

CONSUMER EDUCATION: EFFECTS OF THE TYPE OF
CONSUMER AND HOMEMAKING PROGRAMS
IN MISSISSIPPI

By

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CHAPTER I

INTRODUCTION

The need for consumer education for the nation's youth had long been recognized by business and education leaders. In 1942 the National Association of Secondary-School Principals, a Department of the National Education Association, initiated a consumer education study financed by funds from the National Better Business Bureau. One of the purposes of that alliance was to "help teachers and administrators determine what shall be taught and what methods of curricular organization are likely to prove most effective" (Consumer Education Study, 1947, Preface and Acknowledgement page). Prior to that time consumer education was already a focus of home economics. In the words of Nystrom (1941)

What is going on in the consumer movement is of more than ordinary concern to home economics teachers, for they have for more than twenty years been doing most of the things that are now being enthusiastically urged by recent consumer movement converts (p. 145).

Although the visibility of consumer education in the school curriculum fluctuated over the years since the 1940's, it continued to be a part of courses in home economics, business, and social studies.

In the last two decades there was a growing concern for consumers and their problems in dealing in the marketplace which brought about increased national and state legislation. Congress passed the Vocational Education Amendments in 1968, which required states that received Federal money under Part F, Consumer and Homemaking Education, to incorporate a

statement within the vocational state plan which indicated that consumer education was a part of the vocational consumer and homemaking program. Public Law 94-482, frequently referred to as the Amendments of 1976, continued to require consumer education as a part of the consumer and homemaking education curriculum (Federal Register, 1977, p. 53851). In addition to the consumer education legislation at the National level, between 1974 and 1978, the number of states which had some policy statement regarding consumer education in the public school systems jumped from 19 to 38 (Wilhelms, 1979, p. 8).

When administrators and teachers discussed education in the traditional areas of liberal arts and science, they usually agreed on basic content because society had some generally accepted ideas about what constituted competencies in those areas. That was not true of consumer education. Even though educators had linked consumer education with quality of life and philosophy for many years, it was not accepted into the area of the humanities. In support of that philosophical view, in 1947 the following statement appeared in Consumer Education Study: ". . . when many accustomed values are questioned or have been discarded, we lack a sure philosophy to guide us in spending our money and ourselves. . . . what course will bring the greatest returns in lasting happiness" (p. 4). Furthermore, Wilhelms (1947) pointed out that helping people see alternatives, identifying and clarifying personal values, and the commitment to a way of life which would serve others as well as themselves was included among the major purposes of the humanities. Further, knowing oneself and others included a knowledge of underlying impulses and subconscious motivations. With learning experiences centered around goals, values, spending, saving, investing, decision making,

advertising, scarcity, conservation, development of human, natural, and capital resources, consumer education provided endless opportunities to explore philosophy in a concrete manner.

The need for well-informed, alert, and responsible citizen/consumers became vital as more complicated decisions involved not only personal goals but societal goals as well. In a study of adult functional competency by Kelso (1975), consumer economics was found to be the area of greatest inadequacy. Although more instruction was recommended for adults in order for them to be more effective in the economic aspect of their lives, no specific suggestions were made as to how this could be done.

The review of literature indicated that in some instances consumer education was integrated into the curriculum as a separate course while in others it was diffused throughout the curriculum. There were good arguments favoring both approaches. The integrated approach appeared to reach more people and allowed for reinforcement of concepts. However, Uhl (1970) noted that "dispersion raises problems of student exposure and teacher coordination. A single course afforded greater opportunity for a balanced and comprehensive treatment of consumer education" (p. 131). A single non-required course did not reach everyone; but many courses offered in schools were not chosen by every student, and the single course offered an opportunity to pull together many concepts at one point. In effect, there seemed to be a place for all approaches, if funds permit. In 1976 Mississippi's Senate Bill 2646 was passed which called for the implementation of economic education into the social studies, or business education, or consumer-homemaking curriculum. One of the problems which faced those responsible for implementing legislation

was the lack of universal agreement on what should be taught and how it would be incorporated within the curriculum. Trujillo (1977) indicated that the confusion created by the overlap of consumer education and economic education, identified over forty years ago, still plagued educators. In an attempt to alleviate this problem, he conducted a study in which concepts appropriate to consumer education and economic education were identified. The concepts common to both areas were labeled interface concepts. He presented this as "one approach to clarification of the focus and content of economic and consumer education" (p. 20).

The Vocational Amendments of 1976 allowed consumer education to be incorporated into existing courses in consumer and homemaking or offered as a semester course. Mississippi Senate Bill 2546 specified that consumer education be integrated throughout the curriculum with special responsibility delegated to social studies, business education, and home economics teachers. To home economics teachers the intent of the Amendments of 1976 clearly indicated that course content would be consumer education. However, Senate Bill 2646 contained both consumer education and economic education concepts. In addition to the responsibility of home economics teachers to deliver consumer education to its constituents under national and state law, the Amendments of 1976 mandated that consumer and homemaking programs had to be reviewed and evaluated.

The questions addressed in this study were (1) what were the effects of the type of consumer and homemaking subject area taught by home economics teachers on the consumer education concepts included, (2) what were the effects of the type of consumer and homemaking subject area on pupil score gain on a pre-post consumer education test, and (3) what

were the effects of selected education, student, and socio-economic variables on pupil score gain on a pre-post consumer education test? A systematic study had not been made in Mississippi to assess the effects of consumer and homemaking programs including consumer education concepts on pupil performance or the effects on performance of demographic and socio-economic variables. Additionally, no evidence was found of an effort to determine the consumer education concepts and those which interfaced with economic education included by home economics teachers. Therefore, there was a need to gain information that addressed those voids in consumer and homemaking education. Information gained from the study would serve state leaders, college personnel, local administrators, and teachers by providing information which would be helpful in curriculum planning and planning and executing pre-service and in-service teacher education.

Purpose and Objectives

The purpose of the study was to measure knowledge gain between two groups of students enrolled in consumer and homemaking courses; one group was taught a semester course concentrating on consumer education concepts and one group where consumer education concepts were integrated into the curriculum. An objective test was used to determine if differences existed. The following objectives served to guide the research:

1. To analyze student knowledge gain on a consumer education test in relation to the type of consumer and homemaking programs.
2. To analyze student knowledge gain on a consumer education test in relation to selected education variables.
3. To analyze student knowledge gain on a consumer education test in relation to selected student variables.

4. To analyze student knowledge gain on a consumer education test in relation to selected socio-economic variables.
5. To make recommendations for further research based on the findings and for pre-service and in-service education related to consumer education.

Hypotheses

The null hypotheses formulated for this study were as follows:

- H₁: There will be no significant difference in student knowledge gain on a pre-post test of consumer education concepts and the type of consumer and homemaking program.
- H₂: There will be no significant difference between student gain scores on a consumer education pre-post test and selected education variables.
- H₃: There will be no significant difference between student gain scores on a consumer education pre-post test and selected student variables.
- H₄: There will be no significant difference between student gain scores on a consumer education pre-post test and selected socio-economic variables.

Rationale

The following theoretical assumptions were utilized in the planning of the study:

1. Whether the environmental stimulus is put to use depends both on native potential and motivation. . . . The factor analysis of intelligence test results demonstrates that the most significant variations in intelligence occur according to the factors related to social stratification, such as education, occupation, race, and the subject's own classification of the social class to which he belongs (Taba, 1962, pp. 104-105).

2. Diagnosis is an essential part of curriculum development and of curriculum revision (Taba, 1962, p. 231).

The assumptions led the researcher to expect that variables other than course content would affect score gain by the subjects selected for the study. Furthermore, an evaluation study served the needs of legislative demand for evaluation and a justifiable basis for curriculum development.

Limitations

The population identified for the study and the resultant sample was dominantly rural. While that was typical for the state, it limited the generalizability of the research. Additionally, only teachers teaching consumer education courses the second semester of the 1980-81 school year were included in the study.

Definitions

The following definitions were included to assist the reader in understanding the research report.

Consumer education - as defined by the U.S. Office of Consumer's Education (Wilhelms, 1979).

Consumer's education is an effort to prepare consumers for participation in the marketplace or in situations involving use of resources, public and private, by imparting the understandings, attitudes, and skills which will enable them to make rational and intelligent consumer decisions in light of their personal values, their recognition of marketplace alternatives, and social, economic, and ecological considerations (p. 7).

Type of program - for this study the types of consumer and home-making programs were referred to as: (1) a semester course in consumer education taught by a home economics teacher and (2) consumer education

concepts integrated into all topics taught by a home economics teacher.

Education variables - those used in this study were the number of semesters of prior enrollment in a course in consumer and homemaking and school size. School size was further defined as the number of students enrolled in grades 9-12 in the schools selected for the research as determined from information on Mississippi Public School Enrollment, (Holladay, 1980).

Student variables - these included gender, age, race, location of residence, and college plans.

Socio-economic variables - these were measures related to the students' families which described them in terms of the gender of the household head, and the education and occupation of the household head and of the second adult.

Rural population - included persons living in communities with fewer than 2,500 inhabitants.

Urban population - referred to persons living in areas which had more than 2,500 inhabitants (U.S. Bureau of Census, 1973).

CHAPTER II

REVIEW OF LITERATURE

Peterson (1966), Special Assistant to the President for Consumer Affairs, said "Technology has contributed to our affluence, but it has also made the marketplace mass-oriented, more complex, and more impersonal. The consumer's tasks--never easy--have become harder" (p. 15). She was further concerned

That young marriages are becoming the norm is common knowledge. Less commonly recognized is the fact that financial troubles constitute one of the chief reasons for the dissolution of these young marriages. Consumer education can thus promote stability (p. 15).

Consumer education became increasingly visible as a result of that kind of thinking. This chapter deals with the history of consumer education, problems encountered in teaching a special group of students to be served, and research that related to consumer education in secondary schools.

