondary Education, previously called Botswana General Certificate of Education O level examination, is a subject based examination introduced in 1999. An 8 point scale from A* to G is used for grading. Candidates who fail to meet the standards required for grade G are deemed “unclassified” (U) and result are not reported on the certificate (Ministry of Education, 2003). According to the author, grades are awarded according to the extent to which a candidate has met the set standard for the assessment objectives.

This chapter provides information from research related to this study. The information will be useful as a base to answer research questions in Chapter I and to develop recommendations.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

In this section the research design, participants and sampling, instrumentation, administration of questionnaires, and data analysis are explained. The purpose of the study was to assess the needs of the consumer education modules and make recommendations to address identified needs.

Research Design

A self-administered survey was used to collect data from senior secondary home economics teachers. The survey design was appropriate and cost effective because on average five questionnaires were administered in each school. Surveys are relatively less expensive and information can be collected from a large group of people (Summer, Briggs, & Bell, 1997). A survey was preferred because of its high possibilities of getting a high return rate of questionnaires as compared to mail survey. Surveys are a popular form of needs assessment and they address a wide range of topics and assess diverse educational needs (Ratnapalan & Hillard, 2002).

Surveying home economics teachers was appropriate for this study because teachers play an important role in the learning process of students. Teachers have perceptions of the needs of a program from student feedback through class discussions, tests, assignments, examinations, and course assessments and appraisals. Class discussions, assignments such as weekly homework, and regular unit tests are good

sources of formative feedback that could be used by both students and teachers to work toward improving identified deficiencies. Examinations, usually taken at the end of the year or program, provide summative feedback for performance of the overall program. Apart from the above experiences, teachers' perceptions and reflections are useful to assess needs including strengths and weaknesses of a program. In addition to the questionnaire, an observational worksheet was developed to explore the home economics/consumer education classrooms' learning environment in senior secondary schools in Botswana.

Population and Sampling Procedures

Participants were 101 home economics teachers from senior secondary schools in Botswana. On average there were five home economics teachers in each senior secondary school. Twenty, 14 rural and six urban, senior secondary schools were randomly sampled from the list of all 27 senior secondary schools in the country. The list was obtained from the Ministry of Education. For confidentiality, the schools will be referred to as rural and urban (Appendix A). Approval for the study was obtained from Colorado State University Human Research Committee and the Ministry of Education in Botswana (Appendixes B and C).

The Instrument

To answer research questions, a questionnaire (Appendix D) was developed with ideas adopted from other studies and consultation with six home economics teachers, the home economics curriculum officer for the Department of Curriculum Development and Evaluation, and the examinations officer and consultant for the Examination, Research and Testing Division. Cronbach's alpha was used to assess the internal consistency

reliability of the instrument. The coefficient alphas ranged from .787 to .992 implying consistency of questionnaire items.

The questionnaire had seven content areas. Issues on consumer education modules (part 1), methods and experiences used to teach consumer education (part 2), resources for teaching consumer education modules (part 3), content of consumer education modules (part 4), students learning activities and performance (part 5), professional development/teacher learning (part 6), and teachers' demographic profile (part 7). It took 20-25 minutes to complete the questionnaire. In addition, an observation worksheet (Appendix E) was used by the researcher to assess the classroom learning environment.

Pilot Test

For reliability and validity of questions and instructions, questionnaires were pilot tested with eight people including seven senior secondary home economics teachers from three secondary schools and the home economics lecturer for consumer education at the University of Botswana. The three schools were chosen for convenience and the teachers suggestions and comments were used to refine the questions for instructions and clarity. For example, participants' commented that questions were not clear and in some cases suggested that some words be bolded to make them stand out.

Procedures Requesting Schools' Participation

Appendixes, ordered and referred to as F to I, were sent to principals of each senior secondary school through the research assistant who resided in Botswana. Each principal was informed in the letter (Appendix F) that if his/her school agreed to participate in the study, he/she was to re-type the enclosed sample letter of agreement to

participate (Appendix G) and mail it to the researcher. Also, a package was enclosed to be given to the Head of Home Economics Department (HOD).

The letter (Appendix H) to HODs informed them about the purpose of the study and requested they distribute letters (Appendix I) to each home economics teacher in their schools. Letters to home economics teachers introduced the study and requested their participation in completing the questionnaires that were to be administered at the beginning of 2006. Three weeks after mailing the letters, the researcher telephoned the principal of each school to seek verbal agreement to participate in the study and set dates to administer the questionnaires. All 20 schools agreed to participate in the study.

In some cases principals gave the researcher the name of the person to contact when coming to administer the questionnaire. The contact person was either the head or assistant head of the home economics department. From the researcher's experience in a previous study conducted in senior secondary schools in Botswana, principals were interested and verbally agreed to participate but due to resource constraints, they suggested that their agreement letter to participate be collected during the administration of questionnaires. The letters of agreement were collected during the administration of the questionnaires.

Administration of Questionnaires

Questionnaires were administered in person by the researcher to 101 home economics teachers in 20 schools in March/April 2006. To administer the questionnaire, the researcher introduced herself to principals of each school and/or the contact person and explained the purpose of her visit. As the researcher was expected, each principal or

contact person directed the researcher to the home economics teachers and questionnaires were given to each of the teachers.

During the introduction, the researcher told each principal or contact person and teachers that in addition to administering the questionnaire, she was to do an observation of the consumer education classrooms. The researcher was allowed to do the observations. As some of the equipment to be observed in the classroom, for example, TVs might have been kept in other places for security reasons, one of the teachers in each school was asked about their availability for use in classrooms.

Each participant's cover letter (Appendix J) was attached to the questionnaire. During the administration of questionnaires, each participant was told to read the cover letter first. In addition, each participant was verbally told that the completion of the questionnaire was voluntary and that she/he could withdraw participation at any time without any punitive measures and that there were no known potential risk(s) for participation. To ensure anonymity and confidentiality, questionnaire response were anonymous. The schools' were identified by urban or rural location for analysis only and their names were not revealed anywhere in the records or study.

Because none of the teachers could complete the questionnaires immediately they were collected on the agreed dates a few days later. Eighty-seven questionnaires were returned, 86 (85.0%) of them were usable, and 15.0% were not usable because they had few or no items completed.

Data Analysis

Data were analyzed using descriptive and inferential statistics. According to Gliner and Morgan (2000) the appropriate inferential statistics to be used depend on the

distribution of the data and number of groups. In line with the authors' notion, the appropriate statistics for the data – chi-square, Mann-Whitney U, and Pearson correlation – were computed to determine differences and relationships between variables. Open-ended questions were analyzed using themes and selective coding. Responses from the participants were analyzed and used as evaluation measures for the achievement of the goal and objectives of the study. Data were analyzed as indicated on Appendix L.

CHAPTER III

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Research Design

A self-administered survey was used to collect data from senior secondary home economics teachers. The survey design was appropriate and cost effective because on average five questionnaires were administered in each school. Surveys are relatively less expensive and information can be collected from a large group of people (Summer, Briggs, & Bell, 1997). A survey was preferred because of its high possibilities of getting a high return rate of questionnaires as compared to mail survey. Surveys are a popular form of needs assessment and they address a wide range of topics and assess diverse educational needs (Ratnapalan & Hillard, 2002).

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they were students (QI. 48), years teaching consumer education modules (QI. 2), school location (QI. 49), and background in consumer education taught (QI. 7).

The results indicated that 84 (98.8%) of home economics teachers were female and one was male. One participant did not complete the item on gender. A substantial number of teachers (86.3%) had BSc/BA/ BED, and 8.2% had MSc/MA degrees while 5.5% had diploma degrees. The BED degree option was inadvertently omitted from the questionnaire but inserted by respondents. A high percentage (85.7%) of the home economics teachers majored in home economics, 11.7% in consumer sciences, and 2.6% in education.

The variable teachers' background on consumer education taught was measured on a scale ranging from no background (0) to a lot of background (4). The results revealed that of the 83 teachers who responded to the question, 59.0% reported that they had moderate backgrounds, 26.5% had a lot of background, 8.4% had little background, and 6.0% had very little or no background in consumer education.

Sixty-four percent (64.0%) of the teachers reported that they taught consumer education modules for four or more years and 36.0% for three or fewer years. More than two-thirds (69.8%) of the teachers taught in rural and less than one third (30.2%) taught in urban schools (see Table 3).

Overall, all but one of home economics/consumer education teachers were females and the highest degree earned by most teachers was BSc/ BA/BED. Although a majority (85.7%) of the teachers majored in home economics, 59.0% perceived their background as moderate in consumer education.

Table 3

Demographic Characteristics of Teachers and School Location (N = 86): Frequencies and Percentages

Characteristics	N	%
Gender		
Female	84	98.8
Male	1	1.2
Highest level of education attained		
MSc/MA	6	8.2
BSc/BA/ BED	63	86.3
Diploma	4	5.5
Major		
Home Economics	66	85.7
Consumer Education/Sciences	9	11.7
Education	2	2.6
Years of teaching consumer education including 2006		
Six	16	18.8
Five	20	23.5
Four	18	21.2
Three	8	9.4
Two	8	9.4
One	15	17.6
School location		
Rural	60	69.8
Urban	26	30.2

Consumer Education Modules Taught

The consumer education modules taught by each teacher in 2006 and in 2000–2005 were explored (Q1. 1). Data in Table 4 illustrates the responses to the consumer education module(s) taught by each teacher during the current school year (2006) and for the past four years (2000 to 2005). Forty-eight (79.0%) of the teachers reported that they taught consumer education and food service module in (2006) and 77.9% taught the module from 2000 to 2005. Forty-five (78.0%) of the teachers reported that they taught resource management and consumer education module in (2006) and 78.6% taught the

module from 2000 to 2005. Fifty-eight percent (58.0%) of the teachers said they taught consumer education and textile business module from 2000 to 2005 and 54.7% taught the module in 2006. Overall, both resource management and consumer education and the consumer education and food service modules were taught by three-quarters of the teachers in 2006 and from 2000 to 2005. The consumer education and textiles module was taught by less than three-fifths of the teachers in 2006 and from 2000 to 2005 (see Table 4).

Table 4

Consumer Education Modules Taught

Module Taught	Yes		No	
	N	%	N	%
Taught CE and food service module, school year (2006)	48	78.7	13	21.3
Taught CE and food service module, 2000-2005	53	77.9	15	22.1
Taught resource management and CE modules, 2000-2005	44	78.6	12	21.4
Taught resource management and CE, school year (2006)	45	77.6	13	22.4
Taught CE and textile business module, 2000-2005	32	58.2	23	41.8
Taught CE and textile business, school year (2006)	29	54.7	24	45.3

Resources for Teaching Consumer Education

Research question 1 was what are the teachers' perceptions in relation to the needs of the consumer education modules? The items explored the availability or unavailability of resources/materials and teaching aids used or to be used to teach consumer education. The variables explored were usefulness of study guides for students (QI. 12), instructional/manual guides for teachers (QI. 13), consumer education reference

books (QI. 14), books, journals, and teaching aids at schools' libraries (QI. 15), and video tapes (QI 16). Others were availability of textbooks used to teach consumer education (QI. 22), textbooks for students (QI. 23), whether there was need for a different textbook on consumer education (QI. 24), availability of computer labs (QI. 17), and access to the internet for both students and teachers (QI. 18 & 19).

Data in Table 5 show the results of items that assessed the needs for material resources to teach consumer education. Teachers responded by yes, no, or not sure to the first four items and with yes or no to the other five items. Of the 85 teachers who responded to whether student study guides would be useful for students' learning, 90.7% said yes and 9.3% were not sure. Eighty-one (94.0%) of the teachers agreed that instructional/manual guides for teachers would be helpful and 4.7% were not sure. Sixty-seven (79.0%) of the teachers said their schools had no video tapes for consumer education and 18 (21.0%) said schools had video tapes or were not sure.

Eighty-nine percent of 64 teachers agreed that there was a need for a different textbook(s) for consumer education, 6.0% were not sure, and 5.0% said there was no need. When teachers explained why there was a need for a different textbook(s) for consumer education 41.5% of 53 teachers said they needed a comprehensive, relevant, and up-to-date textbook (s). Fifteen (28.3%) said the textbook (s) they were using had inadequate information, 24.5% said there were no prescribed textbooks, and 5.7% wanted textbook(s) related to Botswana. In response to the availability of textbooks to students, 37 (62.7%) said the textbooks used by teachers were not available to students and 37.3% said they were available.

Table 5

Resources for Teaching Consumer Education

Resources	N	Yes		No		Not sure	
		n	%	n	%	n	%
Helpfulness of instructional/manual guides for teachers	85	81	94.2	0	0	4	4.7
Usefulness of study guides to students	85	78	90.7	0	0	8	9.3
Need for a different textbook(s) for consumer education	64	57	89.1	3	4.7	4	6.3
School has video tapes for consumer education	85	1	1.2%	67	78.8	17	20.0
Availability of computer lab in school for students	85	71	83.5	14	16.5		
Problems with availability of consumer education reference books	86	70	81.4	16	18.6		
Availability of the listed textbooks to students	59	22	37.3	37	62.7		
Teachers' access to the internet	84	29	34.5	55	65.5		
Students access to internet	85	4	4.7	81	95.3		

Of the 86 teachers who responded about problems with the availability of consumer education reference books, 81.4% reported that they had problems and 18.6% did not have problems. When explaining problems with the availability of consumer education reference books, 49.3% of the 69 who responded said there were no prescribed books on consumer education. Twenty-nine percent reported that they borrowed books from other disciplines such as commerce and business studies and that some of the books had inadequate information on consumer education. Seven of the teachers reported that they had no problems because there were a lot of books and information on consumer education. Seven said the information and examples in the books they used related to Western countries and not to Botswana. One teacher said she/he was not sure which book(s) to use for consumer education information.

The availability of computer labs in schools was assessed. Seventy-one (83.5%) of 85 teachers indicated that there were computer labs in their schools and 16.5% said they were no computer labs. Teachers explained that the computer labs were for students enrolled in computer awareness classes. Students in disciplines such as home economics/consumer education did not have access to computers or the labs. Twenty-nine (34.5%) of 84 teachers reported that they had access to the internet while 65.5% did not. Four (5.0%) of 85 teachers said that students had access to the internet and 95.0% said students did not have access to the internet.

Availability of consumer education materials such as books, journals, and teaching aids in each school's library were examined. The responses were none are available (0), not sure (1), very few are available (2), some are available (3), and most of

them are available (4). Of the 84 teachers who responded 45.2% reported that very few consumer education materials were available at their school libraries. Twenty (24.0%) said no consumer education materials were available, 20.2% said some were available, 2.4% said most were available, and 8.2% were not sure.

To answer research question 1, there were no prescribed textbooks and teaching aids on consumer education in most of the schools. The teaching and learning resources identified as not available were reference books and prescribed textbook(s) with up-to-date, relevant, adequate information, related to Botswana. Others not available were instructional/manual guides for teachers, study guides for students, video tapes on consumer education, access to the internet for both teachers and students, and access to computers by consumer education students.

Textbooks Used

Table 6 illustrates the analyses of the textbook assessment and Appendix K includes the particulars of each textbook used for teaching consumer education. Teachers were asked to list the two textbooks they used most to teach consumer education. Then they rated each for relevancy of content, comprehensiveness in details on the consumer education modules, appropriateness of level for students, adequacy of information on consumer education, and recency of publication. The scale used to rate each of the textbooks' attributes ranged, for example, from least relevant (1), less relevant (2), relevant (3), more relevant (4), to most relevant (5). Attributes with means ranging from 1.00 to 1.49 were considered to be least in any of the attributes, 1.50 to 2.49 as less, 2.50 to 3.49 as moderate, 3.50 to 4.49 as more, and 4.50 to 5.00 as most.

Textbooks for which each of the attributes' means ranged from 3.00 to 5.00 were considered to be better textbooks for consumer education. Textbook(s) with any of the attributes' rated less or least or with means ranging from 1.00 to 2.49 were considered inadequate/insufficient for consumer education even if one or two of the attributes had higher means.

Findings revealed that teachers used 14 different textbooks to teach consumer education. The means of the attributes of six textbooks used by 31 teachers ranged from 3.00 to 4.50. For the other eight textbooks used by 54 teachers, two textbooks' attributes were rated less for all five attributes and their means ranged from 1.67 to 2.40. One textbook had all five attributes rated least with means ranging from 1.00 to 1.50. For the other five textbooks' attributes' rating were mixed (most, more, moderate, less and least) with means ranging from 1.00 to 5.00. The descriptors (most to least) will modify the attributes reported here for each book.

The six textbooks whose attributes' means ranged from 3.00 to 4.70 were:

1. *Commerce: A Complete Course* 4th ed. (1997) used by 10 teachers and was rated most up-to-date or recent (mean = 4.70), content more relevant (mean = 4.50), more comprehensive in details on the consumer education modules (mean = 4.40), more appropriate level for students (mean = 4.30), and adequate information for consumer education taught (mean = 4.10).
2. *Active Home Economics for standard 8 and 10* (n = 2) was rated as being more comprehensive (mean = 4.50), more appropriate level for students (mean = 4.50), more adequate information for the consumer education

taught (mean = 4.50), more relevant content (mean = 4.00), and more up-to-date or recent (mean = 4.00).

3. *The Home Economist* (n = 7) was rated as more appropriate for student level (mean = 4.29), more adequate information for the consumer education taught (mean = 4.14), more comprehensive (mean = 4.00), more up-to-date or recent (mean = 4.00), and more relevant content (mean = 3.57).
4. *GCSE Business Studies* (n = 3) was rated as more comprehensive (mean = 4.00), more appropriate (mean = 4.00), more up-to-date or recent (mean = 4.00), more relevant (mean = 3.67), and adequate information for the consumer education taught (mean = 3.33).
5. *Get Living* (n = 8) was rated as more appropriate (mean = 3.75), more up-to-date or recent (mean = 3.63), adequate information for consumer education taught (mean = 3.50), relevant content (mean = 3.25), and comprehensive in details on the consumer education modules (mean = 3.25).
6. *Commerce Skills* (n = 1) was rated as moderate for all the five attributes – relevancy, comprehensiveness, appropriateness, adequacy, and up-to-date or recency. The means were 3.00 for each of the five attributes.

Other textbooks' attributes' means ranged from 1.00 to 2.00 or were mixed with higher means (see Table 6). Overall, among the 14 textbooks used by teachers, six were found to be better in terms of relevancy of content, appropriateness of level for students, adequacy in information for consumer education taught, comprehensiveness, and up-to-

date or recency. The other eight used by more than half of the teachers were not rated as high because they had inadequate information, and irrelevant content, and were not comprehensive appropriate for students' level, or up-to-date.

Comparison of Availability and Use of Resources for Teaching Between Urban and Rural Schools

Research questions 3 was to determine differences in the availability of teaching and learning resources between urban and rural schools and RQ 5 was to determine differences in the use of community resources between teachers who teach in urban and rural schools. The dependent variables to answer RQ 3 were availability of consumer education books, journals, teaching aids in schools' libraries, videotapes, and computer labs for students, and teachers' and students' access to the internet. The independent variable was location of schools (urban and rural). The dependent variables to answer RQ 5 were community resources (Consumer Education Unit officers, shop managers, health inspectors, Botswana Bureau of Standards officials, Weights and Measures officials, and guest speakers) which were collapsed into used and not used resources for analysis. The independent variable was location of schools. Chi-square and Mann-Whitney U statistics were computed to examine the differences. Selection of the statistics used to explore differences/relationships was based on Gliner and Morgan (2000).