Historical Background

Consumer education was characterized by a long history of kaleidoscopic change. It had been a part of the curriculum vocabulary for more than 50 years during which time it fluctuated from being a focal point to being practically non-existent. At one time, it was lauded as ". . . the most powerful single instrument making for a more realistic secondary school program" (Reich, 1946, p. 30). On the other hand, following

Sputnik, it almost completely disappeared from the curriculum in favor of more "vital" topics. Furthermore, even when the presence of consumer education in the curriculum was applauded by the general public, it was marked by a milange of philosophies, many times at cross-purposes if not outright competitive, as to what should be taught and who should teach it. However, in spite of the differences that existed, there seemed to be an overriding objective that expressed the tenet that the educated consumer who functioned effectively in the marketplace and as a consumer citizen was an asset to him or herself and to society (Schoenfield, 1967).

The flames of the first intense interest in consumer education in the 30's and 40's were obviously fanned by business abuses of the times and the depression. Wilhelms (1967) said that

It may be good to remind ourselves that the current surge toward consumer education is a second surge. The first, in the 30's and 40's, not only moved powerfully in the schools but also was accompanied by-or, better, was the product of a powerful 'consumer movement' in adult society.

It is hard today even to remember the fervor of that movement. It had roots far back before the Depression; the Pure Food and Drug Act of 1906 was one of its dramatic triumphs. But the Depression and the New Deal brought it to a climax. Books spilled out of the presses in rapid succession: Your Money's Worth, 100,000,000 Guinea Pigs, Chamber of Horrors, and so on.

. . . Inevitably the consumer education programs of that time acquired much of the flavor of the time. There was a broad streak of anti-business feeling and intense criticism of specific practices (pp. 9-10).

Unquestionably, the pervasive philosophy of the times was use it up, wear it out, make it do, or do without.

Working in the years from 1942-48, the National Association of Secondary School Principals, under the sponsorship of the National Better Business Bureau, moved to establish a more positive attitude

toward consumer education than had built up during the 30's and 40's. Indicative of that attitude was the statement that

The modern American consumer can choose from thousands of goods and services fashioned to meet his every need. In other words, he has unprecedented consumer opportunity: The opportunity to live well. And teaching him to use that chance with imagination and wisdom is the great goal of consumer education (Consumer Education Study, 1947, p. 10).

The beginning of World War II brought about a decline in consumer interests as thoughts and energies were directed toward the national security. The war period was also accompanied by a period of relatively high employment, higher incomes, fewer consumer goods competing for the dollar, price controls, and rationing. The lack of interest in consumer issues continued into the late fifties (Creighton, 1976).

One of the most significant contributions toward the beginning of the third era of consumer interest and to the enduring strength of that interest which continued into the 1980's, was President John F. Kennedy's message to Congress in 1962, titled "Special Message on Protecting the Consumer Interest". The consumers' "bill of rights" were the right to safety, the right to be informed, the right to choose, and the right to be heard. In the decade that followed, a great deal of legislation was passed in the interest of the consumer including consumer education in the public schools.

Legislation and Consumer Education

Consumer education in the schools was not the direct result of either Federal or state legislation. Nor was it instrumental in fostering the beginning interest in consumer education in the field of home economics. In 1910, a home economist, Gwendolyn Stewart proposed a course in family economics and described the course in the following manner:

The course would be not merely an attempt to impart information but would also be an attempt to train the student to recognize and to value the economic essentials of the home, and to develop her ability to assume control and to administer the family expenditures according to economic principles (p. 213).

Bridge (1921) encouraged the teaching of both boys and girls as consumers and discussed ways to integrate economic principles into the topics of clothing, cosmetics, food, shelter (including mortgages), furnishings, and equipment. She also supported the teaching of the economics of investments, taxes, recreation, educational advancement, support of the church, and methods of allocating and accounting for all of these expenditures and investments as a part of the home economics curriculum.

National Legislation

Significant to the national recognition of home economics' contribution and to the subsequent additional emphasis placed on consumer education was the Vocational Education Amendments of 1968 (United States 90th Congress, Public Law 90-576). Under Part F of that law, titled "Consumer and Homemaking Education", vocational home economics teachers were formally delegated the responsibility of including consumer education concepts within existing programs. Public Law 94-482, usually referred to as the Amendments of 1976, continued to recognize and support home economics as a vehicle for consumer education. Of that legislation, Cross (1978) said

There is no doubt about the intentions of the law. The content of the federally-funded programs is to be shaped by current national and local economics, social, and cultural conditions and needs. . . . The programs are to be available to a wide spectrum of the population, but especially to those who might be expected to know the least about consumer and homemaking functions and be more vulnerable to the costs of

imprudent consumer decisions or incompetent homemaking. The programs are expected to contribute to improving the quality of home environments, family life, and consumer decisions (p. 24).

Public Law 93-380, Section 811, which was passed in 1974 established the former Office of Consumer's Education in the U.S. Office of Education (USOE). Provisions of the law included the appointment of a Director of Consumer's Education and a discretionary grant program for consumer education (Richardson, 1977, p. 32). The program was implemented in 1974 with the appointment of a project director who set up guidelines for the program. This action was followed by the appointment of a Director of Consumer's Education in 1976. Fifteen million dollars were authorized for the Office for the fiscal years 1976 and 1977.

In 1978, the Education Amendments Public Law 95-561 was passed. Part E, referred to as the Consumer Education Act of 1978, contained provisions related to consumer education and were much the same as the Education Amendments of 1974. Specifically the guidelines called for:

1. An Office of Consumer's Education within the Office of Education to be headed by a Director of Consumer's Education appointed by the Commissioner of Education.
2. The Office would carry out a program of grants and contracts to local education agencies, state education agencies, institutions of higher education and non-profit institutions for the following activities:
 - A. Development of curricula in consumer education;
 - B. Dissemination of information related to such curricula;
 - C. In support of educational programs at the elementary and secondary and higher education levels; and
 - D. Pre-service and in-service training programs and projects for educational personnel to prepare them to teach in subject matters associated with consumer education (United States 95th Congress, Public Law 95-561, Section 333).

Funding was not to be less than five million for each fiscal year.

State Legislation

The first state to pass legislation regarding consumer education at the high school level was Illinois. In 1967, the Illinois legislature passed a mandate, Senate Bill 977, and allocated funds for the implementation of the law which stipulated that

Pupils in the public schools in grades 8 through 12 shall be taught and be required to study courses which include instruction in consumer education including but not limited to installment purchasing, budgeting, and comparison of prices (Guidelines for Consumer Education, 1968, p. 1).

In the same publication, consumer education was defined as

. . . the development of the individual in the skills, concepts, and understandings required for everyday living to achieve, within the framework of his own values, maximum utilization of and satisfaction from his resources (p. 1).

The importance of consumer education was summed up in these words

One of life's most important problems is the managing of personal economic affairs and knowing how to maximize satisfaction from the level of one's income. To do this, students must understand fully that the basic ingredient of economic competence is the wise use of resources as one chooses a job, earns, spends, saves, borrows, invests, and plans for the future. Natural and human resources as well as capital goods are used to meet the needs and wants of the consumer (Guidelines for Consumer Education, 1968, p. 2).

There was little doubt that the action taken by the State of Illinois sparked an interest which led to 38 states and territories having some specific policy statement by 1978 which was double the number having such a commitment in 1973 (Wilhelms, 1979).

The Disadvantaged Student

Throughout the history of consumer education, educators, legislators, and the general public sensed the special need for consumer education for the disadvantaged. Prehn (1967) said " For the slower

student for whom the high school course is terminal, a special course in economics should be developed to focus on the individual as a consumer, a producer, a worker, a taxpayer, and a citizen" (p. 40). In addition to the directive in the Amendments of 1976 for the inclusion of consumer education in consumer and homemaking programs, home economics teachers were also to "give greater consideration to economic, social, and cultural conditions and needs, especially in economically depressed areas" (Federal Register, 1977, p. 53851).

Those characteristics of students and their impact on education had been explored at length by researchers. Deutch (1967) pointed out that "It has long been known that some general relationship exists between the conditions of social, cultural, and economic deprivation and cognitive deficit. The environment having the highest rate of disease, crime . . . also has the highest rate of school retardation" (p. 32). And Miner (1968) theorized that the "child's assimilation of a set of values regarding education and successful performance, in part, determines his motivation to perform and, consequently, his actual performance" (p. 372). Kaplan (1963) said

Whether we choose to call these pupils disadvantaged, culturally deprived, or economically impoverished, they usually exhibit two characteristics: they are from the lower socio-economic groups in the community and they are notably deficient in cultural and academic strengths. The latter characteristic is usually but not always, a consequence of the first factor. The parents of these children have simply been unable to provide the background, outlook, initial grounding, and readiness for formal learning that middle and upper-class provide as a matter of course (p. 71).

Deutch commented on the fact that lower-class children lived in a noisy non-verbal environment. That is, the noise was more in the background and unrelated to the child. He noted that this type of environment did not develop auditory ability and was conducive to non-attention. Since

attention was related to memory, the initial environment was not conducive to accomplishment in the school environment.

Of greater importance than defining or identifying students was what happened to those children in an educational setting. Levine and others (1979) found that

Certain measures of neighborhood socioeconomic status have consistently had a curvilinear relationship to grade-level achievement scores . . . scatterplots showing neighborhood variables that constantly showed curvilinear relations with achievement generally appeared to be measuring concentrated poverty of social disorganization in neighborhoods served by low-achieving schools. That is, variables such as 'percent students eligible for subsidized lunch' appeared to be measuring 'threshold' points beyond which poverty had become heavily concentrated . . . Other variables curvilinearly related to achievement were 'percent housing units with 1.51 or more people per room' a density measure that we also interpret as indicating concentrated poverty neighborhoods generally have overcrowded housing units, and 'percent females separated, which we take to be a measure of disorganization in the social or family structure of urban neighborhoods (pp. 333-334).