Chi-square test did not produce significant findings meaning that teaching and learning resources were not available in both urban and rural schools. Both rural and urban teachers used community resources (see Table 7). However, the difference for the use of community resources between teachers in urban and rural schools neared significance ($X^2 = 3.310$, $p = .069$).

Statistical analysis was not done to compare the availability of consumer education video tapes (QI. 16) between urban and rural schools because 67 or 79.0% of the teachers said there were no video tapes in their schools and only one said their school had video tapes. Mann-Whitney U test was computed to examine differences in the availability of books, journals, and teaching aids in schools' libraries. The test did not produce significant findings. Both urban and rural school libraries were unlikely to have teaching resources (see Table 8).

Teachers' Perceptions on the Quality of Consumer Education Modules

Questions 3-6, 8-11, 20, 21, 25 through 46 were to answer research question 2. What are the teachers' perceptions in relation to the quality of consumer education modules? Items to answer this research question explored the quality of the consumer education taught and related activities and suggested activities for inclusion in the revision of the consumer education modules.

The quality of a program is determined by many factors that might be directly or indirectly related to the program. As a result, factors to determine the quality of the consumer education modules were those related to perceptions of quality of consumer education modules, teaching, resources to enhance teaching, student learning, and professional development activities. The findings of the variables for each of these quality factors are presented in the following section.

Table 6

Textbook Assessment																		
Titles and Dates		Teachers' Rating		Appropriateness			Recency			Relevancy			Comprehensiveness			Adequacy		
		(n)	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.		
<i>Home management for secondary Schools</i>																		
(1987)		21	2.38	1.284	2.00	1.414	1.95	1.203	1.86	1.062	1.67	.856						
<i>Modern home economics 9 & 10</i>																		
(1987)		13	2.92	.000	1.92	1.311	2.31	1.251	2.08	.954	2.23	1.013						
<i>Commerce: A complete course 4th ed. (1997)</i>																		
(1997)		10	4.30	.675	4.70	.675	4.50	.527	4.40	.516	4.10	.999						
<i>Modern home economics standard 8 (no date)</i>																		
(no date)		10	2.40	1.506	1.75	1.488	2.00	1.633	2.10	1.449	1.80	1.033						
<i>Get living (no date)</i>		8	3.75	1.165	3.63	1.061	3.25	1.035	3.25	.886	3.50	1.195						
<i>The Home economist (1992)</i>																		
(1992)		7	4.29	.951	4.00	.816	3.57	.787	4.00	.816	4.14	.900						
<i>Modern home economics 12 (2001)</i>																		
(2001)		4	3.00	.000	2.00	1.00	2.25	1.500	2.50	.577	2.50	.577						
<i>GCSE business (no date)</i>																		
(no date)		3	4.00	.000	4.00	.000	3.67	.577	4.00	.000	3.33	1.155						
<i>Active home economics 8 & 10 (no date)</i>																		
(no date)		2	4.50	.707	4.00	.000	4.00	.000	4.50	.707	4.50	.707						

Table 6 cont.

Textbook Assessment											
Titles and Dates	Teachers Rating	Appropriateness		Recency		Relevancy		Comprehensive ness		Adequacy	
	(n)	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<i>Home management</i> (1992)	2	1.00	.000	1.50	.707	1.00	.000	1.00	.000	1.00	.000
<i>Junior secondary</i> <i>School home</i> <i>economics</i> (date)	2	2.50	.707	2.00	1.414	4.00	.000	4.00	1.414	2.00	1.414
<i>Commerce skills</i> (no date)	1	3.00	-	3.00	-	3.00	-	3.00	-	3.00	-
<i>Life skills</i> (1987)	1	2.00	-	-	-	2.00	-	3.00	-	4.00	-
<i>Home management: A</i> <i>fresh approach</i> (1981)	1	5.00	-	3.00	-	2.00	-	-	-	-	-

Table 7.

Comparison of Availability and Use of Teaching Resources in Urban and Rural Schools

Comparison of Availability and Use of Teaching Resources in Urban and Rural Schools									
Teaching Resources	School Location							X ²	p
	Rural				Urban				
	N	Responses	N	%	N	N	%		
School has computer lab	59	Yes	49	83.0	26	22	84.6	.032	.858
		No	10	17.0		4	15.4		
Teachers have access to the internet	59	Yes	18	30.5	25	11	44.0	1.414	.234
		No	41	69.5		14	56.0		
Students access to the internet	59	Yes	2	3.4	26	2	7.7	.745	.388
		No	57	96.6		24	92.3		
Use community resources	57	Used	25	43.9	26	17	65.4	3.310	.069
		Not used	32	56.1		9	34.6		

Table 8.

Comparison of Availability of Teaching and Learning Resources in Urban and Rural School Libraries

Materials	N	Rural		Urban		Mann-Whitney U	p
		Mean Rank	N	Mean Rank			
Availability books, journals, and teaching aids in schools' libraries	58	41.72	26	44.23	709.00		.644

Quality of Modules

The variables to determine the quality of consumer education modules were teachers' perceptions of whether consumer education modules meet goals and objectives (QI. 3), essentiality of the objectives to students (QI. 4, comprehensiveness of consumer education content QI. 27), and appropriateness of quality of the consumer education taught (QI. 29). The analysis revealed that 66.2% of the teachers agreed that the

consumer education module(s) they were teaching or had taught met goals and objectives, 31.3% were not sure and two said they did not.

The 12 learning objectives common to each of the three consumer education modules were analyzed to determine their essentiality to students learning. Responses were on a scale ranging from least essential (1) to most essential (5). Means ranging from 2.49 to 3.49 were considered to indicate that the objective was essential while those ranging from 3.50 to 4.49 were more essential and 4.50 to 5.00 were most essential for students' learning (see Table 9).

Higher percentages of teachers (53.5 to 77.9%) indicated that each of the 12 consumer education objectives were most essential for students' learning while less than one-third of the teachers (19.8 to 31.4%) indicated that the objectives were more

Table 9

Essentiality of Consumer Education Objectives to Students' Learning

Objectives	Most Essential (5)			More Essential (4)		Essential (3)		Less Essential (2)		Least Essential (1)		Mean	Std. Dev.
	N	n	%	n	%	n	%	n	%	n	%		
Consumer rights and responsibilities	86	67	77.9	17	19.8	2	2.3	0	0	0	0	4.76	.484
Consumer education	86	63	73.3	19	22.1	3	3.5	0	0	1	1.2	4.66	.662
Redress consumer related problems	85	63	74.1	17	20.0	3	3.5	2	2.4	0	0	4.66	.665
Consumer protection	85	61	71.8	18	21.2	3	3.5	3	3.5	0	0	4.61	.725
Purchasing goods and services	85	59	69.4	19	22.4	6	7.1	1	1.2	0	0	4.60	.676
Advocate for consumers	85	55	64.7	25	29.4	5	5.9	0	0	0	0	4.59	.603
Consumer, producer, goods, and services	85	59	69.4	18	21.2	7	8.2	1	1.2	0	0	4.59	.695
Lodging complaints	86	59	68.6	18	20.9	7	8.1	2	2.3	0	0	4.56	.745
Consumer decision making	85	55	64.7	24	28.2	4	4.7	2	2.4	0	0	4.55	.699
Consumerism	85	48	56.5	25	29.4	12	14.1	0	0	0	0	4.42	.730
Selection of goods and services	86	46	53.5	27	31.4	13	15.1	0	0	0	0	4.38	.738
Prices and shopping facilities available	85	48	56.5	21	24.7	11	12.9	4	4.7	1	1.2	4.31	.951

essential. Few (2 to 13) teachers indicated that the objectives were essential. The means indicated that of the 12 objectives, nine were rated most essential and three more essential. The objectives which were rated as most essential (listed most to least) for students' learning were:

1. Explain and discuss consumer rights and responsibilities (mean = 4.76).
- 2 & 3. Explain the concept of consumer education and Discuss/investigate agencies/organizations available to redress consumer related problems (mean = 4.66 for each).
4. Explain the importance/concept of consumer protection (mean = 4.61).
5. Investigate different ways of purchasing goods and services (mean = 4.60).
- 6 & 7. Differentiate between consumer, producer, goods, and services and Discuss/explain measures in place to advocate for consumers (mean = 4.59 for each).
8. Outline procedures for lodging consumer complaints (mean = 4.56).
9. Discuss factors which influence consumer decision making (mean = 4.55).

The three objectives that were rated as more essential were to: explain the term consumerism (mean = 4.42), explain factors that influence selection of goods and services (mean = 4.38), and compare and discuss prices of food/textile products with reference to shopping facilities available (mean = 4.31). Overall, the means indicated that all the consumer education objectives were considered at least more essential for students' learning.

Comprehensiveness of the consumer education content to prepare students for work and family life was also determined. Forty-one (49.4%) of 83 teachers agreed that the content was comprehensive while 32.5% said it was not, and 18.1% were not sure. There appears to be uncertainty as to the comprehensiveness of content to prepare students for work and family as half of the teachers said it was not comprehensive or they were not sure.

The item to determine the quality of content of the consumer education module(s) taught in relation to the appropriateness to marketplace needs was rated on a scale of very good (4), good (3), poor (2), very poor (1), and don't know (0). Most (72.9% of 85) teachers said the quality was good, 14.1% rated it very good, 3.5% rated it poor, and 9.4% did not know. The overall results indicated that the quality of the content of the consumer education module(s) taught in relation to the appropriateness to marketplace needs was perceived to be good.

Quality of Teaching

The variables to assess quality of teaching were perceptions of competency to teach the objectives, content coverage, teaching methods, teaching experiences, and teachers' strengths and weaknesses.

Levels of competency in teaching each of the objectives/topics were examined. Responses were rated on a scale of least competent (1), less competent (2), competent (3), more competent (4), and most competent (5). Means ranging from 3.00 to 3.49 were considered to indicate that the teachers were competent to teach the objective/topic, ranges from 3.50 to 4.49 indicated the teachers were more competent and those ranging

from 4.50 to 5.00 indicated the teachers perceived they were most competent for teaching the objectives/topics (see Table 10).

Teachers were either more or most competent in teaching each of the 12 objectives/topics. The three objectives/topics which 64.7 to 77.4% of the teachers reported to be most competent in teaching were: consumer, producer, goods, and services (mean = 4.74), consumer rights and responsibilities (mean = 4.56), and consumer decision making (mean = 4.53). One-third to three-fifth (32.0 - 61.0%) of the teachers reported they were more competent to teach consumer education objectives (mean = 4.40); purchasing goods and services (mean = 4.37); consumerism (mean = 4.29); consumer protection (mean = 4.25); selection of goods and services (mean = 4.22); lodging consumer complaints (mean = 4.17); redress consumer related problems (mean = 4.07); prices and shopping facilities available (mean = 4.05); and advocate for consumers (mean = 3.99). The mean for the overall competency of teachers in teaching the 12 objectives/topics was 4.24. In summary, the means for individual objectives implied that teachers were competent in teaching the 12 objectives/topics.

A correlation was computed to answer research question 4, are there associations of teacher competency in teaching the 12 consumer education objectives/topics and teachers' level of education. The dependent variables were teachers' competencies in teaching the 12 objectives/topics and the independent variables were levels of education. The results indicated that there was no association of perceived competency and education level. (see Table 11). Lack of significance might have been due to the fact that majority (66.3%) of the teachers had bachelors degrees.

Table 10

Teachers' Competencies for Each Objective/Topic

Objective/Topic	N	Most Competent (5)		More competent (4)		Competent (3)		Less competent (2)		Least competent (1)		Mean	Std. Dev.
		n	%	n	%	n	%	n	%	n	%		
Consumer, producer, goods, and services	84	65	77.4	16	19.0	3	3.6	0	0	0	0	4.74	.518
Rights and responsibilities	85	55	64.7	26	30.6	3	3.5	0	0	0	0	4.56	.747
Consumer decision making	85	55	64.7	23	27.1	4	4.7	3	3.5	0	0	4.53	.749
Consumer education	85	52	61.2	23	27.1	6	7.1	1	1.2	2	2.4	4.40	.990
Purchasing goods and services	84	44	52.4	32	38.1	5	6.0	2	2.4	0	0	4.37	.861
Consumerism	83	35	42.2	40	48.2	7	8.4	0	0	0	0	4.29	.789
Consumer protection	84	41	48.8	31	36.9	7	8.3	3	3.6	1	1.2	4.25	.980
Selection of goods and services	85	38	44.7	33	38.8	11	12.9	2	2.4	0	0	4.22	.905
Lodging complaints	84	39	46.4	24	28.6	18	21.4	2	2.4	1	1.2	4.17	.929
Redress consumer related problems	84	31	36.9	33	39.3	17	20.2	2	2.4	0	0	4.07	.929
Prices and shopping facilities available	84	27	32.1	36	42.9	19	22.6	2	2.4	0	0	4.05	.805
Advocate for consumers	85	29	34.1	32	37.6	19	22.4	4	4.7	1	1.2	3.99	.932
Overall competency in teaching the objectives	85	29	34.1	49	57.6	5	5.9	2	2.4	0	0	4.24	.666

The ratings for essentiality and teachers' competency in teaching each objective/topic were ranked from 1-12. Rankings for essentiality of each of the 12 objectives/topics to students' learning were compared with ranking of teachers' perceived competency in teaching the objectives/topics. The differences between the two rankings were used to determine whether teachers' competency in teaching that particular objective was higher or lower than the rating for the essentiality of the objective to students' learning. For example, the objective consumer, producer, goods and services was ranked 1st for teachers' competency and ranked 7th for its essentiality for students' learning. Higher negatives indicated that competency rating exceeded the essentiality rating while higher positives indicated the rating for essentiality exceeded that of competency.

As indicated in Table 12 the ranking of teachers' competency in teaching two of the objectives/topics (consumer, producer, goods, and services and consumer decision making) exceeded the essentiality of those objectives/topics to students' learning. Ranking of two other objectives (redress consumer related problems and advocate for consumers) indicated their essentiality to students learning was higher compared to teachers' competency in teaching the objectives. Overall, teacher competency was perceived as higher in teaching five of the objective/topics compared to the essentiality of those objectives to students' learning. Six of the objectives were ranked as higher in essentiality compared to teachers' competency in teaching those objectives/topics. Of the 85 teachers who responded to the item about problems on deciding the magnitude (amount) of content to cover when teaching each of the consumer education objectives, 47.1% agreed that they had a problem, 45.9 said no, and 7.1% were not sure.

Table 11.

Correlation of Teachers' Competency and Level of Education (N = 71 – 72)

Objectives	r	p
Consumerism	.162	.177
Consumer protection	.169	.159
Consumer education	.081	.496
Consumer rights and responsibilities	.089	.456
Purchasing of goods and services	.008	.946
Selection of goods and services	.021	.862
Consumer protection agencies	.159	.185
Lodging consumer complaints	.029	.809
Consumer, producer, and services	.114	.342
Consumer decision making	.099	.409
Shopping facilities	.043	.720
Advocacy for consumers	.040	.737

Methods to Teach Each Consumer Education Objective/Topic

Methods used to teach each of the consumer education objectives/topics were explored. One of the objectives was unintentionally omitted from the questionnaire hence 11 instead of 12 objectives were analyzed. Analysis showed that more than one method was used to teach each of the 11 objectives/topics. The three methods used by a majority of teachers were group discussions (51.0 – 87.0%), chalk boards (52.0 – 67.0%) and lectures (49.0 - 69.0%). As illustrated in Table 13, 81.0 – 87.0% of the teachers used group discussion to teach five of 11 objectives/topics while 71.0% used it to teach one objective/topic. Two-thirds of the teachers (61.0 – 67.0%) used group discussion to teach four of the objectives/topics. Two-thirds (64.0%) used chalk boards to teach two of the objectives while 52.0 – 59.0% used chalkboards to teach nine objectives/topics. Lectures were used by about three-fifths (60.0 – 63.0%) to teach five of the objectives/topics and half of the teachers (52.0 - 55.0%) used lectures to teach two objectives/topics.

Overall, the common methods used by a majority of teachers to teach each of the objectives/topics were group discussions, chalk board, and lectures. The lecture was used

by fewer teachers when compared to the other two (group discussion and chalk board).

Guest speakers, flip charts, and overhead projectors and transparencies were least used.

Table 12

Ranking and Comparison of Objectives' Essentiality and Teachers' Competency

Objectives	Ranking of essentiality of objectives to students' learning	Ranking of teachers' competency for teaching the objectives	Differences
Consumer, producer, goods, and services	7	1	- 6
Rights and responsibilities	1	2	1
Consumer decision making	9	3	- 6
Consumer education	2	4	2
Purchasing goods and services	5	5	0
Consumerism	10	6	- 4
Consumer protection	4	7	3
Selection of goods and services	11	8	- 3
Lodging complaints	8	9	1
Redress consumer related problems	3	10	7
Prices and shopping facilities available	12	11	- 1
Advocate for consumers	6	12	6

One teacher reported that overhead projectors and transparencies were available at school but he/she did not use them because of a phobia to use equipment.

Student Experiences Used

Teachers indicated the experiences used from a list of 14 student learning experiences. In cases where less than 20.0% of the teachers used an experience, such percentages are in the table but not mentioned in text. Results indicated that among others, the experiences commonly used by greater percentages of teachers were student

presentations (57.0 - 77.0%), research (29.0 - 48.0%), and role play, demonstrations, and stories (20.0 - 29.0%).

Three-quarters (72.0 – 77.0%) of the teachers indicated that they used students' presentations to teach five of the objectives/topics while two-thirds (64.0 – 66.0%) used presentations to teach six objectives/topics, and 57.0% to teach one objective/topic. Forty-two to 46.0% of the teachers used research to teach each of four objectives/ topics, 30.0 – 39.0% used it to teach seven objectives, and 29.0% used it to teach one objective. Few teachers (20.0%) either used demonstrations or stories. Role play was used by 29.0% to teach the objective of lodging consumer complaints (see Table 14). Overall, students' presentations were used by a substantial number of teachers to teach each of the 12 objectives compared to research which was used by less than half of the teachers and other learning experiences used by 20.0% of the teachers.

Teachers' Strengths and Weaknesses in Teaching Consumer Education Modules

Two open-ended questions were analyzed to determine teachers' strengths and weaknesses in teaching consumer education module(s). Table 15 shows themes and sub themes for strengths and weaknesses. Sixty-three strengths were identified and 55 weaknesses. Items were analyzed using themes and selective coding.

Strengths were categorized under two themes and weaknesses under three themes. Of the 63 strengths, those related to teaching experiences were identified with five sub themes and categorized as the theme of knowledge. The sub themes were explained consumer education concepts well, used daily experience and general knowledge, had knowledge and confidence in teaching consumer education, and gave relevant and life examples. Some teachers said a strength was background or training in consumer

education which was categorized as the theme of background/training in teaching consumer education.