Impellizzeri and others (1965) also noticed that generally speaking, "education of the parents appeared to be a statistically reliable predictor of the child's achievement" (p. 166). They further noted that "from data on education levels, the parents of achievers tend to have middle or high prestige occupations, while the parents of under-achievers tend to have middle or lower prestige occupations" (p. 166). In a discussion about the problems encountered by the lower-class child, Olson (1965) stressed that such a child had ideas of social advancement unlike those of higher social class children. Additionally, his/her concept of competition was more physical in nature. For these reasons, the traditional type of testing held little appeal for such a person.

From an extensive study conducted by Coleman and others (1966), they said a

. . . consideration to be kept in mind in examining variations in test scores and motivation is that school is only one factor affecting both achievement and motivation. . . . Studies of school achievement have consistently shown that variations in family background account for far more variation in school achievement than do variations in school characteristics (p. 218).

In order to compensate for the effects of cultural deprivation, Kaplan (1963) suggested that such students needed education that was "equal plus more of the same in greater depth, quality, and appropriateness" (p. 71).

Type of Course

A number of researchers studied the effects of the type of course in which consumer education concepts were taught. Harder, cited by Griggs and McFadden (1980), found significant (.05) correlations between gain in test scores on two different consumer education tests and enrollment in child development and business education classes. One of these tests had significant correlations between enrollment in business education, child development, clothing and textiles, and foods and nutrition classes and gain in consumer education scores. Although McCall (1973) had not attempted to control for source of learning, she found a 20 percent increase in knowledge of consumer education concepts from students in the sixth grade through post high school students (pp. 82-83). Meiselwitz, in a 1967 study, found that scores varied little whether students had a course in economics, or general business or none of these. He concluded, however, that graduating seniors were in need of more comprehensive knowledge in the areas he tested. Curry (1970) found little difference between students' understanding of consumer education concepts whether they had had vocational home economics or not. Neither

did she find a difference dependent on whether students were enrolled in a consumer and homemaking class where consumer education was taught as a separate unit or integrated into the curriculum of consumer and homemaking. Other researchers who found no significant differences between scores of students who had had courses related to consumer education and those who had not, included Luper (1973), Stanley (1976), and Thomas (1969). However, Langrehr (1979) found that

. . . student consumer economic competencies apparently can be improved by requiring students to take consumer education. However, students must be enrolled in a course which has as its purpose the presentation of consumer economics and consumer education and not economic principles (p. 50).

Socio-economic Factors

In several general studies already cited under "The Disadvantaged Student" in this chapter, differences were found which favored the achievement of students of higher social class background over those of students of a lower social class background. In studies particularly related to consumer education, Jelley (1958), Bakken (1966), and Lito, cited by Langrehr and Mason (1977), noted that higher socio-economic status students scored significantly better than lower socio-economic status students.

Education Variables

Various researchers examined the relationship between school size and quality of education. Findings were inconsistent; however, there appeared to be a trend which favored larger schools over smaller ones. Research related to prior enrollment in consumer and homemaking was also varied. Generally, little correlation was found to exist.

School Size

Curry (1970) found no significant differences in test scores as a result of community size. However, Larson (1970) found that students in larger schools performed better on a consumer education test than students from small schools. Data collected from 1,058 university freshmen in Indiana, Illinois, and Wisconsin by Bibb in 1973, revealed that students from small city schools scored higher than students from large cities. Langrehr and Mason (1977) pointed out that Seymour had found students from larger school systems made higher scores than students from small schools on a consumer education test. A study by Rajpal (1969) indicated that quality of education in larger schools was better than that of smaller schools. Randhawa and Michayluk (1968) found that urban classes appeared to have "better learning orientation" than the rural classes (p. 267). The exception to that was ghetto and core areas of metropolitan cities.

Prior Enrollment in Consumer and Homemaking

A study by Crawford cited by Griggs and McFadden (1980) failed to reveal a significant difference between students who had a course in consumer and homemaking in high school and those students who had not had a course in consumer and homemaking. It was pointed out that the researcher experienced difficulty identifying a sample which had not been enrolled in a course of consumer and homemaking in junior high school or in 4-H clubs. However, former consumer and homemaking students who were part of the study felt that consumer education courses had contributed to "increased self-awareness, increased management skills, and clarification and development of personal values" (p. 17).

Research by Rowley (1974) disclosed a significant positive relationship between the number of semesters of prior enrollment in consumer and homemaking and student competencies on nine of 11 competencies measured in the study.

Student Variables

A number of researchers had studied the relationship of selected student variables to test performance in the subject area of consumer education. Bakken's (1966) results indicated that differences existed between boys and girls only in the area of borrowing money and utilizing credit. For that concept, boys performed significantly better. In Johnson's (1976) research, no significant differences were found which related gender of the respondent to consumer knowledge. A study by Echternach (1976), which involved adults and high school seniors lent evidence to support the conclusion that adult males and student males scored higher on a test for consumer economic understandings. Contrary to those findings, Luper (1973) found that girls did significantly better than boys on a consumer economics and education test.

Only one study was found in which race was a factor in studying performance related to consumer education. Johnson (1976) concluded that race was a factor when students had some exposure to consumer economics. White students scored significantly better than black students when theoretical and practical concepts were tested together. However, less difference was noted between the two groups on the simple and practical part of the test.

When college plans were included as a factor, Luper (1973) found that college bound students scored significantly better than those not

planning to attend college. When the variable was controlled in a different manner, Meyer (1974) found that students enrolled in a course in a consumer education class performed better on a pre-post test than college bound students who were not enrolled in such a course.

Curriculum

The word curriculum was found to be defined differently by various writers and in some cases a single author was found to define it in more than one way. For the purposes of this discussion, Lewis and Miel's (1978) definition of curriculum as "subject matter, usually organized around a school subject, that has been selected to be taught by someone" (p. 17) and described by the authors as "the oldest and most persistent meaning associated with curriculum" (p. 17) was used. In keeping with the single subject concept, Wilhelms (1969) described curriculum as "what a teacher uses when he teaches children" (p. 80).

Kibler and Barker (1977) reviewed research related to transfer of learning and reported that "students generally do not apply learned skills or knowledge to practical situations unless the teacher specifically demonstrated the application" (p. 587). Furthermore, "The teacher attempting to implement this strategy makes desired behaviors explicit and specifies the variety of conditions under which the behaviors or skills may be applied after they are adequately learned" (p. 587). Other theorists whose writings supported that thesis included Rogers (1972) who said that "Significant learning takes place when the subject matter is perceived by the student as having relevance for his own purposes" (p. 68). Additionally, he said that "placing the student in direct experiential confrontation with practical problems . . . is one

of the most effective modes of promoting learning" (p. 71). And, particularly for disadvantaged students "content which is most closely connected to the learner's reality will have the best possibility for engaging the learner" (Fantini and Weinstein, 1972, p. 172). While many theorists agreed that learning was enhanced by practical experiences, it was believed to present problems in the area of evaluation. Lewis and Miel (1978) pointed out that "Experiences are intangible and difficult to evaluate with any degree of exactness" (p. 71).

Trump and Miller (1977) said that home economics is a field that fuses theory and practice" (p. 244). They also observed that

Many stories have been developed around the theme of a life-long search for an ideal or a precious object that it ultimately found on the searcher's own doorstep. In curriculum studies, this is the story of home economics. Curriculum makers look constantly for subject matter related directly to the lives of pupils--subject matter that has practical application and will lead ultimately to a vocational pursuit. Home economics involves learning activities that meet these requirements (p. 236).

Domestic science was the name given to home economics in the very early years when the main topics were cooking and sewing and was probably so called to lend a more "scientific" aura to the work of the home which tended to be done haphazardly without formal training. As more attention was given to economics as germane to the management of the home and family, home economics became the title. More recently, the term consumer and homemaking was used to identify the subject area of home economics as it was taught at the secondary level. The name suggested that emphasis be placed on consumer education for homemaking. The same law (United States 90th Congress, Public Law 90-576) which proposed that the name be changed to consumer and homemaking stressed that it should especially serve the disadvantaged. However, if home

economists were to fulfill their mission of strengthening family and community life and the use of resources discriminately, in addition, others might be served including those who were not disadvantaged, the intellectually gifted, and boys as well as girls. Trump and Miller (1977) noted that "principles of management, including decision making, goals, values, standards, and nature and use of resources should be included in content" (p. 240). And that "Integrated subject matter should include budgeting and consumer education" (p. 240). Trump and Miller (1977) were emphatic when they stated that

. . . modern home and family life needs to be analyzed critically by curriculum planners in the field of home economics. The schools serve all social, economic, and cultural levels. If the teaching of homemaking is to be the responsibility of the secondary schools, and if this responsibility is to be met realistically, the homemaking curriculum needs all of the characteristics common to other secondary school fields, such as ability grouping, problem solving, content adjustment, and sensitivity to a changing technological order (p. 240).

CHAPTER III

RESEARCH METHODOLOGY

This research was planned to analyze the relationship between the gain in student knowledge of consumer education concepts and the type of consumer and homemaking program. Gain in student knowledge was also related to selected educational, student, and socio-economic variables. It was expected that the information would be beneficial in curriculum planning for pre-service and in-service education of home economics teachers and for identifying the types of consumer and homemaking programs strongest in the consumer education component. The research design, techniques used in the sampling instrumentation, and the data analysis were described in this chapter.

Type of Research Design

The type of research was descriptive. Best (1977) defined descriptive research as research which

. . . describes and interprets what is. It is concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident, or trends that are developing (p. 116).

He further noted that different kinds of information may be helpful in solving a problem. Of the several he listed, one appropriately described the problem addressed in this study.