Of the 55 weaknesses, those related to uncertainty of content were grouped in five sub themes and categorized as the theme of challenges related to content. The sub themes were not confident in teaching consumer education, deciding depth/scope of what to teach, not covering enough topics due to little time, teaching measures to advocate for consumers, and agencies/organizations available to redress consumer related problems.

Weaknesses related to learning experiences were identified with three sub themes and categorized as the theme of limited use of teaching resources. The sub themes were not engaging students in field/shop visits, not varying teaching methods, and not inviting community resources to share with students. The theme of background in teaching consumer education was lack or little background or training in consumer education.

Resources to Enhance Teaching

To determine material and community resources used to enhance student learning, the variables for material resources were video tapes, posters, and handouts/pamphlets. Variables for community resources were Consumer Education Unit, Botswana Bureau of Standards, shop managers, and guest speakers. Responses revealed that thirty-five (44.3%) of 79 teachers never or rarely used posters, 31.6% used them most of the time or always, and 24.1% said posters were not available. Most 67 or 78.8% of the teachers reported that there were no video tapes on consumer education in their schools and 20.0% were not sure. Thirty-three (39.7%) of 83 teachers said they rarely or never used videotapes, 3.6% said they used videotapes most of the time or always, and 56.6% said they were not available. Those who said they used consumer education video tapes stated

that they borrowed tapes from the Consumer Education Unit and Botswana Bureau of Standards offices. Fifty-four percent (54.0%) of the respondents reported that they used handouts and pamphlets most of the time or always, 35.0% used them rarely or never, 10.7% said handouts and pamphlets were not available.

Almost half (49.4%) of 83 teachers reported that they did not use community resources and 36.1% indicated they used the Consumer Education Unit offices in conjunction with the other three community resources, but these were used by less than 6.0% of the teachers (see Table 16). Overall, the teaching materials that were likely to be used by more than one-third of the teachers were handouts or pamphlets.

Student Learning

The variables to describe student learning were students' interest in consumer education content, consumer decision making, use of internet for consumer education activities, and interaction of students with shop managers. Existence of consumer youth clubs in schools was also examined. Teachers were asked whether students showed as much interest in the consumer education content taught as they did in other topics taught. Sixty-seven (77.9%) of 86 teachers agreed that students showed interest, 15.1% said they did not and 7.0% were not sure. Overall, a higher percentage of teachers agreed that students showed as much interest in the consumer education content taught as they did in other topics.

In response to how often teachers require students to use the internet for consumer education class activities, three-quarters (76.3%) of 80 teachers said they seldom required students to use the internet. Less than eight teachers required students to use the internet monthly, weekly, or daily.

Table 13

Methods Used to Teach Each of the Objectives/Topics													
Objectives	N	Group discussion		Chalkboard		Lecture		Guest Speakers		Flip charts		Overhead projectors & transparencies	
		Yes		Yes		Yes		Yes		Yes		Yes	
		n	%	n	%	n	%	n	%	n	%	n	%
Purchasing goods and services	86	75	87.2	50	58.1	42	48.8	2	2.3	1	1.2	1	1.2
Consumer rights and responsibilities	85	72	84.7	46	54.1	42	49.4	2	2.4	3	3.5	3	3.5
Consumer decision making	86	71	82.6	47	54.7	42	48.8	2	2.3	2	2.3	1	1.2
Prices and shopping facilities available	85	70	82.4	44	51.8	38	44.7	3	3.5	2	2.4	1	1.2
Selection of goods and services	86	70	81.4	50	58.1	47	54.7	1	1.2	1	1.2	2	2.3
Consumer education	83	59	71.1	49	59.0	50	60.2	6	7.2	1	1.2	1	1.2
Consumer, producer, goods, and services	84	56	66.7	56	66.7	44	52.4	4	4.8	2	2.4	0	0
Consumer protection	86	56	65.1	47	54.7	59	68.6	4	4.7	2	2.3	1	1.2
Redress consumer related problems	86	56	65.1	47	54.7	52	60.5	8	9.3	2	2.3	0	0
Lodging consumer complaints	86	52	60.5	49	57.0	52	60.5	5	5.8	4	4.7	3	3.5
Consumerism	84	43	51.2	52	64.0	53	63.1	3	3.6	0	0	1	1.2

Table 14

Experiences Used to Enhance Students' Learning

Objectives/Topics	Students Presentations			Research		Demonstration		Stories		Role Play	
	Yes			Yes		Yes		Yes		Yes	
	N	n	%	n	%	n	%	n	%	n	%
Consumer, producer, goods, and services	85	65	76.5	33	38.8	13	15.3	4	4.8	10	11.8
Consumer decision making	85	63	74.1	36	42.4	9	10.6	3	3.5	12	14.1
Purchasing goods and services	84	62	72.9	36	42.4	14	16.5	11	12.9	6	7.1
Consumer education	83	60	72.3	24	28.9	11	13.3	16	19.3	8	9.6
Consumer rights and responsibilities	85	61	71.8	25	29.8	15	17.6	18	21.2	15	17.6
Prices and shopping facilities available	83	55	66.3	31	37.5	9	10.8	5	6.0	6	7.2
Selection of goods and services	85	56	65.9	30	35.3	15	17.6	14	16.5	8	9.4
Consumerism	85	56	65.9	30	35.5	7	8.2	10	11.8	6	7.1
Consumer protection	86	55	65.5	25	29.8	12	14.3	17	20.2	16	19.0
Redress consumer related problems	86	56	65.1	41	47.7	13	15.1	14	16.3	3	3.5
Advocate for consumers	84	54	64.3	39	46.4	9	10.7	4	4.8	2	2.4
Lodging complaints	83	47	56.6	28	33.7	17	20.5	16	19.3	24	28.9

Table 15

Strengths and Weaknesses in Teaching Consumer Education Modules		
Perceived Teachers' Strengths (N = 63)	N	%
Theme: Knowledge		
Explained consumer education concepts well	16	25.4
Used daily experience and general knowledge	15	23.8
Knowledge and confidence in teaching consumer education	14	22.2
Gave relevant and life examples	4	6.3
Used back up material (leaflets and pamphlets on consumer education)	1	1.6
Theme: Background in Teaching Consumer Education		
Background/training in consumer education	13	20.6
Perceived Teachers' weaknesses (N = 55)		
Theme: Challenges Related to Content		
No confidence in teaching consumer education	20	36.4
Deciding the depth/scope of what to teach	6	10.9
Not covering enough topics due to little time	4	7.3
To teach measures to advocate for consumers	4	7.3
To teach about agencies/organizations available to redress consumer related problems	3	5.5
Theme: Limited Use of Teaching Resources		
Not engaging students in field/shop visits	10	18.2
Not varying teaching methods	3	5.5
Not inviting community resources to share with students	1	1.8
Theme: Background in Teaching Consumer Education		
Lack or little background/training in consumer education	4	7.3

For skills that students were expected to acquire from what they were taught about consumer decision-making, 17 (53.1%) of 32 teachers who responded said students were expected to have good shopping skills, 21.9% said budgeting skills, said and 25.1% said skills in planning and prioritizing needs. Thirty-eight (48.0%) of 80 teachers reported that completed projects reflected that students were able to apply what they learned most of the time. Thirty-six (45.0%) reported that students rarely applied what they learned.

Table 16

Materials and Community Resources Used to Teach Consumer Education											
	Most of the time			Always		Rarely		Never		Not available	
Materials used	N	n	%	n	%	n	%	n	%	n	%
Handouts and pamphlets	84	33	39.3	12	14.3	29	34.5	1	1.2	9	10.7
Poster	79	22	27.8	3	3.8	28	35.4	7	8.9	19	24.1
Video tapes	83	1	1.2	2	2.4	7	8.4	26	31.3	47	56.6
Community Resources used		Consumer Education Unit		Shop Managers		Botswana Bureau of Standards		Guest speakers		None	
	83	30	36.1	4	4.8	4	4.8	4	4.8	41	49.4

Interaction of Students and Shop Managers

In response to whether teachers included activities where students interacted directly with shop managers to enhance learning, 22.0% of the teachers said they did and 78.0% said they did not. Teachers were asked to explain the information or activities where students would interact directly with shop managers. Forty-one activities were identified and categorized under two themes. Four sub themes were categorized as research assignments and one sub theme categorized as the theme of shopping (see Table 17). Specifically, teachers reported that students interacted directly with shop managers when doing price surveys, telling consumer complaints to shop managers, investigating how customers were cared for, and examining different ways of purchasing goods and services.

Table 17

Activities on Interaction of Students and Shop Managers (N = 41)

	N	%
Theme: Research assignments		
Price surveys	17	41.5
Investigate common complaints received by managers	11	26.8
Investigate how customers are cared for	7	17.1
Examine different ways of purchasing goods and services	3	7.3
Theme: Shopping		
When students do their personal purchases	3	7.3

Professional Development Activities

Professional development could be achieved through participation in teacher education programs and professional organizations relevant to one's profession.

Teachers' affiliation and participation in consumer organizations, reading of consumer journals, collaboration with other teachers and Consumer Education Unit officers were explored (see Table 18). Numbers of workshops/seminars attended, topics for consumer education and teaching workshops and scheduling were analyzed. Eight-one (98.0%) of 83 teachers said that they were not members of any consumer organization. But they believed that participation in a consumer organization could enhance their knowledge and skills in consumer education. Thirty-nine (48.0%) of 81 teachers reported that they did not read consumer related professional journals, 23.5% said they read them yearly, 29.0% said they read them each term, monthly, or weekly. Twenty-one (25.0%) of 83 teachers said they did not collaborate with other teachers. Fifty-five percent (30.0%) said they collaborated each term, monthly, or weekly. Sixty-two (76.0%) of 82 teachers said they did not collaborate with Consumer Education Unit officers while 23.5% said they collaborated yearly or each term. Ninety-five percent of 84 teachers said there were no consumer youth clubs in their schools. Seventy-six (95.0%) of 80 teachers agreed that having a consumer youth club in schools would enhance students learning.

Consumer Education Workshops

A large number, 62 (72.9%) of 85 teachers, reported that they did not attend consumer education workshops from January 2000 to April 2006. Twenty-four percent (24.0%) said they attended one to two, and three teachers said they attended three to four workshops. Overall, the majority of teachers did not attend consumer education workshops.

Table 18

Teachers' Involvement in Selected Consumer Professional Development Activities

	Never			Yearly		Each Term		Monthly		Weekly	
Activities	N	n	%	n	%	n	%	n	%	n	%
Liaise with Consumer Education Unit officers	82	62	75.6	16	19.5	4	4.9	0	0	0	0
Read consumer related professional journals	81	39	48.1	19	23.5	8	9.9	8	9.9	7	8.6
Collaborate with other home economics teachers in my school or other schools	83	21	25.3	16	19.3	25	30.1	9	10.8	12	14.5

Table 19 shows topics that teachers suggested for consumer education and teaching methods workshops to broaden and add to their knowledge. Measures/organizations to protect or redress consumer problems were suggested by 23.5% of the teachers, consumer protection laws and regulations (13.7%), consumer rights and responsibilities (11.8%), and recordkeeping (9.8%). Others were suggested by one to three teachers. For workshops on teaching, a substantial percentage of teachers (64.9%) suggested the topic, use of computers and the internet. Other suggested topics were how to make portfolios (29.7%), and consumer education websites and educational games suggested by one teacher each.

Teachers were asked to indicate the best months to attend consumer education workshops. Their first choice was April, favored by 32 (40.5%) of 79 of the teachers, followed by January favored by 30 (38.0%) of the teachers. The second choice was August favored by 29 (40.8%) of 71 teachers followed by April, favored by 12 (16.9%). Overall, the best months for teachers to attend workshops/seminars were April and January.

Improvement of the Quality of Consumer Education

In response to an open-ended question to determine what the teachers thought should be changed or improved in the consumer education modules' contents, 42 suggestions were written, (n = 26 teachers). The suggestions were identified with eight themes. The themes were:

1. Contents were okay as they were (46.2%)
2. Teachers should have prescribed textbooks and teaching aids (15.4%)
3. Learning objectives should be reduced (15.4%)

4. Students should visit shops (7.7%)
5. Teachers should teach other important consumer education concepts rather than depending on the examples provided for the objectives (3.8%)
6. Consumer education should have its own syllabus (3.8%)
7. Use of technology for teaching consumer education should be encouraged (3.8%)
8. Consumer education should be introduced or taught to students who are furthering their education at Botswana colleges of education (3.8%)

In response to ways teachers could improve students learning, 39 suggestions were written. They were identified with six themes (see Table 20).

1. Providing students with textbooks
2. Engaging students in field trips/shop visits
3. Giving students more research work
4. Using relevant consumer education textbooks and teaching aids
5. Exposing students to the use of computers and the internet
6. Fostering student centered learning.

Reflection on Revision of the Modules

Analysis to determine the topics to be included in the revision of the consumer education modules indicated that 68.0 - 96.5% of the teachers responded. Eighty percent or more (80.0 - 96.5%) said the following topics should be included--financial management (96.5%) consumer decision-making (92.9%), consumer protection laws and regulations (91.8%), and advantages and disadvantages of credit cards/credit, etc. (89.5%). Impact of technology on consumers was suggested by 85.5% of the teachers,

Table 19

Topics Suggest for Consumer Education and Teaching Workshops		
Topics Suggested (N = 51)	N	%
Consumer Education Workshops		
Measures/organizations to protect or redress consumer problems	12	23.5
Consumer protection laws and regulations	7	13.7
Consumer rights and responsibilities	6	11.8
Recordkeeping	5	9.8
Factors that influence selection of goods and services	3	5.9
Budgeting	2	3.9
How to lodge consumer complaints	2	3.9
Finance management	2	3.9
Business management	2	3.9
How to form consumer organizations	1	2.0
Consumer behavior	1	2.0
How to develop a business plan	1	2.0
Production of goods and services	1	2.0
Teaching Workshops (N = 37)		
Use of computers and internet	24	64.9
How to make portfolios	11	29.7
Consumer education websites	1	2.7
Educational games	1	2.7

understanding and interpreting advertisements (84.7%), consumer behavior (80.5%), and products' labels and packages (80.0%). Other suggestions were lifestyle and fashion (75.6% of the teachers), lifestyle and healthy eating habits (73.8%), sustainable consumption (72.0%), and how to form consumer organizations/youth clubs in schools (67.5%). Few (1.0 - 9.5%) of the teachers said some topics should be excluded (see Table 21). In summary, the majority (two-thirds to 96.5%) of the teachers said that all the 13 topics were to be included in the revision of the consumer education modules.

Teaching Materials and Tools Suggested for Revision

Often it is helpful for both students and teachers to have materials and tools to use for teaching and learning. Data on Table 22 reflect the rating for essentiality of 17 teaching materials and tools that could be included to enhance students' learning.

Table 20

Suggested Improvements for Students' Learning		
Suggestions (N = 39)	N	%
Engaging students in field trips/shop visits	13	33.3
Using relevant consumer education textbooks and teaching aids	11	28.2
Giving students more research work	7	17.9
Exposing students to the use of computers and the internet	4	10.3
Providing students with consumer education textbooks	3	7.7
Foster student centered learning	1	2.6

Thirteen of the tools were for students' use and four were for teachers'. The essentiality of teaching materials and tools were rated on a scale from least essential (1), less essential (2), essential (3), more essential (4), and most essential (5). Responses with means ranging from 3.00 to 5.00 were considered essential and those with means less than 3.00 were considered less essential. All of the 17 teaching tools were rated by 64.0 – 93.0% of the teachers as essential to enhance students' learning. Means ranged from 3.85 to 4.67.

Needs for Effective Teaching

For the open-ended question on what would enable teachers to teach consumer education more effectively, the identified factors were categorized under four themes. Of the 75 factors listed, those related to teaching resources were categorized as the theme of resources (53). Those related to workshops/training and more research work for teachers were categorized as teacher development (10). Those related to the use of the internet and technology (9) were categorized technology and those related to time (3) and reduction of the syllabus were categorized as the theme of time (see Table 23).

To answer research question 2, the quality of the consumer education as perceived by the teachers was found to be good in terms of the modules' meeting goals and objectives and essentiality of objectives to students' learning. Teachers were uncertain about the comprehensiveness of content to prepare students for work and family. On average all the teachers perceived themselves competent to teach consumer education. Although the teachers perceived themselves as competent to teach all the objective/ topics, 52.2% were not sure or had problems deciding the magnitude or amount of content to cover when teaching each objective/topic compared to 45.9% who reported not having any problems.

Teachers perceived their strengths in teaching consumer education modules as knowledge and background/training in consumer education. The perceived weaknesses were uncertainty related to content, limited use of teaching resources, and little or lack of background/training in consumer education.

The three common teaching methods used by more than 50.0% of the teachers were group discussion, chalkboard, and lecture. The teaching resources used by more than half of the teachers to enhance students learning were handouts/pamphlets. Consumer education posters and video tapes were rarely used because they were not available in schools. Guest speakers were rarely used for teaching and learning activities.

Among other factors, the quality of a program is determined through students' interest in the subject and students' performance. Consumer education students were found to be as interested in the consumer education as they were in other topics taught and were able to apply what they learned.

Table 21

Topics Suggested for Inclusion in the Modules

Topics	N	Include (2)		Uncertain (1)		Exclude (0)	
		n	%	n	%	n	%
Financial management	83	74	96.5	9	10.8	0	0
Consumer decision-making	85	79	92.9	6	7.1	0	0
Consumer protection laws and regulations	85	78	91.8	6	7.1	1	1.2
Advantages and disadvantages of credit cards/credit etc.	86	77	89.5	4	4.7	5	5.8
Shopping skills	85	73	85.9	4	4.7	8	9.4
Impact of technology on consumers	83	71	85.5	11	13.3	1	1.2
Understanding and interpreting advertisements	85	72	84.7	10	11.8	3	3.5
Consumer behavior	82	66	80.5	10	12.2	6	7.3
Product labels and packages	85	68	80.0	11	12.9	6	7.1
Lifestyle and fashion	82	62	75.6	14	17.1	6	7.3
Lifestyle and healthy eating habits	84	62	73.8	14	16.7	8	9.5
Sustainable consumption	82	59	72.0	16	19.5	7	8.6
How to form consumer organizations/youth clubs in schools	80	54	67.5	19	23.8	7	8.8

After being taught about decision making students were expected to gain shopping, budgeting and planning skills, and know how to prioritize needs. Students were seldom required to use the internet for classroom activities or interact with shop managers for school activities. There were no consumer youth clubs in the schools. The majority of teachers were neither members of consumer organizations, read consumer education journals, nor collaborated with other teachers and the consumer

education officers. Three-quarters (76.0%) of the teachers had not attend consumer education workshops from January 2000 to April 2006. They suggested 15 topics to be covered for consumer education and teaching workshops with the best months for scheduling workshops as April or January.

Suggestions to improve the quality of the consumer education modules, teaching, and student learning were identified. Topics to be included in the revision of the modules and tools to be used by teachers and students to enhance teaching and learning were also identified.

In conclusion, there were challenges in relation to the comprehensiveness of the consumer education content, determining the scope or depth of the content to teach, unavailability of teaching and learning resources, and not utilizing community resources.

Student learning was partly problematic because students were rarely required to use internet or interact with shop managers on school activities. Professional development was another challenging area because the majority of the teachers were not involved or active in professional development activities despite the fact that they knew that participation in such activities could enhance their consumer knowledge and skills.

Classroom Learning Environment

In addition to the survey instrument, an observation sheet was developed to assess how conducive the home economics/consumer education classroom environment was to students' learning at the 20 sampled senior secondary schools. The features observed by the researcher were ventilation, temperature, furniture arrangement, televisions, overhead transparencies and projectors. Others were computers with internet access and their

Table 22

Rating of the Essentiality of Materials and Tools of the Modules

	Most Essential (5)		More Essential (4)		Essential (3)		Less Essential (2)		Least Essential (1)				
	N	n	%	n	%	n	%	n	%	n	%	Mean	Std. Dev
Teaching materials and tools for students													
Workbooks	83	60	72.3	17	20.5	5	6.0	1	1.2	0	0	4.63	.711
Discussion activities	85	56	65.9	21	24.7	7	8.2	1	1.2	0	0	4.55	.699
Research and projects ideas	83	49	59.0	25	30.1	9	10.8	0	0	0	0	4.48	.687
Consumer education websites	84	51	60.7	21	25.0	12	14.3	0	0	0	0	4.46	.735
Test/quiz questions	81	47	58.0	21	25.9	12	14.8	1	1.2	0	0	4.41	.787
Suggested readings	80	44	55.0	26	32.5	9	11.3	1	1.2	0	0	4.40	.789
Field trips guide	83	45	54.2	28	33.7	8	9.6	1	1.2	1	1.2	4.39	.809
Guides for comparing products (radios, shoes etc.) and services for students	80	43	53.8	21	26.3	13	16.3	3	3.8	0	0	4.30	.877
Answerer keys	82	45	54.9	21	25.6	12	14.6	2	2.4	2	2.4	4.28	.972
Hands on learning activities	82	44	53.7	19	23.1	15	18.3	2	2.4	2	2.4	4.22	1.043
Consumer youth clubs/ organizations guides	84	41	48.8	25	29.8	11	13.1	7	8.3	0	0	4.19	.963
Guides for assessing/ evaluating accuracy and offers in advertising	84	38	45.2	22	26.2	19	22.61	4	4.8	1	1.2	4.19	.963
Paper and pencil activities	78	26	33.3	24	30.8	20	25.6	6	7.0	2	2.6	3.85	1.058

Table 22 cont.

			Most Essential (5)	More Essential (4)		Essential (3)		Less Essential (2)		Least Essential (1)			
Teaching materials and tools for students	N	n	%	n	%	n	%	n	%	n	%	Mean	Std. Dev.
CE videos/films lists and sources	81	62	76.5	13	16.0	5	6.2	0	0	1	1.2	4.67	.707
Reproducible masters that could be copied and distributed to students and/ or used as transparencies	82	49	59.8	24	29.3	6	7.3	2	2.4	1	1.2	4.44	.833
Rubrics for evaluating learning	77	33	42.9	29	37.7	12	15.6	1	1.3	2	2.6	4.17	.923
Guest speakers lists	82	26	31.7	31	37.8	17	20.7	5	6.1	3	3.7	3.88	1.047

location for students and teachers, consumer education video tapes, storage and display of consumer education materials. Classrooms were observed when students were not present to avoid disturbance. In addition to observation, because some items were not kept in classrooms the researcher asked teachers about availability or/and for explanations. For example, overhead projectors and consumer education tapes might be stored elsewhere for security reasons. Analysis of the observations was descriptive and findings are reported in frequencies and percentages. Nineteen schools were in quiet locations. One was located in a mining town where at times, there could be excessive noise from mine blasts. There were no typical classrooms used solely for consumer education. Instead, consumer education students were taught in either Food and Nutrition or Textiles and Fashion labs except in one school where a typical classroom was used for consumer education.

Table 23

Needs to Teach Consumer Education More Effectively (N = 75)

Themes	N	%
Resources		
Availability of teaching resources	21	28.0
Availability of prescribed and recent textbook(s) relating to consumer education in Botswana	20	26.7
Availability of funds to take students on field/shop visits	10	13.3
Instructional guides	2	2.7
Teacher Development		
Consumer education workshops/training	9	12.0
More research work on the teachers part	1	1.3
Technology		
Access to internet	8	10.7
Provision and use of technology	1	1.3
Time		
More time on the timetable	2	2.7
Reduction of the syllabus load	1	1.3

Ventilation and Furniture Arrangement

The windows for 18 of the schools were big (double) and many to allow enough air into the classroom while two of the schools had six double windows each.

Classrooms' temperatures were good during the time of schools' visits.

Because the schools studied were government owned, some of their facilities, especially chalk boards and furniture were similar in all the schools. Because the classrooms used were labs, students used tables as working areas and all the schools had movable chairs allowing students space to move around when working in groups.

Overall, the labs used as classrooms in each school were well ventilated and furniture was well arranged or could be arranged to suit activities.

Display and Storage of Students' Products

Of the 20 schools that were visited, 13 (65.0%) had pamphlets or leaflets displayed on labs (classrooms) walls but most of the displayed materials were for food and nutrition and four of the classrooms had scanty displays of consumer education pamphlets. Although half of the schools had space for displaying students' work or products, all the displayed items were for textiles. Teachers reported that after being exhibited or presented as a class project, consumer education products were given to students for disposal while those for textiles were stored or displayed in a space designated for them.

Teaching Aids for Consumer Education

Green boards were used in all 20 schools instead of black boards which used to be common. The green boards were big and in very good condition. They were placed where all students could see them. Two of the schools had televisions while 18 did not. Three

schools had overhead projectors and transparencies while 17 did not. Eighteen schools had student computer labs. Teachers of all 20 schools reported that the computers' use was limited to students who study computer awareness. Nineteen schools had computers for the home economics teachers. Computers were located in offices of heads of home economics departments and were shared by all home economics teachers. These computers did not have internet access. Overall, equipment and materials such as television, overhead projectors and transparencies, computers and internet for students use were not available in most of the classrooms. Home economics/consumer education teachers in each school shared one computer and did not have access to the internet.

Schools' Libraries

All schools had libraries with reasonable study areas but consumer education materials such as books and other teaching aids were not available in 16 of the libraries. In the other four libraries there were a few books with inadequate information on consumer education. For example, there were books on food and nutrition and other topics with a small section on consumer education. Consumer education materials such as videos, brochures, etc. were not available in any of the schools' libraries. Overall, the study areas were spacious.

In summary, observations of the classroom learning environment revealed that schools were in quiet locations. Classroom environments were conducive for teaching and learning in terms of ventilation and furniture arrangement despite the fact that food and textiles labs were used as classrooms for consumer education. Teaching materials/aids were not available in almost all the schools' classrooms and libraries. Study areas in each school's library were spacious. Home economics/consumer education

teachers in each school shared one computer but did not have access to internet. The challenges were that almost all the consumer education classrooms (labs) in each school did not have teaching aids to use for consumer education and there was no space designated for consumer education students' work or finished products.

CHAPTER IV

FINDINGS

This chapter presents the findings from the questionnaire (Appendix D) and the observational worksheet (Appendix E) developed to explore the home economics/ consumer education classrooms' learning environment for senior secondary schools in Botswana. The questionnaire was designed to answer five research questions and to determine the demography of teachers. Details of the questionnaire, statistics used, including notes on what each question sought to explore are reflected on Appendix L. Findings are organized according to the research questions. Items with less than 5.0% of the respondents' reporting are reflected in tables but may not be discussed in text.

Sample Description

Questionnaire item numbers will be noted as question item and number (QI. #). Eighty-seven of 101 questionnaires administered to home economics teachers in 20 Botswana senior secondary schools were returned. Of the 87 questionnaires, 86 (85.0%) were usable and one had few items completed and was unusable. The variable school location was used to distinguish rural from urban schools (Appendix A).

Teachers' Profile

Items 2, 7, and 47 through 50 were to determine the demography of teachers. Variables were gender (QI. 50), highest level of education attained (QI. 47), majors when

that consumer education will be taught as a core subject in schools and introduced to Botswana colleges of education.

As perceived by teachers, the quality of modules was found to be good in terms of meeting goals and objectives. The quality of the consumer education modules' content was questionable. Teachers perceived themselves competent to teach each of the 12 objectives/topics, but a majority identified a problem deciding the magnitude or amount of content to cover when teaching each of the objectives /topics.

The three most common methods used to teach the objectives/topics were group discussions, chalk boards, and lectures. The learning experiences used by most teachers were students' presentations and research.

Consumer education students were perceived to be as interested in the consumer education as they were in other topics taught and they were able to apply what they had learned. The skills that students were expected to acquire after being taught about consumer decision making were shopping, budgeting, and planning skills, and how to prioritize needs. Most teachers did not require students to use the internet for classroom activities or interact with shop managers for school activities.

There were consumer youth clubs in four of the 20 schools. Most teachers agreed that youth clubs could enhance students' learning. Most teachers believed that participation in consumer organizations could enhance their knowledge and skills in consumer education but only two were members of consumer organizations. The majority of teachers rarely read consumer journals and few teachers collaborated with other teachers and the consumer education officers.

Suggestions to improve the quality of the consumer education modules, teaching, and student learning were identified. Topics to be included in the revision of the modules and tools to be used by teachers and students to enhance teaching and learning were also identified.

The identified challenges were related to the comprehensiveness of consumer education content, determining the scope or depth of content to teach, unavailability of teaching and learning resources, and not utilizing community resources. Student learning was partly problematic because students were rarely required to use the internet or interact with shop managers for experiential learning. Professional development was another challenge because the majority of teachers were not involved or active in professional development activities. They suggested 15 topics to be covered for consumer education and teaching workshops scheduled in April, August, or January. Other challenges were lack of prescribed consumer education textbooks and learning and teaching aids.

Teachers made eight suggestions to improve the quality of consumer education. These included provision of guidelines, instructional materials, relevant and current prescribed textbooks, teaching aids, and teachers' participation in workshops. Access and use of computers and internet by both teachers and students and provision of funds to engage students in field/shop visits were also suggested.

Conclusion

Although the quality of consumer education was perceived to be generally good there were discrepancies that make some components of the quality to be questionable. Examples of these are lack of teaching and learning resources, teachers' uncertainties

regarding the comprehensiveness of the modules, and problems in determining the depth of content to cover when teaching each of the objectives/topics. Recommendations to address the identified needs and challenges were made. The positive responses and support for recommendations by the stakeholders, especially the Ministry of Education and Department of Curriculum Development will lead to improvement of the quality of the home economics curriculum.

Limitations

Although there was a time constraint for administration and collection of questionnaires, the cooperation of school principals and teachers lead to the high rate of return. Only one set of lenses (teachers) was used to determine the quality of the modules. It would have been interesting to learn about the quality of the consumer education modules as perceived both by teachers and students. This was not possible due to time constraints.

Discussion

Discussion of findings will be presented in the following order: a) demographic data, b) status of teaching resources, c) status of quality of consumer education, d) identification of methods and experiences used, e) identified activities to improve students' learning, f) identified teachers' strengths and weaknesses, g) participation in professional development activities, h) topics and tools identified for inclusion in the modules, i) implications, and j) recommendations.

Demographic Data

Demographically, the majority (99.0%) of home economics/consumer education teachers in senior secondary schools were females and more than two-thirds taught in

rural schools. This is consistent with the number of 14 rural and six urban schools in the study. It is not surprising that a majority of teachers were females, because home economics was historically and stereotyped as a female domain (cooking and sewing) (Division of Rare and Manuscript Collections, 2001). Males have been hesitant to major in the discipline. Many teachers (87.0%) reported having moderate to a lot of background in consumer education although a small percentage (11.7%) majored in consumer education/sciences compared to the majority (86.0%) who majored in home economics. However, this disparity could be reconciled by the fact that consumer education issues are interdisciplinary and consumer education concepts are applicable to all subjects including home economics. Studies conducted by English (1974) and Crossno (1975) on perceptions of home economics teachers at the secondary level found that teachers recognized their inadequate backgrounds to teach consumer education and most of them, 62.0% of 515, had no consumer education training.

Currently, there are five colleges of education dedicated to preparing teachers to teach in secondary schools in Botswana but none offer a consumer education course. The five are Molepolole and Tonata colleges of Education, which prepare teachers for junior secondary schools, and Tlokweng, Serowe, and Francistown colleges of Education which prepare teachers for junior secondary schools. The colleges offer three year diploma programs in secondary education (Mpowe, 2002). The University of Botswana's home economics curriculum offers courses in education to prepare home economics students to become teachers and extension courses for those who want to venture in other careers. The curriculum offers consumer education and consumer protection as two core courses.

Status of Teaching Resources

More than 90.0% of the teachers said instructional manual guides and study guides were useful and needed for consumer education. In Buckle, Strom, and Walstad's study (1984), 76.0% of the participants (teachers) rated guidelines on consumer and economic education as a very useful resource for teaching. Teacher and student guides are useful and helpful because they direct teachers and students on what to teach and study, respectively. For example, about half (47.0%) of the teachers reported a problem in determining the magnitude or amount of content to cover when teaching each of the consumer education objectives/ topics. If teachers had instructional/manual guides or teaching standards this problem will be alleviated.

Other teaching resources identified as needed to improve the quality of consumer education and enhancing students learning were reference books, teaching aids such as video tapes, pamphlets and posters, and relevant and current textbook(s) related to Botswana. Lack of access to computers and internet for consumer education students and access to the internet for teachers were other challenges. The results revealed that more than 81.0% of the teachers said they were no consumer education reference books in their school libraries. According to Afimikhe, Adenyika, and Peters (2001) a conducive learning environment is one with material resources that supplement what is being taught.

During the observation of the libraries, the researcher found that the 20 schools had libraries with reasonable study areas but very few consumer education reference books and teaching aids such as video tapes and brochures. Only four libraries had a few books with inadequate information on consumer education. As a result, teachers fend for

books to use and some teachers did not use any books because they did not know where to get consumer education books.

Similar results were found by Arua, Moanakwena, Rodgers, Tierney, and Lenters (2005) in their study of junior secondary schools in Botswana. Their study revealed that there was an acute shortage of new/recent and relevant books, computers, CD-ROMs, and DVDs in the libraries. Mpowe's study (2002) also found that there were no textbooks for arts education for students who were training to be teachers at Molepolole College of Education. It could be deduced that availability of teaching and learning materials are a great problem not only for consumer education but for other subject areas in most schools in Botswana. Teaching and learning resources in school libraries could help both teachers and students.

Due to lack of prescribed textbooks and the unavailability of consumer education books in schools' libraries, teachers used 14 different textbooks. According to the teachers' rating of the 14 textbooks, six were likely to be suitable for teaching consumer education because they were rated as either most, more, or moderately relevant in terms of content, appropriateness for students' level, comprehensive in details, adequate consumer education information, and up-to-date in terms of publication. Twenty-nine percent (29.0%) of 69 teachers borrowed textbooks from other disciplines such as commerce and business studies. The researcher could not comment about the recency of six textbooks because the publications dates were not indicated. The three textbooks with publication dates were published in 2002, 1997, and 1992. The rest of the textbooks which were used by a substantial number of teachers were less likely to be suitable for teaching consumer education based on the ratings as inadequate, less/least relevant,

outdated, and/or of lower level for senior secondary students. With no prescribed textbooks, students did not have textbooks for consumer education.

Literature revealed that lack of textbooks in Botswana schools was a major challenge not only to secondary schools but to primary/elementary schools as well. Due to the seriousness of the issue, the Minister of Local Government, Marget Nasha, said “shortage of books in the primary schools is a perennial problem. While students suffer due to lack of books, finger pointing and accusations by those responsible for ordering and delivering books continue as no one wants to take the blame” (Botswana Press Agency (BOPA), 2006). The Minister said three parties – Ministries of Local Government and of Education and councils (involved in the ordering and delivering of books) were to be blamed. However, books shortages at primary schools were associated with the two ministries handling book issues--the Ministry of Education and of Local Government which were responsible for prescribing and purchasing books respectively. The Minister said she was to discuss the issue with stakeholders and she suggested that the prescribing, budgeting, and purchasing of books for primary schools should be done by one Ministry. The other problem associated with shortage or lack of books in primary schools was lack of money due to budget cuts. When commenting on the books issue, the Minister of the Ministry of Education, Mr. Jacob Nkate, said he was having consultations with stakeholders and he was to inform the Vice President about the issue.

However, regardless of the cause of the problem and the different processes regarding prescribing and purchasing books, students do not have textbooks and this negatively impacts their learning hence the quality of education. It is pertinent that students should have a textbook for each subject taught. Lack of textbooks makes it very

difficult for students to study. This is a pathetic situation as some teachers expressed having difficulties in teaching the consumer education modules due to lack of textbooks. Unavailability of teaching resources is detrimental to students' learning due to lack of or inadequate information.

The researcher expected urban schools to be better off than rural schools regarding the use of community resources and availability of teaching and learning resources because of their proximity and exposure/access to resource and facilities such as National Libraries, Consumer Education offices, and others. This was not the case because no differences were found.

Availability of Computers and the Internet

Eighty-four percent of the teachers agreed that there were computer labs in their schools. The results concur with the results of the study conducted by Arua, et al. (2005) who found that both urban and rural secondary schools in Botswana had a remarkable number of computers. They said each of the six secondary schools examined had 20-50 computers for approximately 20 teachers and 550 students.

Botswana's *Vision 2016* stated that by year 2016, "all schools in Botswana will have access to computers and to computer based communications such as the internet" (Presidential Task Group, 1997). From the findings of the studies it is evident that Botswana's vision to provide all schools access to computers is being accomplished while the provision of access to the internet is lagging.

Although most of the schools have computer labs, some students do not have access to computers. Most of the teachers explained that home economics/consumer education students and other disciplines did not have access to computers or labs because

use was restricted to students enrolled in computer awareness classes. In other schools, students, other than those enrolled in computer awareness classes, had to make requests to use computer labs. Processing requests and computer phobia might discourage students from attempting to use computers.

The use of technology in teaching and learning is now a priority to secondary schools. Computers and the internet have repeatedly been suggested as a tool to improve instruction and learning (Schaumburg, 2001). Computers and internet use by teachers and students enhance educational experiences for students and allow teachers to assign more engaging activities in classes. The author further stated that several evaluations have shown that use of the internet helped to increase the amount of independent and collaborative learning. Instruction using the internet was also found to be more student-centered in many cases. Computers and internet use provide opportunities for information search and effective online resources to support teaching and learning which could be very helpful when there are no teaching resources as identified in this study. Computers and the internet allow teachers to use course software and create list serves for class discussions, and e-mail, which may make teaching and learning processes easier for both teachers and students.

The necessity of computer and internet use and skills for all students in secondary schools cannot be overemphasized because it is recognized locally and globally. For instance, Magetse (1997), as cited by Batane (2002), said then President of Botswana, Sir Ketumile Masire, said “we cannot survive in the ruthless competitive world today without harnessing science and technology. Only science led development will give us chance to become serious players in the international market” (p. 3). To benefit all

students in secondary schools, computers and the internet should be viewed as teaching tools whose use and literacy skills are needed by all students, not just a segment of students.