The type of information involves what we may want. In what direction we go? What conditions are desirable or are considered

to represent best practice? This clarification of objectives or goals may come from a study of what we think we want. . . . (p. 124).

The study was descriptive and a pre-test, post-test sequence was employed to assess the effects of different types of consumer and homemaking programs on gain in knowledge of consumer education concepts by secondary consumer and homemaking students.

Population and Sample Selection

Vocational home economics teachers in Mississippi who offered a semester course in consumer education and at least one other consumer and homemaking course in the spring semester 1981 and their respective students constituted the population for the study. The primary sampling unit included a teacher and two of her classes, one of which was a group enrolled in a semester course in consumer education and the other group was enrolled in another consumer and homemaking course as defined in the Amendments of 1976, Subpart 5 (Federal Register, 1977, p. 53851).

The procedure for identifying the sample for the research involved the cooperation and participation of I. Ballard, State Supervisor, Homemaking Division of the Mississippi State Department of Vocational and Technical Education. Teachers who declared their intention to teach at least one semester course in consumer education and no less than one class of another type of vocational consumer and homemaking class spring semester of 1981, by November 15, 1980, were the population. From the teachers identified, there were schools represented from each of the three districts into which the state was divided.

The appropriate school representative was contacted by I. Ballard or other state department staff members for the purpose of determining

whether the school would participate in the study. All of those contacted agreed to take part in the research and resulted in nine teachers and two of their respective classes participating.

Each student in the classes chosen by the teacher for the study was pre-tested and post-tested. The treatment for one group of students in each school was a semester course in consumer education. The treatment for the second group in each school was that consumer education concepts were integrated throughout the consumer and homemaking class. The integration concept did not preclude brief units of consumer education which may have been included as a part of a consumer and homemaking course. All of the groups were taught by home economics teachers.

Instrumentation Procedure

The instruments used in this study included a Consumer Education Test (Appendix A) which was validated by Harder and Fanslow (1979), and had a calculated reliability of .90. Another student instrument was a Personal Data Form (PDF) (Appendix B) which was used to obtain information about the student's background. A Consumer Education Concepts Form (CECF) (Appendix C) was used to determine the consumer education concepts included by the teachers in relation to the type of program they were teaching. The Mississippi section, Part 26, Volume 1, of the U.S. Bureau of Census, Census of Population 1970, Characteristics of the Population was used to determine the size of the cities served by the schools and the Mississippi Public School Enrollment 1980-81 End of the First Month, (Holladay, 1980), was used to determine the number of students in the high schools participating in the study. The objectives of the research could be met through the use of the instruments and information as stated. The data derived from the collective instruments were tabulated and analyzed.

Consumer Education Test

The Consumer Education Test (CET) was selected to use as a pre-test and as a post-test to reflect gain in consumer education knowledge in relation to the type of program in which the student was enrolled. The test had a .90 reliability as calculated by the test developers. When the 361 Mississippi student pre-tests were machine scored the process also calculated the reliability. For the 361 participants who took the pre-test, the calculated reliability was .83. The questions were also checked against textbooks on the adopted list for Mississippi schools and all content areas were found in the texts. The test contained 50 multiple choice items each with a four choice response. The table of specifications for the Consumer Education Test are shown in Table I.

Personal Data Form (PDF)

A review of literature was conducted to locate instruments which could be used or adapted to gain information relevant to the study. The 13 item PDF which requested that the nearest appropriate response be selected and that the corresponding letter be placed to the left of the numbered item was adapted from the Coleman (1966) study and information on coding the occupational data from Miller (1977). The information sought on the form included: age; sex; nationality; residence; prior enrollment in home economics; educational level of parents; occupational status of parents; family composition; housing; and personal educational level expected. The personal information was needed to determine if those variables affected the knowledge level gain of the students.

TABLE I
CONSUMER EDUCATION TEST SPECIFICATIONS*

Content Areas of Iowa Guide	Number of Knowledge Items	Number of Comprehension and Above Items	Percent of Test Items	Total Number of Test Items
1. Values and ethics underlying education for consumption (5) ^a	2	4	12	6
2. Consumption: an expression of life style (4)	3	2	10	5
3. Consumer decision-making (6)	5	4	18	9
4. Consumer information location, evaluation, procession (4)	5	3	16	8
5. Change and the consumer (3)	4	2	12	6
6. Consumers and the economic environment (2)	4	3	14	7
7. Consumer rights and responsibilities (5)	5	4	18	9

^aNumbers in parentheses indicate numbers of competencies in the content area.

*Harder and Fanslow

Consumer Education Concepts Form (CECF)

The researcher was unable to find a CECF which served the objectives of the study. Sources used in compiling the list of concepts included Hughes (1980), Hearn (1979), and the Iowa State University (1977) curriculum guide, Teaching Management and Consumer Education. Following the development of the first draft of the CECF checklist by the researcher, a panel of experts met April 2 to examine the checklist for completeness and clarity. The experts were: M.J. Drummond, District State Supervisor of Home Economics Education; B. Gaffney, Home Economics Teacher Educator, Oklahoma State University; and M.D. Dickerson, Assistant Professor of Home Economics in Consumer and Family Finance, San Diego State University, California. These people were requested to work together and turn in one completed form in order for the developer of the test to have what represented a consensus among the experts. The task was accomplished in approximately one hour. The suggestions were incorporated into the final checklist and it was mailed with the post-tests to the teachers who participated in the study. A primary purpose of the checklist was to identify the consumer education and the consumer education and economic education interface concepts taught by home economics teachers which were included in Mississippi Senate Bill 2646.

Data Collection

The sample of the study was selected in December, 1980. Packages containing a CET for each student with a standard answer sheet for machine scoring paper clipped to the test, number two pencils for marking the answer sheet, and a PDF for each student were mailed out the last week in December, 1980. Instructions (Appendix D) were included

for administering the tests and postage was enclosed for the return of the pre-tests and the answer sheets. The pre-tests were administered during the first week of the semester. The post-tests were mailed the third week in April along with the CECF for each teacher with instructions to administer the test as near the end of the semester as possible.

The pre and post-test answer sheets were machine scored. The process produced, in addition to scores on each test, percent correct, percentile ranking, relative frequency, and cumulative frequency information.

Data Analysis

Four null hypotheses were formulated for the research. These were: (1) H_1 : there will be no significant difference in student knowledge gain on a pre-post test of consumer education concepts and the type of consumer and homemaking program, (2) H_2 : there will be no significant difference between student gain scores on a consumer education pre-post test and selected education variables, (3) H_3 : there will be no significant difference between student gain scores on a consumer education pre-post test and selected student variables, and (4) H_4 : there will be no significant difference between student gain scores on a consumer education pre-post test and selected socio-economic variables.

All of the home economics teachers in Mississippi, who offered a semester course in consumer education during the school year, were not part of the sample because many taught the course during the fall semester and did not teach it again in the spring semester of 1981. Furthermore, the researcher was not able to randomly select and place students into treatment and control groups. However, Kerlinger (1973) said that

Unless there is good evidence to believe that populations are rather seriously nonnormal and that variances are heterogeneous, it is usually unwise to use a nonparametric statistical test in place of a parametric one. The reason for this is that parametric tests are almost always more powerful than nonparametric tests (p. 287).

In further support of his conviction, Kerlinger cited Lindquist who said

. . . the F distribution is amazingly insensitive to the form of the distribution of criterion measures in the parent population. . . . Linquist also says, on the basis of Norton's data, that unless variances are as heterogeneous as to be readily apparent, that is, relatively large differences exist, the effect on the F test will probably be negligible. Boneau confirms this. He says that in a large number of research situations the probability statements resulting from the use of t and F tests, even when these two assumptions are violated, will be highly accurate (pp. 287-288).

Finally he advised that ". . . in most cases in education and psychology, it is probably safer - and usually more effective - to use parametric tests rather than nonparametric tests" (p. 288).

Data obtained from the Consumer Education Tests and the Personal Data Forms were coded as needed for the research and keypunched onto cards for electronic calculation. The computer program chosen for analysis of variance was the Statistical Analysis System (SAS) (Barr, Goodnight, Sail, Blair, and Chilko, 1979). The level of significance was .05. After a significant F ratio was obtained, the Duncan's multiple range test was applied to determine where significant differences existed.

CHAPTER IV

ANALYSIS OF DATA

The questions addressed in this study were: (1) what were the effects of the type of consumer and homemaking subject area taught by home economics teachers on the consumer education concepts included, (2) what were the effects of the type of consumer and homemaking subject area on pupil score gain on a pre-post consumer education test, and (3) what were the effects of selected education, student, and socio-economic variables on pupil score gain on a pre-post consumer education test? The procedure in this chapter was to set forth and analyze the findings which resulted from the questionnaire responded to by selected home economics teachers and the pre and post consumer education tests responded to by the students of the teachers involved in the research.

Consumer Education Concepts Taught

The consumer education concept checklist developed for the research included consumer education and concepts of consumer education which interfaced with economic education concepts. It was responded to by nine teachers selected to participate in the study. In their consumer education classes, as noted in Table II, all of the nine teachers incorporated the concepts of values, goals, needs, wants, consumer resources, decision-making, money management, buymanship, advertising, rights, responsibilities, credit, insurance, and role of government. Next in

TABLE II

PERCENT OF TEACHERS TEACHING THE VARIOUS CONSUMER EDUCATION AND ECONOMIC
EDUCATION CONCEPTS TO CONSUMER EDUCATION CLASSES AND INTEGRATED
IN OTHER CONSUMER AND HOMEMAKING CLASSES

Concepts	Consumer Education		Family Living		Child De- velopment		Housing		Consumer and Homemaking I		Consumer and Homemaking II	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
1. Values	9	100	4	100	1	100	1	100	1	100	1	100
2. Goals	9	100	4	100	1	100	0	0	1	100	1	100
3. Lifestyles	8	89	4	100		0	1	100	1	100	1	100
4. Needs	9	100	4	100	1	100	0	0	1	100	1	100
5. Wants	9	100	4	100	1	100	0	0	1	100	1	100
6. Consumer resources	9	100	2	50	0	0	0	0	1	100	1	100
7. Communication skills	7	78	4	100	0	0	0	0	1	100	1	100
8. Decision- making	9	100	4	100	1	100	0	0	1	100	1	100
9. Money Management	9	100	2	50	0	0	0	0	1	100	1	100
10. Buymanship	9	100	3	75	0	0	1	100	1	100	1	100
11. Advertising	9	100	2	50	0	0	0	0	0	0	1	100
12. Rights	9	100	2	50	0	0	1	100	1	100	0	0

TABLE II (Continued)

Concepts	Consumer Education		Family Living		Child Development		Housing		Consumer and Homemaking I		Consumer and Homemaking II	
	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent	N	Percent
13. Responsibilities	9	100	2	50	1	100	1	100	1	100	0	0
14. Credit	9	100	2	50	0	0	0	0	0	0	0	0
15. Insurance	9	100	2	50	0	0	0	0	0	0	0	0
16. Retirement	4	44	1	25	0	0	0	0	0	0	0	0
17. Estate planning	4	44	1	25	0	0	0	0	0	0	0	0
18. Change and the consumer	8	89	1	25	0	0	0	0	1	100	0	0
19. Taxes	7	78	0	0	0	0	1	100	0	0	0	0
20. Factors of production	6	67	0	0	0	0	0	0	0	0	0	0
21. Factors of consumption	7	78	0	0	0	0	0	0	0	0	0	0
22. Pricing	8	89	1	25	0	0	0	0	0	0	0	0
23. Role of government	9	100	1	25	0	0	0	0	0	0	0	0
24. Consumer advocacy	6	67	0	0	0	0	0	0	0	0	0	0

order of frequency were the concepts of lifestyles, change and the consumer, and pricing which were among those taught by eight of the nine teachers. Principles of communication skills, taxes, and factors of consumption was third as seven of the nine teachers indicated these were a part of their courses. Factors of production and consumer advocacy were reported to be taught by six of the nine participating home economics teachers.

In addition to semester courses of consumer education, other consumer and homemaking subject areas included in the study were family living, child development, housing, consumer and homemaking I, and consumer and homemaking II. The ninth consumer and homemaking course was not included in the analysis because the teacher variable was not held constant. Of the consumer education and interface concepts included in these areas, the values concept was the only one which was a part of all of the classes.

Four of the teachers chose to pre and post test a class in family living in addition to the group enrolled in consumer education. Of these, all reported the inclusion of the concepts of values, goals, lifestyles, needs, wants, communication skills, and decision-making. Three teachers taught buymanship in the family living classes and two of the four incorporated the topics of consumer resources, money management, advertising, rights, responsibilities, credit, and insurance. Retirement, estate planning, change and the consumer, pricing, and role of government were taught by one of the four teachers. The concepts of taxes, factors of production, factors of consumption, and consumer advocacy were not covered in any of the family living classes.

One class each of consumer and homemaking I, consumer and homemaking II, child development, and housing was included in the study. The teacher who reported on a class in consumer and homemaking I indicated that 13 of the 24 concepts were a part of the curricula. Those were values, goals, lifestyles, needs, wants, consumer resources, communication skills, decision-making, money management, buymanship, rights, responsibilities, and change and the consumer. The 11 of 24 concepts in consumer and homemaking II were values, goals, lifestyles, needs, wants, consumer resources, communication skills, decision-making, money management, buymanship, and advertising. In child development, the teacher incorporated values, goals, needs, wants, communication skills, decision-making, and responsibilities into the course of study. The fewest number of consumer and interface concepts reported was in the housing course. These were values, lifestyles, buymanship, rights, responsibilities, and taxes. No attempt was made to determine whether the content was the same when a teacher taught a concept in both a semester course in consumer education and in the other course reported on in the research.

Description of the Sample

The nine schools from which data were collected had 361 student subjects who took the pre-test and 324 who took both the pre-test and the post-test. The 324 students represented an 89 percent usable response. The greater proportion of the total sample, 51.2 percent, was enrolled in the nine classes of consumer education (166 students). The remaining 48.8 percent (158 students) which represented eight other consumer and homemaking classes, were made up of four classes in family

living, one class each of child development, housing, consumer and homemaking I, and consumer and homemaking II. The ninth class of consumer and homemaking was not reported because the teacher variable was not held constant. The ninth consumer education class was retained in the analysis when it was found to be not significantly different from the other consumer education classes. In the following discussion the nine consumer education classes were combined to form one group and the data from the other eight classes in consumer and homemaking were combined and identified as the other consumer and homemaking group.

Education Variables

School Size. Counting only students enrolled in grades nine through twelve in public schools in Mississippi, enrollments ranged from approximately 80 to 2,000 students (Holladay, 1980). As can be seen in Table III, there were six (67 percent) of the schools selected from among schools in the 500-999 classification, two (22 percent) from the 0-499 category and one (11 percent) from the category of 1,000 or more.

TABLE III

SIZE AND NUMBER OF SCHOOLS UTILIZED IN THE STUDY OF
STUDENTS GAIN IN CONSUMER EDUCATION INFORMATION

School size	N	Percent
0-499	2	22
500-999	6	67
1,000 and over	1	11
Total	1	100

Prior Enrollment in Consumer and Homemaking. The number of semesters of prior enrollment in consumer and homemaking checked most frequently by students in both groups was "four semesters" (Table IX, Appendix E). This number represented 33.97 percent of the consumer education students and 33.78 percent of the other consumer and homemaking students.

Student Variables

Gender, Age, Race, Location of Residence, and College Plans. As can be seen in Table X, (Appendix E), a majority of the students in the consumer education classes and the other consumer and homemaking classes were female (71.7 percent and 72.8 percent, respectively). The ages of 15, 16, and 17 accounted for 87.3 percent of the consumer education students and 82.3 percent of the other consumer and homemaking students (see Table XI, Appendix E). For these three dominant age groups, the rank order in numbers was the same with the fewest number in the "15 year or younger" group and increased through the age bracket of "17".

The percentage of black and white students was about equally divided in the total sample as shown in Table XII (Appendix E). Of those responding to the question and enrolled in consumer education, 54.8 percent were black and 42.2 percent were white, two American Indian students, and one oriental student accounted for the remainder of the sample. The distribution in the other consumer and homemaking classes was 43.7 percent black and 49.4 percent white. There were four American Indians and two oriental students in this group. Approximately 87 percent of the consumer education students reported living in a rural area, and almost 80 percent of the other consumer and homemaking students

lived in a rural area, as depicted in Table XIII (Appendix E). Table XIV, Appendix E, revealed that 75.3 percent of those enrolled in consumer education and 67.1 percent of the consumer and homemaking students planned to attend college.

Parent's Socio-economic Variables

Heads of Households. As illustrated in Table XV (Appendix E), the percentages of male heads of households of both the consumer education students and the other consumer and homemaking students were almost identical at 63.25 percent and 63.29 percent, respectively. The educational level of the household head (Table XVI, Appendix E), was also similar. Twenty-four percent in the consumer education group had "some high school" and 27.2 percent of the other consumer and homemaking students had accomplished this education level. The students who did not know the educational level of the head of the household were represented by 18.7 percent in the consumer educational group and 17.1 percent in the other group.

The heads of the households were employed in all 10 of the occupational categories as can be seen in Table XVII (Appendix E). Many students failed to respond to this question (21.1 percent of the consumer education students and 28.5 percent of the other consumer and homemaking students). Of those who responded, the occupation of "operatives and kindred workers" accounted for the greater number of both groups with 30.1 percent of the heads of the households for the consumer education students being so employed and approximately 19 percent of the others were identified in the category.

Second Adult. The second adult in the households of consumer

education students had "some high school but did not graduate" (36.7 percent), second in order of frequency was 30.1 percent who were reported to have "graduated from high school" (see Table XVIII, Appendix E). The most frequently checked educational levels for the second adult in the households of the other consumer and homemaking students were 37.3 percent who had "graduated from high school" and 26.16 percent who had "some high school". Approximately 46 percent of the consumer education students and 45 percent of the other consumer and homemaking students failed to respond to the question related to occupation for the second adult (Table XIX, Appendix E). Of those who were employed, the category most frequently checked in both groups was "operatives and kindred workers" which represented 13.3 percent of the occupational category for the second adult in the consumer education group and 12.7 percent for the other consumer and homemaking students.

Knowledge Gain in Consumer Education Concepts

Knowledge gain in consumer education concepts was determined through the use of a 50 item multiple choice questionnaire. They were administered by home economics teachers in nine schools. In the schools, the subjects were the students enrolled in two classes taught by one home economics teacher with one exception; in one school the teacher variable was not held constant. The consumer education class was retained for the analysis and the other consumer and homemaking class was not. Of the two classes taught by each teacher, one of the classes was a semester course in consumer education and the other was a course in another consumer and homemaking subject area. The matrix for the analysis

included the type of program, education, student, and socio-economic variables.

As illustrated in the section on the description of the sample, the two groups were similar. Therefore, except for the type of program variable, the data were collapsed for the analyses.

Type of Program

The two types of programs, as defined for this study were: (1) a semester course in consumer education and (2) consumer education concepts integrated into the subject areas in consumer and homemaking. One of the questions addressed by the researcher was, would students gain more knowledge, as measured on a pre-post test, of consumer education concepts in a semester course of consumer education or when integrated with other consumer and homemaking courses?

The analysis of variance was used to determine if significant differences existed in student knowledge gain in consumer education concepts and the type of program. The analysis produced an F value (1.57, $p > .211$) and suggested that differences failed to exist at the .05 level of confidence. Therefore, null hypothesis (H_1) of no significant difference in terms of treatment was retained (see Table IV).