More than two-thirds of the teachers said that both teachers and students did not have access to the internet and this explains why a large number (76.3%) of teachers reported that they did not require students to use the internet for classroom activities. Lack of internet connection in Botswana senior secondary schools was also found to be a challenge (Arua, et al. 2005). The authors revealed that 58.0% of the teachers gave students computer related assignments and projects and 14-24% did not because they did not have access. They further noted that even though most schools had computers, without internet connections the use of computers in cross-curricular instruction for information search and internet communication between teachers and students and among students is stifled.

Information is the source of knowledge and if both teachers and students as revealed by the results do not have textbooks and access to other teaching and learning resources then knowledge in consumer education is limited and the quality of consumer education taught becomes questionable. We live in the information age where the use of technology is a necessity and a valuable source of information even in developing countries like Botswana. Since there was a problem with the availability of textbooks and other teaching resources, access to computers and the internet for consumer education students and teachers would provide sources of consumer education information and websites. In fact, consumer education websites were rated fourth – by about two-thirds of the teachers – as one of the essential tool to enhance student learning. Computer and

internet literacy are an added advantage for employment readiness hence it will be helpful for students to have the skills.

Although the internet is a source to retrieve information globally, teachers and students need to be cautioned that not all information is credible. Some of the information lacks credibility because anybody can create a website and disseminate information without meeting any standards or screening. It is crucial to provide orientation to both teachers and students on how to evaluate internet information and websites.

Although 20.0% of the teachers reported that they were unsure whether there were consumer education video tapes in their schools, 79.0% said there were no video tapes. The few teachers who said they sometimes used video tapes borrowed the tapes from the Consumer Education and Botswana Bureau of Standards offices. It is possible that a majority of teachers who said consumer education video tapes were not available did not know materials were available from community resources such as Consumer Education offices and others. Visual aids are effective tools for teaching and learning because what is seen is not easily forgotten compared to what is heard. Using consumer education video tapes is highly essential as a way of varying teaching methods and making the subject interesting to students. Not varying teaching methods was mentioned as one of the teachers' weaknesses in teaching consumer education. The availability and use of video tapes could turn this weakness to a strength.

Fifty-nine percent (59.0%) of the teachers reported that they rarely used or did not use consumer education posters and 11.0% said they did not use them because they were not available. Posters and pamphlets are effective teaching aids because most have visual images and basic information which is easy to read and understand. Usually, community

resources such as consumer education offices have supplies of handouts to distribute to the public and schools. Teachers could also assign students to produce posters and pamphlets and display them on classrooms' walls.

Using visual images and involving students in producing brochures and pamphlets is an effective strategy for learning. As stated by Pickard, DeBates, and Bell (2002) project activities allow students to generate their own content and construct their own knowledge. During the process of producing the product, students assess their work and make choices, hence it is not easy to forget the processes compared to when they are told about the processes if not involved in the production. The proverb used by Pickard, DeBates, and Bell (2002) to express the effectiveness of learning by doing is "tell me, I will forget. Show me, I may remember, Involve me, and I will understand" (p. 1).

Status of the Quality of Consumer Education

Issues of quality in education relate to improved curriculum, teacher training, infrastructure, and availability of teaching and learning resources including modern educational equipment such as computers and supportive managers and administrators (Ministry of Education, 2001). The quality indicators examined in this section include essentiality of objectives to students' learning, comprehensiveness of content, and teachers' competency.

Essentiality of Objectives to Students' Learning

A large number of teachers reported that the modules were meeting goals and objectives. The 12 objectives were rated as more essential for students learning by a substantial percentage of teachers. The researcher examined the objectives and found that

four of the objectives could be merged into two because the concepts were related. The objectives to be merged are:

1. To investigate different ways of purchasing goods and services, and to explain factors that influence selection of goods and services.
2. To discuss/investigate agencies/organizations available to redress consumer related problems, and
3. To discuss/explain measures to advocate for consumers.

The new or merged objective for the first pair could be To investigate different ways of purchasing and factors that influence selection of goods and services. The objective for the second pair could be To discuss agencies/organizations that protect consumers. Overall, the quality of consumer education was found to be good for the above mentioned indicators except for the comprehensiveness of the content.

Comprehensiveness of Content

Although most of the teachers rated the quality of consumer education as good, they were not certain whether consumer education content was sufficiently comprehensive to prepare students for work and family life. The researcher could not examine or give definitive explanation about the comprehensiveness of the content of consumer education modules because there is no inclusion of standards and content to be taught to achieve the objectives. However, during a casual discussion with the researcher, some teachers said due to lack of documentation of content they collaborate and compare notes so that they teach similar material for individual objectives/topics. Others said they taught what they thought was supposed to be taught. A similar situation existed in Wisconsin, USA, where teachers of family and consumer sciences education got

frustrated due to lack of unified family-focused content for consumer economics. This need resulted in the development of a curriculum resource guide that provided teachers with a conceptual framework accompanied by directed activities and assessment tools (Fabian, 2004).

To teach consumer education effectively, among other attributes, teachers should have content knowledge. Teachers' uncertainty of the comprehensiveness of content might be due to lack of standards and instructional guides for teachers. Standards, content outlines, and instructional guides would guide or specify the content to be covered to achieve each objective. As stated by Nikolay, Grady, Stenfonek, and Strom (1997) "academic standards address content, performance, and proficiency. They specify what students and teachers should know and be able to do" (p. vii).

As stated in the literature, the framework which was used to guide this study – the Idaho framework of Family and Consumer Sciences – provided valuable and relevant information and guidance on consumer education standards, competencies, concepts/content, etc. The framework is a good source for home economics teachers' use and appropriate to reshape the consumer education modules according to the identified challenges.

Teacher Competency

Teacher competency was cited in literature as one of the important education aspects leading to achievement of objectives (Bureau of adult basic and literacy education, 2006). Although the majority of the participants perceived themselves competent to teach each of the consumer education objectives/topics, this finding should be accepted with caution due to the subjectiveness of the responses.

Perception of one's competency is very subjective and being human, participants might have felt uncomfortable to say they were not competent to teach some of the objectives/topics. The fact that all teachers perceived themselves competent to teach each of the objectives/topics seems to confirm the researchers' assumption that some teachers might feel uncomfortable when rating their competencies.

The correlations of teacher competency and teachers' level of education were not significant. The reason for not obtaining significant results in each of the items tested for teacher competency and level of education might be the little variation in the level of teachers' education because most had BSc/BA/BED degrees.

Teachers' comments on strengths and weaknesses in teaching consumer education showed that some teachers were knowledgeable because besides being confident to teach consumer education, they felt they were able to explain consumer concepts well. They used daily experiences, gave life examples, and used back up materials such as leaflets and pamphlets.

As confidence to teach consumer education was identified as a strength, for others it was a weakness. Identified weaknesses were related to uncertainty with content, not providing learning experiences to students, and not engaging students in field/shop visits, for examples. Weaknesses related to uncertainty with content and limited use of teaching resources could be related to the need for more information on what and how to teach. Lack or having little background/training in consumer education was one of the weaknesses and could be improved through teachers' participation in consumer education workshops, conferences, and training.

Teacher preparation is one of the indicators of teacher competency and quality education. Institutions such as the University of Botswana and colleges of education are to be playing a leading role in teacher preparation or professional development by offering in-service programs that include consumer education. The vision of the Department of Home Economics Education of the University of Botswana is “to be a leading academic center of excellence in home economics teaching, research and services in Southern Africa Development Countries (SADC) and internationally (Mberengwa & Van der Merwe, 2004/2005, p. 5). According to Mooko (2004), the University’s vision acknowledges that the quality of education and life in general depend on the quality of the teachers in the classrooms. Although the University recognizes the importance of teachers in developing and empowering students to become effective citizens, apart from the academic programs, it does not have a regular induction program for novice teachers or to revitalize and sustain teachers’ competency skills. Professional development is the key to develop quality teachers (Haslam & Seremet, 2001).

Methods and Experiences Used

According to the findings, on average 75.0% of the teachers taught two modules (resource management and consumer education, and consumer education and food service business) from 2000 to 2006 compared to 56.0% who taught the consumer education and textile business module during the same period.

One teaching method is seldom used by itself. In a typical lesson, effective teachers usually use more than one method although the lecture method is the most common form of presentation (*Teaching Methods*, 2003). In this study the method used by a majority of teachers to teach each of the 12 objectives/topics was group discussion,

followed by using the chalk board and lecture. Guest speakers, flip charts, and overhead projectors and transparencies were either not used or used by very few teachers.

It is not easy to differentiate teaching using a chalkboard and lecturing because for emphasis, especially at secondary school level, teachers write on the board as they lecture and/or as students discuss. Secondary school students use notes to revise and prepare themselves for tests and examinations, therefore, lecturing and writing notes on the board help students to take notes.

According to *Teaching Methods* (2003) various studies indicated that student group tasks lead to “higher test scores, higher self esteem, improved social skills, and greater comprehension of the subject they were studying” (p. 9). Group discussion like experiential learning requires active participation of students in the learning process. Experiential learning is one of the very effective learning methods. Rodgers (n.d.) distinguished two types of learning, cognitive and experiential. According to his theory of learning, cognitive learning refers to academic knowledge and experiential learning refers to applied knowledge. Rodgers considers cognitive learning as meaningless and experiential learning as significant. He further said that experiential learning has overwhelming effects on learners because besides addressing the needs of the learners, it engages students and they can evaluate their learning. Unlike Rodgers, the researcher believes that both cognitive and experiential learning are significant because to apply, one should have cognitive knowledge.

One way of exposing students to real life situations in the marketplace is to give assignments and activities where they interact with the market and shop managers. A majority (78.0%) of the teachers said they did not engage students in activities requiring

interaction. Although many teachers did not directly assign activities where students interacted with shop managers, teachers said students interacted with shop managers independently when doing research assignments and individual projects.

About 50.0% of the teachers said they did not use community resources such as guest speakers to teach or share ideas with students. It would be beneficial to students if most teachers engaged community resources in the classroom. Guest speakers or resource persons from organizations or offices such as Consumer Education, Botswana Bureau of Standards, Weights and Measures, shop managers, and financial organizations have a wealth of information and experiences to share with students. They also provide students an opportunity to raise issues and questions which they may not raise with their teachers (*Consumer Education and Economics. Teacher's Manual*, 1990). Resource persons can answer and respond to students' consumer questions and concerns from a practical perspective. Guest speakers can also provide career information to students because they usually explain what their organizations do and how students can best make use of them.

Speakers from government organizations are a good source of posters, handouts, pamphlets, etc., which they give to students and schools during presentations. If teachers collaborated and invited guest speakers to classes they could receive consumer education materials and create their own departmental libraries or add to their schools' libraries or both. Invited guest speakers could show videotapes or produce and sell them to schools. One of the major tasks of the Consumer Education offices is to educate the public and schools on consumer issues and as such, is a valuable resource for consumer education in schools as long as the teachers liaise and collaborate with the officers.

The experiences used by a majority of the teachers to enhance students' learning for each of the consumer education objectives/topics were students' presentations, research, role plays, demonstrations, and stories. Students' presentations were used by a large number of teachers 57.0% to 77.0% followed by research. According to the literature, the National Examinations for Botswana senior secondary schools are based on three parts (Ministry of Education, 2003). That is, paper 1, which has three compulsory questions, paper 2, which is a classroom and laboratory based project paper, and paper 3, which is an individual research paper. It is realistic that students do presentations and research to prepare for writing papers 2 and 3 of their National Examinations. Although role play was used by few (11) teachers, it was used to teach the objective/topic lodging consumer complaints. Role play is a good simulation to teach this topic because it depicts the characters' behaviors and emotions when lodging or receiving a consumer complaint, hence students can learn about the best approach on how to lodge a consumer complaint.

Activities to Improve Students' Learning

Teachers identified five ways that could improve students' learning. They were field trips or shop visits, provision of consumer education textbooks to students, assigning students practical and research work, use of computers, and the internet. Learning is said to be improved when students understand and are able to apply what they have learned. For example, 53.0% of the teachers reported that after being taught about consumer decision making, students were expected to have good shopping, planning, and budgeting skills, and be able to prioritize needs. Forty-eight percent of the teachers said that students' projects reflected application of what they learned while 45.0% said they rarely applied what they learned.

The ways suggested to improve students' learning are pertinent because field trips or shop visits expose students to experiences that enable them to better understand and apply some of the theoretical aspects and concepts of consumer education. Field trips or shop visits and practical projects are part of experiential learning and a good opportunity for students to apply and demonstrate knowledge. The importance of computers, the internet, and textbooks was discussed in preceding sections.

Teachers Strengths and Weaknesses

Teachers perceived their strengths and weaknesses in teaching consumer education related to being knowledgeable and background/training in consumer education. Specifically, perceived strengths in teaching consumer education were that they were able to explain the concepts well, used daily experiences and knowledge, gave relevant and life examples, used back up materials, and had confidence in teaching. The ones who said they had background or training in consumer education could be the 12.0% of the teachers who said they majored in consumer education/ sciences and who reported that they did internships at the Consumer Education Unit when they were students. Also, as mentioned earlier, because consumer education is interdisciplinary they might have learned or applied consumer concepts in home economics classes as students since the majority majored in home economics. Consumer educators interact with the market and consume and utilize goods and services daily, therefore, they could use daily experiences and knowledge as some teachers mentioned as one of their strengths in teaching consumer education.

While having backgrounds or training and confidence in teaching consumer education were strengths to some teachers, other teachers identified having little or no

background or confidence as their weaknesses. The weaknesses include deciding the depth and scope of what to teach for given objectives/topics, and teaching the objectives/topics measures to advocate for consumers and agencies/organizations available to redress consumer related problems. Deficiencies in teaching the two objectives/topics imply that students taught by teachers who perceived these weaknesses may receive limited information. Difficulty in teaching these objectives/topics might be due to the newness of consumer education in Botswana coupled with lack of teaching resources.

Some teachers said they did not cover enough topics or content due to shortage of time and were not varying teaching methods and using community resources. Students have different learning styles, therefore, it is very important to vary teaching methods to embrace the diversity of students in a classroom.

Other weaknesses mentioned were teachers' failure to engage students in field trips/shop visits which they attributed to lack of funds. However, it should be noted that students in urban schools have advantages of choices and proximity to shops to visit for school activities. Those in rural schools have limited choices due to fewer shops compared to big villages and towns.

Participation in Professional Development Activities

Ninety-three percent of the teachers reported no consumer youth clubs in their schools and 95.0% agreed that having consumer youth clubs would enhance students' learning. Similarly, a study conducted by Peters and Makela (1994) revealed that few, 2.7% of 3,015, students in Botswana senior secondary schools were members of consumer youth clubs and a high portion (81.2%) were interested in becoming members

of consumer clubs. It is important that teachers encourage the formation of consumer clubs in their respective schools. As stated by Lerner (1993) the purpose of “consumer youth groups is to provide an opportunity outside of the school and home to bring youth together in order to develop specific subject matter knowledge and life skills” (p. 16). In other words, activities of consumer youth clubs complement or create an opportunity for accessibility of information and activities that may not have been gained either from school or at the family experiences. Like other consumer associations/organizations, members of consumer youth clubs can be good advocates for consumers at large. Formation of youth groups aligns with the responsibility of solidarity which refers to unity and action of consumers that promote and protect consumer interests.

Although a substantial number of teachers, 85.0%, agreed that participation in a consumer organization could enhance their knowledge and skills in consumer education, 98.0% of the teachers were not members of any consumer organizations and almost half did not read consumer related journals. Seventy-three percent of the teachers reported that they did not attend consumer education workshops or seminars from January 2000 to April 2006. Affiliation and participation in professional organizations related to one's profession contributes to professional development. The majority of the teachers stated that participation in consumer education training would enable them to teach consumer education more effectively. Professional organizations such as consumer and home economics associations hold annual conferences and workshops. These provide opportunities for individuals, educators, and professionals to interact, network, and share ideas and challenges that need to be addressed. Participation at such meetings enhances professional growth by directly sharing knowledge, skills, and experiences with other

professionals and provides an opportunity to get resources such as handouts and papers to enhance and update knowledge. Teachers can participate in regional and international conferences and workshops such as those organized by Regional Office of Africa (ROAF), based in Zimbabwe. As a member of consumer organizations one gets journals, materials, and information that are valuable for reference or teaching. Unfortunately, local organizations, such as Botswana Home Economics Association and Botswana Consumer Center for Advocacy, Research and Orientation, are currently dormant due to lack of active members. If teachers decide to be active members of local associations the two dormant associations could be revived. Teachers could affiliate with international consumer organizations such as American Association of Family and Consumer Sciences, International Federation of Home Economics, and others.

Consumer education workshops or training could help teachers to understand consumer education concepts and develop teaching activities for those concepts and teachers' instructional manual guides. For instance, results of an in-service training program on consumer and economic education in Indiana revealed that 89.0% of the teachers strongly agreed or agreed that the program improved their understanding of consumer and economics education concepts (Buckles, Strom, & Walstad (1984).

Workshops will also help teachers who indicated that they have little or no background/training in consumer education and those who mentioned that they lacked confidence in teaching some of the consumer education topics. The envisaged teacher training or development program should capitalize on the topics which teachers said should be covered for consumer education and teaching methods workshops or training.

The consumer education topics identified by teachers for consumer education workshops/seminars were:

1. Measures/organizations in place to protect or redress consumer problems
2. Consumer protection laws and regulations and consumer rights and responsibilities
3. Finance management, budgeting, and recordkeeping
4. Consumer behavior and factors that influence selection of goods and services
5. Business management, how to develop a business plan, and production of goods and services
6. How to form consumer organizations

Topics identified for sessions on teaching methods workshops were:

1. Computer and internet skills
2. Use portfolios for learning
3. Consumer education websites
4. Educational games

Tools for teaching methods provide skills that make educators effective teachers. As mentioned earlier, prioritization of topics will be done at a preliminary consumer education workshop to be held for teachers.

January, April, and August were identified as the best months to attend consumer education workshops. The months coincided with Botswana school holidays. From these dates, it could be deduced that three workshops could be held for teachers within a year. As there were 27 senior secondary schools countrywide and each school has an average

of five home economics/consumer education teachers, a group of 45 teachers could attend a workshop in any of the three months.

It is interesting to note that home economics/consumer education teachers in Botswana secondary schools indicated that they need workshop/training in protection laws and regulations and consumer rights and responsibilities. Similarly, primary and secondary teachers in North Ireland reported the most difficult consumer education topics to teach and learn were those dealing with legal requirements, and they reported that there was a significant need for teacher training in the same areas – consumer legislation and consumer rights (Edwards, 2002). The participants further reported that resources and advice in these areas were difficult to make interesting and engaging to students and they expressed lack of confidence that they had the most current information (Edwards, 2002). This partly explains why some of the home economics/ consumer education teachers in Botswana senior secondary schools reported that to teach the objective/topic “measures to advocate for consumers and agencies/organizations available to redress consumer related problems” was a weakness.

Topics and Tools for Inclusion in the Modules

Teachers were given a list of 13 consumer education topics to indicate the ones they wanted included or excluded in the revised consumer education modules. More than two-thirds of the teachers said that all the 13 topics (see Table 20 in Chapter IV) were to be included in the revision. Topics suggested for inclusion were also suggested by other studies. For instance, Louisiana secondary school Family and Consumer Science teachers and a group of consumers statewide suggested consumer decision making, consumer protection, and investment which is part of financial management (Good, 2002).