While the hypothesis was accepted, a notable finding was that there were mean score gains on the consumer education test by both groups. Those enrolled in a semester course of consumer education registered a positive mean score gain of 3.156, and those enrolled in other consumer and homemaking courses registered a positive mean score gain of 2.24 on the pre-post test sequence. Table V depicts those findings.

TABLE IV

F VALUE DEPICTING DIFFERENCES IN SCORE GAIN OF STUDENTS
ENROLLED IN CONSUMER EDUCATION AND THOSE ENROLLED
IN OTHER CONSUMER AND HOMEMAKING CLASSES

Source	df	F Value	P
Treatment	1	1.57	.211
Error	322		

TABLE V

DUNCAN'S MULTIPLE RANGE ANALYSIS BETWEEN MEAN SCORE GAIN BY
STUDENTS ENROLLED IN SEMESTER COURSES OF CONSUMER EDU-
CATION AND OTHER CONSUMER AND HOMEMAKING COURSES

Type of Program	Consumer Education	Other Consumer and Homemaking
Mean score gain	3.156	2.24

A variable not controlled for in this research was how the concepts were taught. Since home economics teachers were encouraged to relate consumer education concepts to student interests (Bridge, 1921), the concepts may have been similarly taught whether they were integrated into other courses or taught as a semester course.

Education Variables

One of the education variables, as explained earlier in this chapter,

was school size and the other one was prior enrollment in consumer and homemaking. Specifically, school size meant the number of students enrolled in grades nine through twelve in each of the nine schools selected to participate in the study. The schools were coded into three categories, one category represented those schools with enrollments of from 0-499, the second category represented those schools with enrollments of from 500-599 students, and third category included those with over 1,000 students.

The two groups of students, those enrolled in a semester course of consumer education and those enrolled in other consumer and homemaking courses in the participating schools, who took both the pre and the post test were combined for the analysis on the education variables.

School Size. There were two schools in the category of 0-499, six fitted into the 500-599 category, and one was in the 1,000 and over category. The analysis of variance for significant differences indicated that school size affected the mean score gain on the consumer education concepts test taken by the students. Those enrolled in semester courses of consumer education and those in other consumer and homemaking courses were combined. As noted in Table VI, the F value (27.11, $p > .0001$) was significant. Since the level of confidence of .05 was chosen for this study, the null hypothesis (H_2) was not completely accepted. Duncan's Multiple Range test was used for further analysis to determine which enrollment size range was significantly different. As can be seen in Table VII, students enrolled in school category 3 had a significantly higher mean score gain on the consumer education test. This school (3) was the only one in the sample with over 1,000 students enrolled in grades nine through twelve.

TABLE VI

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS IN THE STUDY AND THE SCHOOL SIZE

Source	df	F Value	P
School Size	2	27.11	.0001
Error	321		

TABLE VII

DUNCAN'S MULTIPLE RANGE ANALYSIS BETWEEN MEAN SCORE GAIN BY STUDENTS ENROLLED IN BOTH CONSUMER EDUCATION AND OTHER CONSUMER AND HOME MAKING CLASSES AND SCHOOL SIZE

School size	3	1	2
	Over 1,000	0-499	500-599
Mean score gain	9.61	2.69	1.46
	A	B	

Prior Enrollment in Consumer and Homemaking. Data collected from the students enrolled in a semester course of consumer education and the students enrolled in other consumer and homemaking courses were combined for this analysis. The analysis indicated no significant differences between the educational variable of "prior enrollment in consumer and homemaking" and mean score gain on the consumer education concepts test. The F value of (2.24, $p > .064$) was not significant at the .05 level of confidence and the null hypotheses (H_3) was accepted for this aspect of the educational variables (Table XX, Appendix E). However, the F value approached significance and a Duncan's Multiple Range Test illustrated the difference in mean score gain on the pre-post test of consumer education concepts and the number of semesters of previous enrollment in consumer and homemaking (Table VIII).

TABLE VIII

DUNCAN'S MULTIPLE RANGE ANALYSIS BETWEEN MEAN SCORE GAIN BY STUDENTS ENROLLED IN THE CONSUMER EDUCATION AND OTHER CONSUMER AND HOMEMAKING COURSES COMBINED AND PRIOR ENROLLMENT IN CONSUMER AND HOMEMAKING

Semesters in consumer and homemaking	3	4	1	2	5
	N=50	N=103	N=74	N=70	N=7
Mean score gain	4.080	3.572	1.878	1.657	-0.428

As can be seen in Table VIII, those students who had three and four semesters of consumer and homemaking had almost double the mean score gain over those who had one and two semesters. When these gains were compared to the ages of the students, with the exception of six students of 307 who responded to the question and whose mean score gains were high, it appeared that age was not the influencing factor (see Table XX, Appendix E). Additionally, it was noted that following the third semester of prior consumer and homemaking, the mean score gain on the consumer education concepts test began to decline with a dramatic drop following four semesters. The researcher speculated that beyond three or four semesters of enrollment in consumer and homemaking, college bound students failed to enroll in consumer and homemaking because of enrollment in courses required for university admission. The size of the school appeared to affect knowledge gain on the consumer education test while prior enrollment in consumer and homemaking failed to affect knowledge gain in consumer education concepts at the .05 level of confidence chosen for the study.

Student Variables

Data from the entire sample, consumer education students and other consumer and homemaking students, were combined for the analysis on selected student variables which were described earlier in this chapter. They were: (1) gender, (2) age, (3) race, (4) location of residence, and (5) college plans. The t test and analysis of variance were utilized to establish any statistical differences between these variables and mean score gain on the multiple choice questionnaire. Results of the analysis were presented in Tables XXI through XXV, Appendix E.

Gender. Of the number who responded to this question, 82 were male (25.9) percent students and 234 (74.1 percent) were female students. Only eight students failed to respond. A t test for significant differences indicated that gender was not a determining factor in mean score gain in knowledge of consumer education concepts as measured on the test. The t statistic was then converted to an equivalent F (F') value of (1.30, $p > .127$) and was not significant at the selected .05 level of confidence. It appeared therefore, that gender was not a determining factor in the mean score gain on the test over consumer education concepts (Table XXI, Appendix E).

Age. The categories included in the variable of age on the personal data sheet ranged from "15 or younger" to "20 or older". With the exception of one student, 20 years or older, and five students who were 19 and had mean score gains of 11.00 and 4.4 respectively, the range of mean score gain was from 2.25 for students 15 or younger to 1.96 for those 18 years old. The data analysis indicated no significant differences with regard to age and mean score gain on the pre-post consumer education concept test taken by the students enrolled in a semester course of consumer education and other consumer and homemaking classes combined. The F value (.53, $p > .756$) was not significant at the accepted confidence level of .05 (Table XXII, Appendix E).

Race. Data generated from students enrolled in semester courses of consumer education and those in other consumer and homemaking classes were collapsed for this analysis. Approximately 50 percent of the students were black, approximately 47 percent were white and the remaining three percent were American Indians and orientals. The F value

(.78, $p > .507$) was not significant at the .05 level of confidence. The information was graphically presented in Table XXIII, Appendix E.

Location of Residence. Data from the entire sample, consumer education students and other consumer and homemaking students, were combined for the analysis on location of residence. The analysis of variance was utilized to identify any statistical differences between location of residence and mean score gain on the consumer education concepts test. Approximately 86 percent of the respondents reportedly lived in rural areas. The remaining 14 percent lived in an urban area (2,500 to 25,000 population). The F value of (1.22, $p > .271$) was not significant at the selected .05 level (Table XXIV, Appendix E).

Evidence failed to support any differences between the student variables of gender, age, race, location of residence, or college plans and mean score gain on the consumer education concepts tests. On the contrary, the results indicated that score gain by the two groups of students, those in consumer education classes and other consumer and homemaking classes, was not a function of the student variables and led to the acceptance of the null hypothesis (H_3).

College Plans. Data from subjects enrolled in consumer education and other consumer and homemaking classes were combined for studying this variable. The statistical analysis of variance was utilized to determine if any significant differences between plans by students participating in the study and mean score gain on the consumer education concepts pre-post test sequence. Evidence, F value (.88, $p > .347$), supported the null hypotheses of no differences for the variable of college plans (Table XXV, Appendix E).

Coleman and others' (1966, p. 280) research found "very high educational aspirations of all groups". This was consistent with previous research and suggested that for some economic levels there was "considerable lack of realism in aspirations" (p. 280).

Socio-Economic Variables

Data from the sample, consumer education students and other consumer and homemaking students, were combined for the statistical analysis on the selected socio-economic variables of household head, educational level of the first and second adult, and the occupational category of the first and second adult in the households. The t test and analysis of variance were applied to the data to determine if there was any significant differences between those variables and mean score gain on the multiple choice questionnaire on consumer education concepts. The analysis failed to reveal any significant differences at the .05 level of confidence. Results of the analysis were presented in Tables XXVI through XXX, Appendix E.

Heads of Households. The t test was used on the combined scores of students who were enrolled in semester courses in consumer education and in other consumer and homemaking courses to determine if significant differences existed in student knowledge gain on a consumer education concepts test and the socio-economic variable of household head. The analysis produced an F (F') value of (1.30, $p > .127$) and suggested that differences failed to exist at the .05 level of confidence (see Table XXVI, Appendix E).

Occupational Category of the Heads of Households. Data collected

from the students enrolled in semester courses of consumer education and those enrolled in other consumer and homemaking courses were combined for this analysis. Eighty of the students failed to respond to this item on the questionnaire and may have biased the results (Table XXVII, Appendix E). The computations indicated no significant differences between the socio-economic variable of occupational category of the head of the household and mean score gain on the consumer education concepts test. The F value of (.49, $p > .880$) was not significant at the .05 level of confidence chosen for this study.