Botswana senior secondary school students suggested advertising, purchasing decisions (part of consumer decision making), credit and finance, and importance and characteristics of consumer organizations (Makela & Peters, 2004).

When the researcher examined the 12 objectives/topics for consumer education and the 13 suggested topics, three of the suggested topics overlap with the consumer education modules' objectives/topics which suggests that they may be covered, hence the expectation was that the response for those topics would be "exclude" since they are already covered. The three objectives/topics that overlapped with topics suggested for inclusion in the revised modules were:

1. To discuss factors that influence decision making. It is expected that before one talks about the factors, the concept of consumer decision making should be introduced.
2. To explain the importance/concept of consumer protection. Consumer protection relates to laws, regulations and agencies/organizations whose main functions are to promote and protect the interests of consumers and as such, they are components of consumer protection.
3. To investigate different ways of purchasing goods and services (e.g., credit, lay-by, hire purchase, credit cards, cash sales, etc.). It is expected that when teaching about different methods of purchasing goods and services one would also talk about the advantages and disadvantages of each method (credit cards/credit, etc.).

Lack of standards, instruction guides, and content outlines to guide teachers lead to the suggestions of topics that were already part of the consumer education modules' objectives/topics.

Although 10 of the 13 suggested topics fit with the modules' objectives, three of are topics of food and nutrition and fashion and fabrics. Discounting the three topics that were already covered reduces the suggested topics to seven. The seven topics fit within the objectives of resource management and consumer education, consumer education and food service business, and consumer education and textile business modules. Teachers reported that they were not covering enough topics due to time, and more time and reduction of the syllabus load would enable more effective teaching of consumer education. Adding seven more topics to the already overloaded syllabus may be impossible and it could jeopardize the quality of consumer education. The fact that all 12 objectives/topics were either rated as most or more essential complicates the issue because if some were rated less or least essential, they could be replaced with the new suggested topics. Integration of the suggested topics with the existing objectives might be a possibility. However, inclusion of these topics in the revision of the modules will be prioritized at the preliminary workshop held for selected teachers.

Often it is helpful for both teachers and students to have materials and tools to use for teaching and learning. All the 17 materials and tools that could be used to enhance students' learning were rated by 69.5 - 93.0% of the teachers as essential for inclusion in the revision of the modules (see Table 24 in Chapter IV). Decisions on whether to include all the suggested topics and tools in the revision will be discussed with teachers at the preliminary workshop.

Improvements to the Consumer Education Modules

Due to lack of teaching resources teachers made multiple suggestions to improve the quality of modules. Most of the activities suggested were duplication of the responses given to other items. Teachers suggested that:

1. Consumer education should have its own syllabus to be taught effectively.
2. There should be fewer learning objectives.
3. The topic production of goods and services should be phased out.
4. The use of technology for teaching should be encouraged
5. Consumer education should be introduced or taught to student teachers at Botswana colleges of education.
6. There should be teaching aids and up to date prescribed textbooks relating to Botswana
7. Funds should be provided to allow teachers to engage students in field trips/shop visits.
8. Teachers should be provided with guidelines and instructional materials on consumer education.
9. Teachers should teach other important consumer education concepts rather than depending on the examples provided for the learning objectives.
10. Teachers should plan together regionally and draw upon common skills.

In addition, it was suggested that teachers should have access to the internet, participate in consumer education workshops, have more time to teach consumer education, and do more research. The impact of these activities on teaching and learning are already discussed in other topics.

Prioritization of recommendations needs the input of home economics/consumer education teachers. It will be considered at the preliminary workshop that will be held in Botswana to discuss the summary results of the study and to develop an action plan.

Implications

Implications of the findings relate to: a) access to use computers and the internet for all secondary students, b) prescription and provision of teaching and learning resources c) teacher professional development, d) modification of the curriculum and the consumer education modules.

As indicated in the Botswana's policy documents, *Vision 2016*, (Presidential Task Force Group, 1997), the *National Development Plan 8* (Ministry of Finance and Development Planning, 1997), and *The Revised National Policy on Education* (Botswana Government, 1994), Botswana Government is committed to invest in quality education for her citizens. The government has made tremendous progress in providing structure and facilities to create conducive teaching and learning environments.

Although it is evident from empirical data that the government has almost accomplished the vision of providing computers to all secondary schools, connection to the internet is still lagging. The majority of teachers reported that both teachers and students did not have access to the internet. The use of computers and the internet as part of education and business cannot be avoided because most transactions, information searches, and communications are done electronically. It is therefore critical for the government to expedite internet connections in all secondary schools so that all graduates gain computer and internet literacy.

Prescription and provision of consumer education teaching and learning resources such as textbooks, instructional guides, video tapes, etc. were repeatedly identified as needs. Prescription of relevant and up-to-date textbook(s) and instructional guides produced in Africa or Botswana will not only be used for consumer education students but could be used as reference book (s) for other subjects. Lack of teaching and learning resources has negative implications on the quality of consumer education due to lack of sources of information for both teachers and students.

Quality teachers play an important role in the academic development of students. Knowledge is not static. To improve and maintain quality of teaching, teachers need professional development opportunities to improve, master, and reflect on current information and new approaches when teaching. Investing in the professional development of home economics/consumer education teachers is imperative for the improvement of the quality of consumer education and for the home economics curriculum as a whole.

The quality of any education program is determined by many factors including the quality of the curriculum in terms of content to achieve the goals and objectives and essentiality of objectives to students' learning. These factors affect student learning and performance and operate as a system where the malfunction of one affects others. The need to balance them to maximize efficiency and effectiveness of teaching and student learning is the challenge. Inclusion of objectives relating to current and future developments and emerging issues such as HIV/AIDS strengthens the quality of curriculums. The literature revealed that AIDS has created child headed families in Botswana and neighboring countries, making children responsible for their siblings and

decision makers for personal, family, financial, and material resources, and parenting roles. Emerging responsibilities for orphans due to AIDS has created a need to empower students with life and decision making skills to enable them to make informed and wise decisions as heads of families.

To improve the quality of the consumer education modules the researcher is not suggesting an overhaul of the home economics curriculum, but the modification of both the curriculum and the consumer education modules. The curriculum for colleges of education is also likely to be affected to accommodate an additional course(s) or content in consumer education. Extending consumer literacy to student teachers at the colleges will enhance and sustain competency in teaching consumer education.

Recommendations

After a program is developed and implemented it does not mean that is the end. The program has to be assessed regularly to ascertain if it suits the needs of its recipients as dictated by the environmental and developmental changes. It is imperative that we continue to develop and maintain quality consumer education programs in secondary schools in Botswana. To ensure quality program, a needs assessment has to be conducted to determine the gaps and apply corrective measures. Implementation of recommendations not based on needs assessment can have tremendous financial and emotional costs if they are imposed and as such might not necessarily address the program's and students' needs.

Although there is limited information and research on consumer education in Botswana, there is extensive research on the quality of education in secondary schools in Botswana from different perspectives. The common areas that were found to be

challenges by most of the studies including this one were lack of learning and teaching resources and library materials, use of computers and the internet in teaching and learning, and teacher professional development (Arua, et al., 2005; Batane, 2002; Mpowe, 2002). Lack of teaching resources such as textbooks needs immediate attention.

The recommendations from this study align with recommendations from other studies conducted in Botswana and other countries. For example, Arua et al. (2005) and Mpowe, (2002) in their studies conducted in Botswana secondary schools to examine the quality of literacy learning in content areas made the following recommendations:

1. All students should be taught computer and internet skills and that instead of limiting the teaching of computer skills to science teachers all teachers who have computer skills were to teach computer and internet skills.
2. In relation to the internet connections, the government of Botswana should advocate for special internet tariffs for secondary schools. They said the adoption of this strategy was already in practice in some schools in South Africa and would significantly improve the general use of computers and the internet in Botswana secondary schools.
3. The use of computers and internet should be introduced in Botswana colleges of education.

Ukpore (2006) recommended that consumer education in Nigeria secondary schools should be taught as a core subject because it is basic to living and it is a lifelong experience that could not be ignored. Based on the findings of this study and the literature, recommendations similar to the ones above are presented here.

Recommendations with asterisks are short-term and could be implemented in 2007.

Recommendations to Address the Challenges Affecting the Curricula are:

1. *The objectives ‘to investigate different ways of purchasing goods and services’ and ‘to explain factors that influence selection of goods and services’ should be combined and reworded. Also the objectives ‘to discuss/investigate agencies/organizations available to redress consumer problems’ and ‘discuss/explain measures in place to advocate for consumers in Botswana’ should be combined and reworded because the concepts are related.
2. Consumer education should have its own syllabus and be taught as a core subject at secondary schools and at Botswana colleges of education. In Nigeria “consumer education is a core course specified as a minimum standard for colleges of education and faculty of education” (Ukpore, 2006, p. 14). Although consumer education concepts are infused in most of subjects, teachers and students might not be aware/recognize or relate them to consumer education hence consumer education should be taught as a course(s).
3. Consumer education enhances the wellbeing of individuals and families and therefore, an objective (s) to empower and prepare students for their new roles due to AIDS pandemic needs to be integrated in the consumer education modules.

The projected increase of orphans in Botswana by year 2010 (*World Factbook Botswana*, 2002) and responsibilities discharged by orphans as heads of families justify the infusion of life and consumer decision making skills in curriculums to prepare

students to be competent heads of families capable of handling their role challenges efficiently and effectively. This recommendation concurs with the statement of the Permanent Secretary in the Ministry of Education, Festinah Bakwena, who said “Botswana's national curriculum needs to be reviewed and developed” (p. 1) to address issues such as HIV/AIDS to equip children with life skills to cope with new challenges they are faced with (Botswana Press Agency (BOPA), 2004).

Recommendations to Address the Challenges Relating to Teaching and Learning Resources are:

1. *Due to acute shortage of consumer education books and teaching aids, the Ministry of Education should provide libraries with a list of current and relevant books, video tapes and other teaching and learning resources to be ordered. The Ministry of Education should ensure that consumer education textbook(s) written in the context of consumer education in Africa, teacher’ instructional guides and students’ study guides be produced to guide teachers and students in teaching and learning activities. The Ministry of Education should ensure that equipment such as TV sets, DVDs, and overhead projectors are provided to each secondary school. To minimize costs these resources should be pooled for teachers and students presentations.
2. The Ministry of Education should ensure that all secondary school students regardless of their majors have access to use schools’ computer labs and all school computers have internet connections. Provision of access to the internet for teachers should be a high priority and they must

be oriented on how to effectively use the internet as a teaching and learning tool. The costs for internet connection should be included in the 2007/2008 budget. All school libraries should have reasonable numbers of computers with internet connections as a supplementary to computer labs and to allow students to do their school activities after school hours.

3. *Teachers should engage students in activities and projects that require use of computers, the internet, and interaction with consumers and shop managers. Teachers should encourage students to form consumer youth clubs in their schools.
4. The Ministry and schools should secure funds to support students' engagement in possible activities of youth groups as part of experiential learning activities.

Recommendations to Address Challenges Relating to Teacher Preparation and Professional Development are:

1. *The Ministry of Education should finance the preliminary workshop in which the researcher presents the summary of findings to selected teachers and an action plan for the implementation of the recommendations is developed.
2. *The Ministry in conjunction with the researcher and the University of Botswana should conduct subsequent consumer education workshops for home economics/consumer education teachers every year.
3. *Teachers should establish fruitful collaborations within and among other secondary school teachers. They should also collaborate and network with

consumer related government and non government agencies such as the Consumer Education offices to enhance their knowledge and skills in consumer education. School management and administration staff should provide moral and financial support for teachers' participation in professional development activities and collaboration initiatives. This should be an on-going effort. The Ministry of Education should secure funds to support teachers' professional growth and sustainability through participation in local and international consumer education workshops, conferences, and training.

Corcoran (1995) noted that policymakers have paid little attention to the quality of professional development. Lack of support, a sense of professional community, and staff development opportunities make it more difficult for teachers to learn and implement new techniques. To improve teacher competency, there should be an investment in teachers' development (Darling-Hammond, 2001).

Successful implementation of these recommendations will highly depend on support of the stakeholders, availability of funds, and the efforts and contributions of selected teachers in developing an action plan and getting input from other teachers. Implementation of these recommendations will not only release frustrations but improve the quality of consumer education modules and enhance students' learning.

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APPENDIXES

APPENDIX A

Sample Summary: Schools, Location, and Administration and Returns of Questionnaires

Sample Summary: Schools, Location, and Administration and Returns of Questionnaires

Schools	Teachers	Questionnaires administered	Questionnaires returned	Questionnaires not completed and unusable
	N	N	N	N
Rural				
1	5	5	5	0
2	5	5	4	1
3	4	4	4	0
4	6	6	6	0
5	4	4	4	0
6	4	4	4	0
7	5	5	4	1
8	4	4	4	0
9	6	6	6	0
10	5	5	5	0
11	6	6	3	3
12	6	6	5	1
13	4	4	4	0
14	4	4	2	2
Urban				
1	5	5	5	0
2	5	5	5	0
3	5	5	5	0
4	7	7	4	3
5	6	6	4	2
6	5	5	3	2
Total	101	101	86	15

APPENDIX B

Colorado Human Subjects Approval

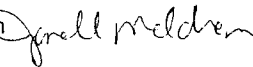


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Notice of Approval for Human Research

Principal Investigator: Carole Makela, School of Education, 1588
Co-Principal Investigator: Selinah Peters, School of Education, 1588

Title: Consumer Education Programs in Botswana
Protocol #: 05-308H Funding Source: N/A
Number approved: 120 participants
Committee Action: Approved on: November 7, 2005 Expires: November 7, 2006

HRC Administrator: Janell Meldreim 

Conditions of approval:

Letters of cooperation from each participating school must be obtained and submitted to the HRC prior to recruitment from the school.

A copy of the dissertation methodology must be submitted once available.

Consent Process:

Because of the nature of this research, it will not be necessary to obtain a signed consent form. However, all subjects must receive a copy of the approved cover letter printed on department letterhead. The requirement of documentation of a consent form is waived under § __.117(c)(2).

Investigator Responsibilities:

- It is the PI's responsibility to obtain this consent from all subjects.
- It is the responsibility of the PI to immediately inform the Committee of any serious complications, unexpected risks, or injuries resulting from this research.
- It is also the PI's responsibility to notify the Committee of any changes in experimental design, participant population, consent procedures or documents. This can be done with a memo describing the changes and submitting any altered documents.
- Students serving as Co-Principal Investigators must obtain PI approval for any changes prior to submitting the proposed changes to the HRC for review and approval.
- The PI is ultimately responsible for the conduct of the project.
- A status report of this project will be required within a 12-month period from the date of review. Renewal is the PI's responsibility, but as a courtesy, a reminder will be sent approximately two months before the protocol expires. The PI will be asked to report on the numbers of subjects who have participated this year and project-to-date, problems encountered, and provide a verifying copy of the consent form or cover letter used. The necessary continuation form (H-101) is available from the RCO web page www.research.colostate.edu/rcoweb/.
- Upon completion of the project, an H-101 should be submitted as a close-out report.
- If approval did not accompany a proposal when it was submitted to a sponsor, it is the PI's responsibility to provide the sponsor with the approval notice. This approval is issued under Colorado State University's OHRP Federal Wide Assurance 00000647.
- **Should the protocol not be renewed before expiration, all activities must cease until the protocol has been re-reviewed.**

Please direct any questions about the Committee's action on this project to me for routing to the Committee.

Additional information is available from the Regulatory Compliance web site at

<http://www.research.colostate.edu/rcoweb/>.

Attachment to PI & Co-PI

Date of Correspondence: 11/29/05

APPENDIX C

Botswana, Ministry of Education Human Subjects Approval

TELEPHONE: 3655400
TELEX: 2944 THUTO BD
FAX: 351624/3655458



REFERENCE: E 11/17 XXXVI((26)

REPUBLIC OF BOTSWANA

MINISTRY OF EDUCATION
PRIVATE BAG 005
GABORONE
BOTSWANA

28 December 2005

To: Ms Selinah Peters

RE: PERMISSION TO CONDUCT RESEARCH

We acknowledge receipt of your request to conduct a research that will

1. *assess the needs and explore consumer education programs(consumer education modules) as perceived by home economics teachers in senior secondary schools.*
2. *Provide theMinistry of Education with recommendations as the basis for refinement and revision of the consumer education modules*
3. *help teachers enhance their professional growth and strengthen their teaching and learning activities.*

You are granted permission to conduct your research entitled:

NEEDS ASSESSMENT FOR THE CONSUMER EDUCATION PROGRAMS IN BOTSWANA: PERCEPTIONS OF HOME ECONOMICS TEACHERS.

Please be reminded to submit a copy of your final report to the Ministry of Education, (Research Unit), University of Botswana(Research and Development office), Botswana National Library Service and Botswana National Archives and Records Services.

Thank you,

A handwritten signature in black ink, appearing to read 'M.L. Phiri'.

M.L. Phiri
For Permanent Secretary

APPENDIX D

Home Economics Teachers' Questionnaire

Consumer Education in Senior Secondary Schools in Botswana

Consumer education programs in this study refer to the three consumer education modules contained in each of the three Botswana General Certificate of Secondary Education Teaching Syllabi for home economics. The three modules are:

- Resource Management and Consumer Education
- Consumer Education and Food Service
- Consumer Education and Textile Business

Your responses are welcome and you are kindly asked to respond honestly to all the questions. For confidentiality and anonymity, you must not write your name on the questionnaire. Your participation and time to complete the questionnaire are highly appreciated.

Part 1: Consumer Education Modules

1. Which consumer education module(s) are you teaching or have you taught since 2000? Please tick each to indicate the one or the ones you are teaching or have taught.

	From 2000 – 2005		This school year	
Resource Management and Consumer Education	☐ Yes	☐ No	☐ Yes	☐ No
Consumer Education and Food Service	☐ Yes	☐ No	☐ Yes	☐ No
Consumer Education and Textile Business	☐ Yes	☐ No	☐ Yes	☐ No

2. How many years (including this year) have you been teaching the consumer education module(s)?

☐ 1 year ☐ 2 years ☐ 3 years ☐ 4 years ☐ 5 year ☐ 6 years ☐ More than 6 years

3. Does the consumer education module(s) you taught or have taught meet its goals and objectives?

☐ Yes ☐ No ☐ Not sure

4. Two important aspects of each of the consumer education modules are the objectives for students' learning **and** your competency in teaching each of the objectives. Please indicate how essential each of these specific objectives is for students in the first column **and** your competency level to teach the objectives in the second column. Circle the appropriate number in each column for each objective.