Father's Educational Attainment. Data generated from students enrolled in semester courses of consumer education and students enrolled in other consumer and homemaking courses were combined for this analysis. The F value (1.48, $p > .162$) which was calculated with the analysis of variance showed no significant difference between the variable of the father's educational attainment and mean score gain on a pre-post test over consumer education concepts at the .05 level of confidence (Table XXVIII, Appendix E).

Occupational Category of Second Adult. The statistical analysis of variance was calculated on data from all students who participated in the study, those in classes of consumer education and other consumer and homemaking classes, to determine if significant differences existed between the mean score gain made by students on a consumer education competency test and the occupational category of the second adult in the family. The F value (1.10, $p > .368$) indicated no significant differences with regard to occupation of the second adult and mean score gain (Table XXIX, Appendix E). As was shown in Table XIX, Appendix E, 148

(approximately 45 percent) of the students failed to respond to the question and the results on this variable may be biased.

Mother's Educational Attainment. The calculated F value (.42, $p > .09$) failed to support a significant difference in mean score gain on the multiple choice questionnaire on consumer education concepts and the mother's educational level. The information was graphically presented in Table XXX, Appendix E.

The calculated t and analysis of variance used to analyze the data generated from students enrolled in consumer education classes and those in other consumer and homemaking classes combined, failed to support any differences between the socio-economic variables of students' parents and mean score gain on the consumer education concepts pre-post tests. As mentioned earlier in this section, there was a high rate of non-response on the occupational categories for the first and second adults in the households. The mean score gain made by the respondents was not a function of the socio-economic variables and led to the acceptance of the null hypothesis (H_4) formulated for this study.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Public Law 94-482, frequently referred to as the Amendments of 1976, continued to require that consumer education be a part of the consumer and homemaking curriculum. The law further mandated that those programs be reviewed and evaluated. The purpose of the present study would be to measure the difference in knowledge gain in consumer concepts between two groups of students enrolled in consumer and homemaking; one group was taught a semester course concentrating on consumer education concepts and in one group consumer education concepts were integrated into the entire home economics curriculum.

Summary

Although the hypothesis of no significant differences in type of consumer and homemaking program was accepted, it was noted that positive mean score gains were made by both groups of students, those enrolled in semester courses in consumer education and those enrolled in other consumer and homemaking classes. These positive gain scores for both groups lent support to Langrehr's (1979) findings that student competencies were improved when students were enrolled in courses where the emphasis was on consumer education or consumer economics rather than economic principles. Evidence existed that home economics teachers had integrated consumer economic principles into the topics of clothing,

cosmetics, food, and shelter since at least as far back as 1921 (Bridge, 1921).

Evidence noted by Bridge (1921) coupled with the concept that home economics is an applied science suggested to the researcher that regardless of whether consumer education was integrated into other consumer and homemaking subject areas or planned for a semester course, concepts were probably taught along with practical application related closely to the lives of the students enrolled in the classes. As Trump and Miller (1977, p. 244) said, home economics "is a field that fuses theory with practice".

The variable of "school size" was the only one which emerged as affecting significantly the mean score gain of the two groups of students, those enrolled in consumer education semester courses and those enrolled in other consumer and homemaking classes. Scores from the two groups with each school were combined for the study of effect of size of school on mean score gain. The results indicated that students in the larger schools showed a greater knowledge gain in consumer education concepts than did the students in the smaller schools, and this difference was significant beyond the .0001 level. Findings of other researchers who examined the relationship between school size and quality of education were inconsistent. However, research tended to favor larger sized schools over smaller sized schools. Studies by Larson (1970), Seymour, cited by Langrehr and Mason (1977), and Rejpal (1969) all credited larger schools with a higher quality education. Bibb (1973) found that students from smaller size of city schools scored higher than those from larger size of schools in cities. Bibb's (1973) findings were not contradictory to the findings in the present research in that the school, with slightly over 1,000 students, was not a large city school.

The educational variable of "prior enrollment in consumer and homemaking" approached significance with $p = .064$. Those students who had three and four semesters of consumer and homemaking education had almost twice the mean score gain as those who had one and two semesters. The score gain on the consumer education concept test began to decline after three semesters followed by a dramatic drop following four semesters. Results of other research relevant to this hypothesis were inconsistent. A study by Crawford, cited by Griggs and McFadden (1980), failed to reveal a significant difference in knowledge of consumer education concepts between students who had a course in consumer and homemaking in high school and those who had not. Rowley (1974) found a significant positive relationship between the number of semesters of prior enrollment in consumer and homemaking and student competencies on nine of the eleven competencies measured in the study. The researcher speculated that beyond three or four semesters of enrollment in consumer and homemaking, college bound students failed to enroll in additional classes because of enrollment in courses required for university admission.

Findings of the present study supported the null hypothesis of no significant differences between mean gain in student scores on a consumer education test and the student variables of gender, age, race, location of residence, and college plans. Some conflicting findings were reported from other research. Johnson (1976) and Echternach (1967) supported the conclusion that in some areas of consumer education competencies males scored higher than females. Luper (1973) found that females performed better on a consumer education test than males and that college bound students scored significantly better than those who did not plan to

attend college. Coleman (1966) found that students were not realistic in their plans to attend college when they responded to a questionnaire.

The null hypothesis of no significant difference was accepted for the effect of selected socio-economic factors on score gain. Statistical evidence of the present study was not supported by previous findings. Deutch (1967), Kaplan (1963), Levin and others (1979), and Impellizzeri and others (1965) all found differences in achievement by students and their families' socio-economic status. In research related to consumer education, Jelly (1958), Bakken (1966), and Lito, cited by Langrehr and Mason (1977) also found that students with families from a higher socio-economic status performed better on tests. In the opinion of the researcher, a number of factors may have contributed to this finding. The percentage of students who failed to respond to the occupational profile question may have biased the results (Tables XVII and XIX, Appendix E). If this study were replicated, a different occupational profile classification might be used to strengthen the research. Additionally, the relatively small student groups may have produced more homogeneity among students than that found in larger systems. Another fact which may have affected the findings was that Mississippi had no compulsory school law and those who remained in school may have been more "middle class" in educational aspirations.

Conclusions

The results obtained in the present study led to the conclusion that consumer education concepts were learned by students whether taught as a semester course in consumer education or integrated into other areas of the consumer and homemaking curriculum. While there was not a significant difference in knowledge gain between the two groups, those

enrolled in a semester course in consumer education had a slightly higher mean score gain than the students enrolled in the other consumer and homemaking courses.

From the data presented, the researcher also concluded that larger size schools supported greater student learning than smaller size schools. The largest school, included in the study and the only one which had over 1,000 students enrolled in grades nine through twelve, showed a significantly greater mean score gain on the consumer education concepts pre-post tests. Although other studies supported this finding, research which included more schools of this size or larger would have added greater significance to the study.

The researcher had originally hoped to be able to make suggestions for pre-service and in-service teacher education. However, the limited nature of the response did not provide sufficient data to support recommendations.

Recommendations

Subsequent to this researcher's review of literature, a national study, Classification of Concepts in Consumer Education (Bannister and Monsma, 1980), identified seven functions of effective consumers which ranged from coping to influencing change. These described roles along with the findings of the present research prompted the writer to submit several recommendations for strengthening consumer education programs for youth and for providing home economics personnel and others with research based information upon which to make program decisions.

Recommendations for further research center on high school students and home economics teachers who are involved in consumer education. A

follow-up study of students in consumer education programs needs to be conducted and should involve other than the cognitive domain. In fact, the researcher thinks consideration needs to be given to a longitudinal study involving knowledge, attitudes, and behavior. An investigation conducted over a period of time following different approaches to including consumer education in the curriculum would give insight into the more complicated aspects of consumer behavior especially if related to a theoretical base. An investigator might consider a study related to how the changing social system (variety of lifestyles, changing sex roles, etc.) affects consumer decision making; or research to clarify the extent to which students are aware of the impact of the physical environment on decision making would be appropriate.

Other suggestions for additional research would be to investigate the extent to which consumer education teachers are cognizant of the influence of technology, ecology, and public policy on consumer decision making; and research to study the effect of various methods of teaching on students' knowledge, attitudes, and behaviors could provide valuable information. In-depth case studies of consumer education teachers to identify strengths and weaknesses could give insight into needs at the pre and in-service education levels. Additionally, more consumer education tests need to be developed which would contribute to broader research based information including concepts which extend beyond a knowledge and/or coping type of information.

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APPENDIXES

APPENDIX A
CONSUMER EDUCATION TEST

CONSUMER EDUCATION TEST*

Directions: Read each question carefully and decide which of the answers best completes the statement. On the answer sheet mark your answer to each question by darkening the letter corresponding to the answer you select. Mark only one response per item; use a number 2 pencil for responding.