Objectives/Topics	(1) Essentiality of Objectives for Students					(2) Your Competency Level				
	Least Essential		Most Essential			Least Competent		Most Competent		
a) To explain the term consumerism	1	2	3	4	5	1	2	3	4	5
b) To explain the importance/ concept of consumer protection	1	2	3	4	5	1	2	3	4	5
c) To explain the importance of consumer education	1	2	3	4	5	1	2	3	4	5
d) To explain/discuss consumer rights and responsibilities	1	2	3	4	5	1	2	3	4	5
e) To investigate different ways of purchasing goods and services (e.g., credit, lay-by, hire purchase, credit cards, cash, etc.)	1	2	3	4	5	1	2	3	4	5
f) To explain factors that influence selection of goods and services (psychological, economical, social, and physical)	1	2	3	4	5	1	2	3	4	5
g) To discuss/investigate agencies/ organizations available to redress consumer related problems	1	2	3	4	5	1	2	3	4	5
h) To outline procedures for lodging consumer complaints	1	2	3	4	5	1	2	3	4	5
i) Differentiate between consumer, producer, goods, and services	1	2	3	4	5	1	2	3	4	5
j) Discuss factors which influence consumer decision making	1	2	3	4	5	1	2	3	4	5
k) Compare and discuss prices of food/textile products with reference to shopping facilities available (wholesale, departmental stores, etc.)	1	2	3	4	5	1	2	3	4	5
l) Discuss/explain measures in place to advocate for consumers (e.g. Botswana Bureau of Standards, Consumer Education Unit, etc.).	1	2	3	4	5	1	2	3	4	5
m) Your overall competence in teaching the objectives						1	2	3	4	5

Part 2: Teaching Consumer Education

5. Which method(s) do you use when teaching each of the consumer education objectives/topics? Please indicate by ticking all that apply to your teaching of each objective. For example, if you use both lecture and group discussion to explain the term consumerism, tick the appropriate **boxes** under lecture and group discussion.

Objectives/ Topics	Method(s)						
	Lecture	Black/ White board & chalk/markers	Group discussion	Overhead projector & transparencies	Guest speakers	Flip charts	Other. Please specify
To explain the term consumerism	☐	☐	☐	☐	☐	☐	
To explain the importance/concept of consumer protection	☐	☐	☐	☐	☐	☐	
To explain the importance of consumer education	☐	☐	☐	☐	☐	☐	
To explain/discuss consumer rights and responsibilities	☐	☐	☐	☐	☐	☐	
To investigate different ways of purchasing goods and services (e.g., credit, lay-by, hire purchase, credit cards, cash, etc.)	☐	☐	☐	☐	☐	☐	
To explain factors that influence selection of goods and services (Psychological, economical, social, and physical)	☐	☐	☐	☐	☐	☐	
To discuss/investigate agencies/ organizations available to redress consumer related problems	☐	☐	☐	☐	☐	☐	
To outline procedures for lodging consumer complaints	☐	☐	☐	☐	☐	☐	
Differentiate between consumer, producer, goods, and services	☐	☐	☐	☐	☐	☐	
Discuss factors which influence consumer decision making	☐	☐	☐	☐	☐	☐	
Compare and discuss prices of food/textile products with reference to shopping facilities available (wholesale, departmental stores, etc.)	☐	☐	☐	☐	☐	☐	

6. Which experiences are you using to enhance students' learning for each of the consumer education objectives/topics? Please indicate by ticking all that apply when you teach each of the objectives.

Objective/Topics	Experiences you use
a) To explain the term consumerism	☐ Projects ☐ Computers ☐ Internet ☐ Role play ☐ Demonstrations ☐ Student presentations ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
b) To explain the concept of consumer protection	☐ Projects ☐ Computers ☐ Internet ☐ Role play ☐ Demonstrations ☐ Student presentations ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
c) To explain the importance of consumer education	☐ Projects ☐ Computers ☐ Internet ☐ Role play ☐ Demonstrations ☐ Student presentations ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
d) To explain consumer rights and responsibilities	☐ Projects ☐ Computers ☐ Internet ☐ Role play ☐ Demonstrations ☐ Student presentations ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
e) To discuss/investigate different ways of purchasing goods and services (psychological, economical, etc.)	☐ Projects ☐ Computers ☐ Internet ☐ Role-play ☐ Demonstrations ☐ Student presentation ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
f) To explain factors that influence selection of goods and services (psychological, economical, social, and physical)	☐ Projects ☐ Computers ☐ Internet ☐ Role-play ☐ Demonstrations ☐ Student presentations ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one
g) To investigate agencies/ organizations available to redress consumer related problems	☐ Projects ☐ Computers ☐ Internet ☐ Role play ☐ Demonstrations ☐ Student presentation ☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates ☐ Educational games ☐ Field trips ☐ Shop visits ☐ Research ☐ Do not teach this one

h) To outline procedures for lodging consumer complaints

☐ Projects ☐ Computers ☐ Internet ☐ Role play
☐ Demonstrations ☐ Student presentation
☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates
☐ Educational games ☐ Field trips ☐ Shop visits
☐ Research ☐ Do not teach this one

i) Differentiate between consumer, producer, goods, and services.

☐ Projects ☐ Computers ☐ Internet ☐ Role play
☐ Demonstrations ☐ Student presentations
☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates
☐ Educational games ☐ Field trips ☐ Shop visits
☐ Research ☐ Do not teach this one

j) Discuss factors which influence consumer decision making

☐ Projects ☐ Computers ☐ Internet ☐ Role play
☐ Demonstrations ☐ Student presentations
☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates
☐ Educational games ☐ Field trips ☐ Shop visits
☐ Research ☐ Do not teach this one

k) Compare and discuss prices of food/textile products with reference to shopping facilities available (Wholesale, department stores, etc.)

☐ Projects ☐ Computers ☐ Internet ☐ Role play
☐ Demonstrations ☐ Student presentations
☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates
☐ Educational games ☐ Field trips ☐ Shop visits
☐ Research ☐ Do not teach this one

l) Discuss/explain measures in place to advocate for consumer education protection.

☐ Projects ☐ Computers ☐ Internet ☐ Role play
☐ Demonstrations ☐ Student presentations
☐ Student portfolio ☐ Panels ☐ Stories ☐ Debates
☐ Educational games ☐ Field trips ☐ Shop visits
☐ Research ☐ Do not teach this on

7. How much background do you have in the consumer education you are teaching? Please tick the appropriate box.

☐ a lot of background ☐ moderate ☐ little ☐ very little ☐ no background

8. Do you have any problem on deciding the magnitude (amount) of content to cover when teaching each of the consumer education objectives/topics?

☐ Yes ☐ No ☐ Not sure

9. What are your strengths in teaching the consumer education module (s)?

10. What are your weaknesses in teaching the consumer education module (s)?

11. What could enable you teach consumer education more effectively?

Part 3: Resources for Teaching Consumer Education

This section is to assess the availability of resource materials used or to be used in teaching consumer education modules. Currently there are no guides for students or instructional/manual guides for teachers for the consumer education modules.

12. Would student study guides be useful? ☐Yes ☐No ☐Not sure

13. Would instructional/manual guides for teachers be helpful for your teaching?

☐Yes ☐No ☐Not sure

14. Do you have any problems with the availability of consumer education reference books?

☐Yes ☐No

Please explain. _____

15. Are consumer education materials such as books, journals, and teaching aids available at your school's library? Please tick the appropriate box.

☐Most of them are available ☐Some are available ☐Very few are available ☐None are available ☐Not sure

16. Does your school have videotapes to use for consumer education?

☐Yes ☐No ☐Not sure

17. Is there a computer lab for students in your school? ☐Yes ☐No

18. Do you have access to the Internet to search for consumer education information?

☐Yes ☐No

19. Do your students have access to the Internet to search for consumer education information?

☐Yes ☐No

20. How often do you use each of these materials to teach consumer education?

- a) Posters ☐ Always ☐ Most of the time ☐ Rarely ☐ Never ☐ Not available
 b) Video tapes ☐ Always ☐ Most of the time ☐ Rarely ☐ Never ☐ Not available
 c) Handouts and pamphlets from the Consumer Education Unit ☐ Always ☐ Most of the time ☐ Rarely ☐ Never ☐ Not available

21. Which community resources do you use for teaching consumer education? Tick all that use or have used.

- ☐ The Consumer Education Unit Officers
☐ Shop Managers
☐ Health Inspectors
☐ Botswana Bureau of Standards Officials
☐ Weights and Measures Officials
☐ Guest Speakers
☐ Other community resources, please specify who/what _____
☐ None of these

22. List the two textbooks you use most for teaching Home Management and rate them in terms of the listed attributes. Rate them from 1 (least) to 5 (most). For example, if the relevancy of content of textbook (s) you listed has little consumer education you should rank it as (1) or (2) and so on.

Prescribed Textbooks for Home Management	Rating (1-5) least = 1; most = 5					Comments
	Relevancy of content	Comprehensiveness in details on the consumer education module(s)	Appropriateness of level for students	Adequacy of information for the consumer education you teach	Up to date	
Title, author, year of publication, & publishing company						
1.						
2.						

23. Are the textbooks you listed above available to students? ☐ Yes ☐ No

24. Is there a need for a new textbook(s) for consumer education? ☐ Yes ☐ No ☐ Not sure

Please explain. _____

25. Often it can be helpful to teachers to have materials and tools to use in teaching. This question is to determine the teaching tools that could be included with the consumer education modules to enhance students' learning. Please indicate the tools you want to be included for consumer education by rating each of them from most essential (5) to least essential (1). Please circle the number you rate.

Teaching Tools	Least essential			Most essential	
<u>For students</u>					
a) Test/Quiz questions	1	2	3	4	5
b) Paper and pencil activities	1	2	3	4	5
c) Hands on learning activities	1	2	3	4	5
d) Guides for comparing products (radios, shoes, etc.) and services (credit cards, lay-by, etc.).	1	2	3	4	5
e) Guides for assessing/evaluating accuracy and offers in advertising	1	2	3	4	5
f) Consumer youth clubs/organizations guides	1	2	3	4	5
g) Field trips guide	1	2	3	4	5
h) Consumer education websites lists	1	2	3	4	5
i) Discussion activities	1	2	3	4	5
j) Research and project ideas	1	2	3	4	5
k) Answer keys	1	2	3	4	5
l) Workbooks	1	2	3	4	5
m) Suggested readings	1	2	3	4	5
n) Other, please list _____					
<u>For you as a Teacher</u>					
o) Rubrics for evaluating learning	1	2	3	4	5
p) Guest speakers lists	1	2	3	4	5
q) Consumer education videos/films lists and sources	1	2	3	4	5
r) Reproducible masters that could be copied and distributed to students or used as transparencies	1	2	3	4	5
s) Other, please list _____					

Part 4: Content of Consumer Education

26. What consumer education topics would you want included in the revised consumer education modules? Please circle the appropriate number if topic should be included, excluded, or you are uncertain.

Topics	Include	Exclude	Uncertain
a) Consumer protection laws and regulations	1	2	3
b) Consumer decision-making	1	2	3
c) Advantages and disadvantages of credit cards/credit etc.	1	2	3
d) Shopping skills	1	2	3
e) Understanding and interpreting advertisements	1	2	3
f) Product labels and packages	1	2	3
g) Sustainable consumption	1	2	3
h) Impact of technology on consumers	1	2	3
i) Lifestyle and healthy eating habits	1	2	3
j) Lifestyle and fashion	1	2	3
k) Financial management	1	2	3
l) Consumer behavior	1	2	3
m) How to form consumer organizations/youth clubs in your school	1	2	3
n) Others to include. Please list _____			

27. Is the consumer education content you teach comprehensive enough to prepare students for work and family life? ☐ Yes ☐ No ☐ Not sure

28. Do students show as much interest in the consumer education content you are teaching as they do in other topics you teach? ☐ Yes ☐ No ☐ Not sure

29. How do you rate the quality of content of the consumer education module (s) you are teaching in relation to appropriateness to marketplace needs? Please indicate your response by ticking one of the boxes.

☐ Very good ☐ Good ☐ Poor ☐ Very Poor ☐ Don't know

30. What should be improved/changed in the consumer education modules' contents?

Please add suggestions that you feel would improve the quality of the consumer education modules. _____

Part 5: Students Learning Activities and Performance

31. Do you include activities where students interact directly with shop managers? ☐ Yes ☐ No

For what information or activities would students interact directly with shop managers?

32. How often do you require students to use the Internet for consumer education class activities?

☐ Daily ☐ Weekly ☐ Monthly ☐ Once per term ☐ Never

33. What skills are students expected to acquire from what you teach about consumer decision making? Please list _____

34. Do completed students' projects reflect that they are able to apply what they have learned?

☐ Always ☐ Most of the time ☐ Rarely ☐ Never

35. How could you improve the learning of your students? _____

36. Is there a consumer youth club in your school? ☐ Yes ☐ No

37. Would a consumer youth club in your school enhance students learning

☐ Yes, it would ☐ No, it wouldn't

Part 6: Professional Development/Teacher Learning

38. How many consumer education workshops/seminars have you attended since January 2000 (to date)? Indicate by ticking the number attended.

- ☐ none
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ more

39. What is the best month for you to attend a consumer education workshop? Please respond by indicating your 1st and 2nd choice from the listed months.

Jan. Feb. March April May June July Aug. Sep. Oct. Nov. Dec.

1st choice _____

2nd choice _____

40. List the consumer education workshop topics that would broaden and add to your knowledge?

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

41. List the teaching workshops that would broaden and add to your teaching competence, for example, using the internet, portfolios as learning tools, etc.

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

42. Are you a member of any consumer organization? ☐ Yes ☐ No

If yes, list the consumer organization (s) you belong to.

- a) _____
- b) _____
- c) _____

For questions 43 through 46 respond by ticking the appropriate boxes.

43. Do you believe that participation in a consumer organization can enhance your knowledge and skills in consumer education? ☐ Yes ☐ No ☐ Not sure

44. How often do you read consumer related professional journals?

☐ Weekly ☐ Monthly ☐ Each term ☐ Yearly ☐ Never

45. How often do you liaise with the Consumer Education/Protection Unit officers?

☐ Weekly ☐ Monthly ☐ Each term ☐ Yearly ☐ Never

46. How often do you collaborate with other home economics teachers in your school or other schools to discuss or share resources for the teaching of the consumer education modules?

☐ Weekly ☐ Monthly ☐ Each term ☐ Yearly ☐ Never

Part 7: Demographic

47. What is your highest level of education?

☐MSc./ MA ☐BSc./BA ☐Diploma ☐Certificate

48. What was your major?

☐Education ☐Home Economics ☐Consumer Education/Sciences ☐Other. Please
specify _____

49. Please indicate the location of your school. ☐Rural ☐Urban

50. Are you ☐Male ☐Female?

Is there other consumer education information you want to share? Please write your comments on the space provided.

Thank You

APPENDIX E

Observation Worksheet for Classroom Learning Environment

**Observation Worksheet for Home Economics/Consumer Education Classroom
Learning Environment for Senior Secondary Schools in Botswana**

Respond by ticking the appropriate boxes and giving comments on the provided space if necessary.

School Particulars

School # _____

☐ Rural

☐ Urban

Features to be Observed

Home Economics Classroom

Ventilation and windows

1. Temperature

☐ Moderate ☐ Hot

☐ Cold

2. Number of windows

Number _____

Comments _____

Furniture Arrangement

3. Are chairs and desks flexible for group as well as individual work/ space surface for project work by students?

☐ Movable ☐ Fixed

☐ Crowded

4. Overall room arrangement is pleasant for learning

☐ Yes

☐ No

☐ Not certain

5. Location of classroom, is in

☐ Quite area

☐ Noisy area

☐ Cannot tell

Comments _____

Display

6. Are there posters/graphics/artifacts on the walls?

☐ Yes

☐ No

☐ Not available

7. Posters/graphics/artifacts on walls include consumer related materials/posters

☐ Yes

☐ No

☐ Not available

8. Bulletin boards include consumer related messages, materials/pamphlets and posters

☐ Yes

☐ No

☐ Not available

9. Space for displaying students' work/products

☐ Yes

☐ No

10. Space to store consumer education materials, students' projects in process, etc.

☐ Yes

☐ No

11. Other observations/first impression about the classroom _____

Comments _____

Teaching Aids

12. Televisions are available

☐ Yes

☐ No

13. Video tapes on consumer education

☐ Yes

☐ No

14. Overhead transparencies and projectors

☐ Yes

☐ No

15. Computers with Internet access are available for students

☐ Yes

☐ No

☐ Int. access

☐ No Int. access

16. Location of computers

☐ Classroom

☐ Computer lab

17. Are there printers hooked to the computers

☐ Yes

☐ No

18. Is there a computer (s) in individual teacher's office or do they share?

☐ Yes

☐ Sharing

☐ No computer

Comments _____

Writing Boards

19. Type and condition of boards ☐ White boards ☐ Black boards
☐ Good ☐ Poor ☐ Needs replacement
20. Size of the boards ☐ Big ☐ Small ☐ Too small
21. Placed where all students can see ☐ Yes ☐ No

Comments _____

Libraries

22. Does the school have a library ☐ Yes ☐ No
23. Availability of consumer education
 Materials, and size of collection ☐ Reasonable ☐ Very few ☐ Un available
24. Availability of non book consumer
 education materials (videos, brochures, etc.)
 and size of collection ☐ Reasonable ☐ very few ☐ Un available
25. Study area ☐ Reasonable space ☐ Crowded

Comments _____

APPENDIX F

Letter to School Principals

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

October 25, 2005

Dear Sir/Madam

I am a lecturer at the University of Botswana and currently a Ph. D. candidate at Colorado State University in the United States of America. I am conducting research for my dissertation titled "Consumer Education Program in Senior Secondary Schools: Botswana".

Since consumer education has been recently (2002) introduced in senior secondary schools and consumerism itself is a relatively new in Botswana, it is timely to conduct a study to determine the needs and explore the quality of consumer education at senior secondary schools.

The findings of the study will provide feedback as to what needs to be improved in the program (consumer education modules) to better equip students with consumer knowledge and skills that:

- enable them to function effectively in real life situations and the world of work
- are needed for their interaction with the market and determine teachers':
- training needs in consumer issues
- preparation and competency in teaching the consumer education topics

Your school was randomly selected to participate in the study. If your school is willing to participate, you are kindly requested to give the enclosed package to the Head of the Home Economics Department (HOD). The package contains a letter informing the HOD about the study and requesting the HOD to pass the letters in the package to each home economics teacher. Letters to home economics teachers inform them about the intent of the study and request their participation in completing the questionnaires to be administered by the researcher and research assistant in January 2006.

It will take teachers about 20 to 25 minutes to complete the questionnaires. Completion of questionnaires is voluntary. Participants can withdraw participation any time without any punitive measures. For confidentiality, questionnaire responses will be anonymous and teachers' names will not be revealed anywhere in the study. Names of schools will only be mentioned to indicate the selected schools, otherwise schools will be referred to as either rural or urban. No information or data will be associated with the name of a school.

For research ethics purposes, permission to conduct this research will be obtained from the Ministry of Education in Botswana and Colorado State University Human Research Committee.

Colorado State University Regulatory Compliance requires that we receive a letter of cooperation from your school with an original signature from an individual qualified to obligate your school using your school's letterhead. To meet this requirement, a draft letter is enclosed for your use in preparing this letter of cooperation.

Your school's participation in my study will be highly appreciated. If you have questions or concerns please feel free to contact me. I am looking forward to working with you and receiving your response on or before December 18, 2005. I will be in Botswana in January 2006 collecting data therefore, correspondence should be addressed to my home mailing address.

Selinah Peters
Box 70282, Gaborone, Botswana
e-mail address: speters@lamar.colostate.edu
Phone number: (970) 492-9233

Dr. Carole J. Makela
e-mail address: Makela@CAHS.Colostate.edu
Phone number: (970) 491-5141

APPENDIX G

Sample Letter of Principal's Agreement for Participation of School

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

*Sample letter of agreement for participation of school.
Please put this letter on your school's letterhead.
Address the letter to:*

Box 70282, Gaborone
Botswana

Date

Dear Selinah Peters,

I have read the letter regarding your research project entitled. "Consumer Education Program in Senior Secondary Schools: Botswana". Our school is willing to participate in this project.

I understand that I am to give the package enclosed in my letter to the Head of the Home Economics Department. I understand that the names of teachers will not be revealed anywhere in the study and that the school's name will only be mentioned to indicate the selected schools, otherwise schools will be referred to as either rural or urban. I also understand that either the researcher or the research assistant will come to our school in January, 2006 to administer the questionnaires to home economics teachers.

I understand the project and am comfortable that participants are adequately protected and individual teachers may chose to or not to participate. I am authorized to volunteer our school's participation in this study.

Signature:

Title:

Please enclose this letter in the addressed and stamped envelope and mail it.

APPENDIX H

Letter to Heads of Home Economics Department

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

October 25, 2005

Dear Sir/Madam

I am a lecturer at the University of Botswana and currently a Ph. D. candidate at Colorado State University in the United States of America. I am conducting research for my dissertation titled "Consumer Education Program in Senior Secondary Schools: Botswana".

Since consumer education has been recently (2002) introduced in senior secondary schools and consumerism is relatively new in Botswana, it timely to conduct a study to determine the needs and explore the quality of consumer education program (consumer education modules).

The findings of the study will provide feedback as to what needs to be improved for consumer education modules to effectively equip students with consumer knowledge and skills needed for their interaction with the market and to function in real life situations and the world of work. Teachers' training needs in consumer issues and preparation and competency in teaching the consumer education topics will be explored.

You and other home economics teachers play an important role in the learning process of students. Teachers are familiar with the program content, interact with students and assess their performance. They can also use their perceptions to assess the strengths and weaknesses of a program. You are therefore, in an important position to give your perceptions about the consumer education modules.

I am kindly requesting you to give the letters enclosed in your package to all the home economics teachers in your school. The letters are requesting the teachers to participate in the study by completing questionnaires which will be administered to them in January 2006 by the researcher or the research assistant.

Thank you

Selinah Peters

Carole J. Makela

APPENDIX I

Letter to Participants (Intent to conduct a study)

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

October 25, 2005

Dear Sir/Madam

I am a lecturer at the University of Botswana and currently a Ph. D. candidate at Colorado State University in the United States of America. I am conducting research for my dissertation titled "Consumer Education Program in Senior Secondary Schools: Botswana". This letter is an invitation and pre-notification of your opportunity to participate in the study.

The purpose of the study is to determine the needs and explore the quality of the consumer education program (consumer education modules) in senior secondary schools. Teachers play an important role in the learning process of students. Teachers are familiar with the program content, interact with students and assess their performance. They can also use their perceptions to assess the strengths and weaknesses of a program. You are therefore, in an important position to give your perceptions about the consumer education modules.

The findings and recommendations from the study will provide feedback as to what needs to be improved for the consumer education modules to equip students with consumer knowledge and skills needed for their interaction with the market and to function effectively in real life situations and the world of work.

Your training needs in consumer issues and preparation and competency in teaching the consumer education topics will be explored.

I am therefore, kindly requesting your participation by completing the questionnaire that will be personally administered to you by the researcher or research assistant in January, 2006 at your school.

It will take about 20 to 25 minutes to complete the questionnaire. The questionnaire will be anonymous and your name will not be revealed anywhere in the study. Schools' names will only be mentioned to indicate the selected schools, otherwise schools will be referred to as either rural or urban. No information or data will be associated with the name of a school. There are no known risk(s) that will occur as a result of your participation in the study.

Your participation in the study will be highly appreciated.

Thank you

Selinah Peters

Carole J. Makela

APPENDIX J

Cover Letter to Participants



Knowledge to Go Places

School of Education
1588 Campus Delivery
Fort Collins, Colorado 80523-1588

March 10, 2006

Dear Home Economics Teacher,

I am a lecturer at the University of Botswana and currently a Ph. D. candidate at Colorado State University in the United. I am conducting research for my dissertation titled "Consumer Education in Senior Secondary Schools in Botswana: Perceptions of Home Economics Teachers".

The purpose of the study is to assess the needs and explore the quality of the home economics education modules and learning related activities. As a teacher, you are familiar with the program content, interact with students and assess their performance. Your perceptions to assess the strengths and weaknesses of the consumer education modules are valuable. Further, the purpose is to obtain feedback to enhance students learning. Your sincere responses to the questionnaire will lead to valued and effective recommendations for the improvement of consumer education and students' learning.

The study's findings and recommendations will provide feedback to revise and develop the consumer education modules to equip students with consumer knowledge and skills to function effectively in real life situations, in the marketplace, and in the world of work. Findings should provide opportunities for professional development and training in consumer education and for you and your home economics colleagues, and guide the University of Botswana in preparing new home economics teachers.

I, therefore, kindly requesting your participation by completing the attached questionnaire after reading this letter. It will take 20 to 25 minutes to complete. You need not write your name on the questionnaire and your name will not be revealed anywhere in the study. Please be honest and thorough in your responses.

There are no known risk(s) that will occur as a result of your participation in this study. It is not possible to identify all potential risks in research procedures, but the researchers have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

There are no direct benefits. In the future it is hoped that home economics teachers will use the findings to build on the identified strengths and address challenges of the consumer education modules. Your participation in this research is voluntary. If you decide not to participate, you may withdraw and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. Question about participation or participants' rights may be directed to Janell Meldrem at (970) 491-1655.

Thank you

Selinah Peters

Carole J. Makela

APPENDIX K

Textbook Assessment

Textbook Assessment

Books and Dates	Teachers' Rating of Textbooks										
	Teach- ers	Appropriateness		Recency		Relevancy		Comprehen- siveness		Adequacy	
	N	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<i>Home Management for Secondary School</i> (1987)	21	2.38	1.284	2.00	1.414	1.95	1.203	1.86	1.062	1.67	.856
<i>Modern Home Economics 9 & 10</i> (1987)	13	2.92	.000	1.92	1.311	2.31	1.251	2.08	.954	2.23	1.013
<i>Commerce: A Complete Course 4th ed.</i> (1997)	10	4.30	.675	4.70	.675	4.50	.527	4.40	.516	4.10	.999
<i>Modern Home Economics Standard 8</i> (date not indicated)	10	2.40	1.506	1.75	1.488	2.00	1.633	2.10	1.449	1.80	1.033
<i>Get Living</i> (date not indicated)	8	3.75	1.165	3.63	1.061	3.25	1.035	3.25	.886	3.50	1.195
<i>The Home Economist</i> (1992)	7	4.29	.951	4.00	.816	3.57	.787	4.00	.816	4.14	.900
<i>Modern Home Economics 12</i> (2001)	4	3.00	.000	2.00	1.00	2.25	1.500	2.50	.577	2.50	.577
<i>GCSE Business</i> (date not indicated)	3	4.00	.000	4.00	.000	3.67	.577	4.00	.000	3.33	1.155

Textbook Assessment (Cont.)

Books and Dates	Teachers' Rating of Textbooks										
	Teach- ers	Appropriateness		Recency		Relevancy		Comprehen- siveness		Adequacy	
	N	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<i>Active Home Economics Standard 8 & 10</i> (date not indicated)	2	4.50	.707	4.00	.000	4.00	.000	4.50	.707	4.50	.707
<i>Home Management</i> (1992)	2	1.00	.000	1.50	.707	1.00	.000	1.00	.000	1.00	.000
<i>Junior Secondary School Home Economics</i> (date not indicated)	2	2.50	.707	2.00	1.414	4.00	.000	4.00	1.414	2.00	1.41 4
<i>Commerce Skills</i> (date not indicated)	1	3.00	NR	3.00	NR	3.00	NR	3.00	NR	3.00	NR
<i>Life Skills</i> (1987)	1	2.00	NR	NR	NR	2.00	NR	3.00	NR	4.00	NR
<i>Home Management: A Fresh Approach</i> (1981)	1	5.00	NR	3.00	NR	2.00	NR	NR	NR	NR	NR

Key: NR = No Response.

APPENDIX L

Matrix Showing Data Analysis

Matrix Showing Data Analysis

Research questions	Questionnaire items and #	Values and Labels	Statistics to be used	Notes
RQ 1. What are the teachers' perceptions in relation to the needs of the consumer education modules?	Would study guides be useful for students? (12)	2 = yes 0 = no 1 = not sure	Descriptive	Questions 12-15, 17-19, 22-24 were to explore the needs of the consumer education modules. Frequencies, means, and standard deviations were computed for all the questionnaire items under RQ 1.
	Instructional/manual guides for teachers would be helpful for your teaching? (13)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
	Do you have any problems with the availability of consumer education reference books? (14). Please explain.	1 = yes 0 = no Open-ended. Themes and selective coding were used to categorize responses.	Descriptive	Frequencies, means, and standard deviations were computed
	Are the consumer education materials such as books, journals, and teaching aids available at libraries? (15)	1 = most of them are available 2 = very few are available 3 = none are available 4 = not sure	Descriptive	Frequencies, means, and standard deviations were computed

Does your school have videotapes on consumer education? (16)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
Is there a computer lab for students in your school? (17)	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
Do you have access to the internet? (18)	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
Do your students have access to internet?	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
Listing and rating of two textbooks used for teaching Home Management, rating attribute in terms of relevancy, comprehensiveness in details, appropriateness of level for students, adequacy of information for the topic taught, and recency of textbooks (22)	1 = least relevant 2 = less relevant 3 = relevant 4 = more relevant 5 = most relevant	Descriptive	Frequencies, means, and standard deviations were computed
Are the textbooks you listed above available to students? (23)	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
Is there a need for a new textbook(s) for consume education? (24)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed

RQ 2. What are the teachers' perceptions in relation to the quality of the consumer education modules?	Which consumer education module(s) are you teaching or have taught since 2000? (1) a) Taught resource management and consumer education b) Taught consumer education and food service business c) Taught consumer education and textile business.	0 = no 1 = yes	Descriptive	Questions 1, 3-6, 8-11, 20, 21, 25- 46 were to explore the quality of consumer education modules as perceived by teachers. Frequencies, means, and standard deviations were computed for all the question items under RQ 2.
	Does the consumer education module(s) you teach or have taught meet its goals and goals and objectives? (3)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
	Indicate how essential each of these 12 specific objectives is to students and your competency level in teaching each of them (4). To: a) Explain the term consumerism b) Explain the importance/concept of consumer protection c) Explain the importance of consumer education d) Explain/discuss consumer rights and responsibilities e) Investigate different ways of purchasing goods and services (e.g.,	1 = least essential 2 = less essential 3 = essential 4 = more essential 5 = most essential 1 = least competent 2 = less competent 3 = competent 4 = more competent 5 = most competent	Descriptive	Frequencies, means, and standard deviations were computed

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- credit, lay-by, hire purchase, credit cards, cash, etc.)
- f) Explain factors that influence selection of goods and services (psychological, economical, social, and physical)
 - g) Discuss/investigate agencies/ organizations available to redress consumer related problems
 - h) Outline procedures for lodging consumer complaints
 - i) Differentiate between consumer, producer, goods and services
 - j) Discuss factors which influence consumer decision making
 - k) Compare and discuss prices of food/textile products with reference to shopping facilities available (wholesale, departmental stores, etc.)
 - l) Discuss/explain measures in place to advocate consumer protection (e.g. Botswana Bureau of Standards, Consumer Education Unit, etc.)
 - m) Your overall competence in teaching the objectives/topics
-

Which method(s) do you use when teaching specific consumer education objectives/topics? (5). a) use lecture b) black/white chalk board c) group discussion d) overhead projector and transparencies e) guest speakers f) flip charts g) others	0 = no 1 = yes	Descriptive	Frequencies, means, and standard deviations were computed
Which experiences are you using to enhance students' learning for each of the consumer education objectives/topics? (6). a) projects b) computers c) internet d) role-play e) demonstrations f) student portfolios g) student presentations h) panels i) stories j) debates k) educational games l) field trips m) shop visits n) research o) don't teach this one.	0 = no 1 = yes	Descriptive	Frequencies, means, and standard deviations were computed
What could enable you teach consumer education more effectively? (11)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed

Do you have any problem on deciding the magnitude of the content to cover when teaching each of the consumer education specific objectives/topics? (8)	2 =yes 0= no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
What are your strengths in teaching the consumer education module (s)? (9)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
What are your weaknesses in teaching the consumer education module (s)? (10)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
What could enable you teach consumer education more effectively? (11)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
How often do you use these materials to teach consumer education? (20)	4 = always 3 = most of the time 2 = rarely 1 = never 0 = not available	Descriptive	Frequencies, means, and standard deviations were computed
a) Handouts and pamphlets from the Consumer Education Unit			
b) Posters			
c) Consumer education video tapes			
Which community resource used for teaching consumer education modules? (21)	1 = The Consumer Education Unit Officers 2 = Shop managers 3 = Health Inspectors 4 = Botswana Bureau of Standards officials 5 = Weights and Measures Officials 6 = guest speakers 7 = Others 8 = none of these	Descriptive	Frequencies, means, and standard deviations were computed

Rate each of the teaching tools you want to be included for the consumer education module. The tools are test/quiz, student o paper pencil activities, guides for comparing product, guides for assessing accuracy and offers in advertisement, etc. (25)	1 = least essential 2 = less essential 3 = essential 4 = more essential 5 = most essential	Descriptive	Frequencies, means, and standard deviations were computed
Which consumer education topics not currently taught would you want to be include in the revised consumer education modules? (26)	2 = include 0 = exclude 1 = uncertain	Descriptive	Frequencies, means, and standard deviations were computed
a) consumer protection laws regulations			
b) consumer decision-making			
c) advantages and disadvantages of credit cards/credit etc.			
d) shopping skills			
e) understanding and interpreting advertisements			
f) product labels and packages			
g) sustainable consumption			
h) impact of technology on consumers			
i) lifestyle and healthy eating habits			
j) lifestyle and fashion			
k) financial management			
l) consumer behavior			
m) how to form consumer organizations/youth clubs			
n) others to include			

Is the consumer education content you teach comprehensive enough to prepare students for work and family life? (27)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
Do students show as much interest in the consumer education content you are teaching in comparison to other topics? (28)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
How do you rate the quality of content of the consumer education module(s) you are teaching in relation to appropriateness to the marketplace needs? (29)	4 = very good 3 = good 2 = poor 1 = very poor 0 = don't know	Descriptive	Frequencies, means, and standard deviations were computed
What should be improved/changed in the consumer education module(s) contents? Please add comments that you feel would add value to the quality of the consumer education modules. (30)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
Do you include activities where students interact directly with shop managers (31)?	0 = no 1 = yes Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
For what information or activities do students interact directly with shop managers?			
How often do you require students to use the internet for consumer education class activities? (32)	4 = daily 3 = weekly 2 = monthly 1 = once per term 0 = never	Descriptive	Frequencies, means, and standard deviations were computed

What skills are students expected to acquire after you teach them about consumer decision making? (33)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
Do completed students' projects reflect that they are able to apply what they have learned? (34)	3 = always 2 = most of the time 1 = rarely 0 = never	Descriptive	Frequencies, means, and standard deviations were computed
How could you improve the learning of your student? (35)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
Is there a consumer youth club in your school? (36)	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
Would a consumer youth club in your school enhance students' learning? (37)	1 = yes 0 = no	Descriptive	Frequencies, means, and standard deviations were computed
How many consumer education workshops/seminars you attend since January 2000 to date? (38)	0 = none 1 = 1-2 2 = 3-4 3 = 5-6 4 = more	Descriptive	Frequencies, means, and standard deviations were computed
What is the best month for you to attend a consumer education workshop? (39)	1 = 1 st choice 2 = 2 nd choice	Descriptive	Frequencies, means, and standard deviations were computed
List the consumer education workshop topics that would broaden and add to your knowledge. (40)	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed

List the teaching workshops' topics that would broaden and add to your teaching competence. (41).	Open-ended. Was analyzed using themes and selective coding	Descriptive	Frequencies, means, and standard deviations were computed
Are you a member of any consumer organization? (42).	0 = no 1 = yes	Descriptive	Frequencies, means, and standard deviations were computed
Participation in a consumer organization can enhance your knowledge and skills in consumer education? (43)	2 = yes 0 = no 1 = not sure	Descriptive	Frequencies, means, and standard deviations were computed
How often do you read consumer related professional journals? (44)	4 = weekly 3 = monthly 2 = each term 1 = yearly 0 = never	Descriptive	Frequencies, means, and standard deviations were computed
How often do you liaise with the Consumer Education/Protection Unit officers? (45)	4 = weekly 3 = monthly 2 = each term 1 = yearly 0 = never	Descriptive	Frequencies, means, and standard deviations were computed
How often do you collaborate with other home economics teachers to discuss or share resources for the teaching of the consumer education modules? (46)	4 = weekly 3 = monthly 2 = each term 1 = yearly 0 = never	Descriptive	Frequencies, means, and standard deviations were computed

Years you have been teaching the consumer education module(s)? (2)	1 = 1 year 2 = 2 years 3 = 3 years 4 = 4 years 5 = 5 tears 6 = 6 years 7 = more than 6 years	Descriptive	Frequencies, means, and standard deviations were computed
How much background do you have in consumer education topics you are teaching? (7)	4 = a lot of background 3 = moderate 2 = little 1 = very little 0 = no background	Descriptive	Frequencies, means, and standard deviations were computed
What is your highest level of education? (47)	4 = MSc./ MA 3 = BSc./BA 2 = Diploma 1 = Certificate	Descriptive	Frequencies, means, and standard deviations were computed
What was your major? (48)	1 = Education 2 = Home Economics 3 = Consumer Education/Sciences 5 = Other	Descriptive	Frequencies, means, and standard deviations were computed
Location of your school (49)	1 = Rural 2 = Urban		
Male or female? (50)	2 = Male 1 = Female		

RQ 3. Are there differences in the availability of resources for teaching consumer education modules between teachers who teach at urban and rural schools?	Availability of resource materials used or to be used in teaching consumer education modules (Qs 15-19) and location of schools (Q 49)	Values and labels for question items are already indicated under RQ 1 and 2, questionnaire items 15-19, and 49.	Difference inferential statistics	Chi-square and Mann-Whitney U tests were computed to determine whether there were significant differences in the availability of teaching and learning resources between urban and rural schools.
RQ 4. Are there association in teachers competency in teaching the 12 consumer education objectives/topics and their level of education?	Competency level in teaching each of the objectives/topics (Q 4) and highest level of education (Q 47)	Values and labels for question items are already indicated under RQ 2, question item 4 and 47.	Association al inferential statistics	Pearson correlation test was computed to determine whether there were relationships on teacher competencies and their level of education.
RQ 5. Are there differences in the use of community resources between teachers who teach at urban and rural schools?	Community resources used for teaching consumer education. (Q 21) and location of the school (Q 49)	Values and labels for question items are already indicated under RQ 2, question items 21 and 49	Difference inferential statistics	Chi-square was computed to examine if there were significant differences in the use of community resources between teachers who teach at urban and rural schools.