1. An important factor for establishing priorities of basic needs is identifying one's
 - A) standards
 - B) time
 - C) money
 - D) values

2. Needs for consumer goods and services
 - A) increase during adolescent years
 - B) decrease from adolescence to adulthood
 - C) remain the same after adulthood is reached
 - D) vary for each stage of the life cycle

3. Personal resources should first be planned to meet
 - A) desires
 - B) wants
 - C) needs
 - D) standards

4. Preserving the environment in our country for us and for future generations involves
 - A) returning to a more primitive existence
 - B) modifying lifestyles and goals
 - C) increasing the productive capacity
 - D) decreasing consumption by all segments of our economy

5. If Pat wanted the satisfaction of using some of her human resources rather than all material ones, she would
 - A) pay someone to make and install the shelves
 - B) make shelves herself and put them up
 - C) purchase the shelves at a store that will deliver them
 - D) delay the purchase of shelves so as to save the money

6. When purchasing a house, a family first considers
 - A) amount of repair the house needs
 - B) preferences of color scheme
 - C) family life style and needs
 - D) insurance rate of the house

* Used with permission of authors, Harder and Fanslow, Department of Home Economics Education, Iowa State University

7. An example of materialistic lifestyle is
- A) passing up a job promotion so you can spend more time with your family
 - B) quitting a job as a pro football player and taking a job in a sporting goods store to avoid injuries
 - C) leaving a good job and moving to a wilderness area in order to be close to nature
 - D) buying a new sports car instead of going to college
8. The Carlson family values spending time together each Saturday evening. Jane, their daughter, has three choices for Saturday night. To be consistent with the family's life style, Jane probably will
- A) go to the youth group meeting at church
 - B) play a game with her younger sister
 - C) work on school assignment at the library
 - D) talk to a friend on the telephone
9. The Bennett family purchased a boat for summer recreation. The purchase will change the family's activities by
- A) spending more time away from home
 - B) participating in more community activities
 - C) increasing expenditures for formal clothing
 - D) having family members participate in diverse activities
10. Life styles change during inflation because
- A) salaries go up and each dollar buys more
 - B) salaries remain the same while prices increase
 - C) the value of the dollar increases
 - D) it takes more dollars to buy the same amount of goods
11. Americans' basic values are least likely to change due to a change in the
- A) person's life style
 - B) stages of the family life cycle
 - C) geographic location
 - D) federal laws
12. The decision-making process in making consumer choices involves the following steps:
- 1. seek alternatives or possible courses of action
 - 2. make a list of all possible choices
 - 3. choose an alternative
 - 4. identify the problem
 - 5. examine alternatives

Select the most appropriate sequence from the list below

- A) 4 1 2 5 3
- B) 4 2 1 5 3
- C) 4 1 5 2 3
- D) 4 2 5 1 3

13. The total cost of car ownership includes
- A) repairs, insurance, and gasoline
 - B) depreciation plus gasoline
 - C) insurance, licenses, and fuel
 - D) operating costs and depreciation
14. Factors that determine credit rating include all the following except
- A) capacity
 - B) capital
 - C) character
 - D) convenience
15. John is selecting peas for a casserole. Choices in the grocery store are

Store Brand	Frozen Fancy Peas	Fresh peas	National Brand
A	B	C	D
The lower priced choice for John would usually be			
A) A			
B) B			
C) C			
D) D			

16. Low cost community resources available to the public include all the following except
- A) cable television
 - B) county parks
 - C) local health department
 - D) libraries
17. Mary has limited money to provide books for her three-year-old son John. The widest variety of books for John can be obtained by
- A) purchasing books at rummage sales
 - B) purchasing through a monthly book club at reduced prices.
 - C) exchanging books with families in the neighborhood
 - D) borrowing from the local library

18. The primary responsibility of consumers in using credit is
- A) borrowing on time only what one can afford
 - B) paying on debts that he/she can afford every month
 - C) knowing how to figure the true interest rate
 - D) limiting the use of credit to emergency needs
19. Human resources are classified as
- A) money, attitudes, libraries
 - B) talents, interest, knowledge
 - C) clothing, skills, abilities
 - D) hospitals, police, homes
20. The group of people hurt most by inflation is
- A) retirees on fixed income
 - B) business persons with long-term debts
 - C) union members on an annual contract
 - D) salesmen who receive a percentage of the gross receipts
21. The Truth-in-Lending Law states that the yearly percent rate of interest is printed
- A) many times on the contract
 - B) on the back of the contract
 - C) in large black type on the contract
 - D) in newspaper ads and on the contract
22. A written statement attached to an article or a product describing its essential characteristics is the
- A) guarantee
 - B) label
 - C) warranty
 - D) price tag
23. The best weapon to use against impulse buying in the grocery store is
- A) checking weights and measurements
 - B) shopping at supermarkets
 - C) shopping during week-end specials
 - D) using a shopping list
24. Two boxes of cereal are the same type and quality. The kind of information that would help you decide which one was the better buy is the
- A) size of the package
 - B) package marking "on sale"
 - C) cost per ounce of net weight
 - D) label reading "10¢ Off"

25. A consumer who is evaluating an advertisement should know that law forbids advertising which
- A) makes faulty claims of quality
 - B) is puffing rather than factual
 - C) compares products on television
 - D) promotes foreign products
26. An example of an advertising statement that can be relied upon when making a purchase is
- A) "It can't be beat"
 - B) "Better than any other"
 - C) "Made of 100% virgin wool"
 - D) "Contains special whitening agent X-80"
27. Name brand aspirin cost more than generic brand aspirin because it
- A) is packaged better than the nonname brand
 - B) works more effectively than the other brand
 - C) has more advertising to make it seem different
 - D) uses better labeling techniques than the other brand
28. Bill saw an advertisement in which a famous pro football player recommended a cologne for men. An accurate statement about this advertisement is that it
- A) represents the feelings of most football players
 - B) illustrates the comparative qualities of the cologne
 - C) provides him with some type of payment
 - D) means that cologne is the best on the market
29. As the income of a family increases, they are likely to spend a smaller percentage of their income on
- A) insurance
 - B) travel
 - C) taxes
 - D) food
30. The roles in a four member family are least likely to change when
- A) a baby is born into the family
 - B) the breadwinner becomes disabled
 - C) one of the children enters high school
 - D) the mother takes a part-time job outside of home
31. The principle behind insurance is that it
- A) enables individuals to share losses
 - B) reduces the chances of accident and death
 - C) lowers the total cost of accidents
 - D) shifts financial burden away from government

32. Mary's mother and father are elderly. She worries about their illnesses and the possibility of their sudden death. The parents have made no will, and Mary thinks they only have a small estate. The best action for Mary to take involves
- A) asking the parents to indicate on paper what they want done with the estate and have them sign it
 - B) avoiding the topic because the estate is small and no will is necessary
 - C) avoiding the subject of a will; it will upset her parents
 - D) suggesting to the parents that they hire a lawyer to draw up a legal will
33. The least expensive type of life insurance policy is
- A) term
 - B) straight life
 - C) endowment
 - D) annuity
34. The most essential type of automobile insurance is
- A) comprehensive
 - B) collision
 - C) bodily injury
 - D) liability
35. The economic principle of scarcity refers to
- A) labor union demands of higher production
 - B) unlimited wants and limited resources
 - C) the overuse of consumer credit
 - D) business loss of profit
36. An inaccurate statement about most private American businesses is that they are
- A) guaranteed a profit by the government
 - B) expected to earn profits in return for risking their money capital
 - C) established to produce goods and/or services for which people are willing to pay
 - D) made efficient because of competition
37. The law of supply and demand suggest that when supplies are
- A) low, prices are low
 - B) high, prices are high
 - C) low, prices are high
 - D) high, prices stay the same
38. As gasoline prices go up, bicycles become more popular. As a result, there is a sudden increase in the number of bicycles being purchased without an accompanying increase in production of bicycles. The price of bicycles would

- A) go down because more bicycles were being sold
 - B) stay constant because the manufacturer's costs were constant
 - C) stay constant because production eventually would keep up with the increased demand
 - D) go up because the demand increased and inventory decreased
39. The four major factors of production are
- A) oil, land, gas, electricity
 - B) banking, investing, manufacturing, managing
 - C) wages, rent, interest, capital
 - D) land, labor, capital, management
40. A local ice cream store owner decides to sell sundaes for 40 cents. Every sundae now costs the store owner 50 cents. The store owner
- A) is currently making a profit by selling sundaes
 - B) may be breaking the law by selling sundaes below cost
 - C) needs to closely examine the cost of producing sundaes
 - D) will sell more sundaes so the production costs decreases
41. When only one company provides the consumer with the necessary goods and services, it is called
- A) corporation
 - B) monopoly
 - C) oligopoly
 - D) proprietorship
42. The Fair Credit Reporting Act states that a person may
- A) take his credit report home for one day to study it
 - B) see his credit report at the credit bureau
 - C) pay a small fee to see a credit report that kept him from getting credit
 - D) see his credit report at the credit bureau only if credit has been refused
43. Four brands of frozen meat pies are the same price and weight but they list ingredients as follows. The best buy would be
- A) brand A: meat, potatoes, water
 - B) brand B: potatoes, meat, water
 - C) brand C: water, meat, potatoes
 - D) brand D: potatoes, water, meat
44. Government agencies that provide consumer protection through regulations are
- A) manufacturers, retailers, and wholesalers
 - B) Better Business Bureau, Chamber of Commerce
 - C) Food and Drug Administration, Federal Trade Commission
 - D) local, state, and national consumer organizations

45. The consumer responsibility which does not necessarily accompany the right to safety is
- A) doing comparative shopping
 - B) studying safety ratings of products
 - C) reporting unsafe products
 - D) following use and care instruction
46. The state agency responsible for prosecuting state consumer fraud cases is the
- A) Department of Consumer Affairs
 - B) Department of Labor
 - C) Bureau of Weights and Measures
 - D) Attorney General's Office
47. Consumers can best improve products by
- A) complaining about poor products to the seller and producer
 - B) demanding faster service at the market place
 - C) throwing away faulty products
 - D) warning friends about poor products
48. Exercising the proper judgment and restraint when transacting business is considered part of the consumers'
- A) satisfaction
 - B) responsibility
 - C) shopping ability
 - D) given rights
49. Better products appear on the market when consumers do all of the following except
- A) learn how to take action for personal complaints
 - B) join with others for group pressure
 - C) refuse to discern differences in quality
 - D) learn more about products
50. You buy four new tires from a local service station for \$100 and later discover that they are recaps. The service station operator says you must have switched tires and refuses to refund your money. The agency that would finally settle this complaint is
- A) Better Business Bureau
 - B) Small Claims Court
 - C) Chamber of Commerce
 - D) Department of Transportation

APPENDIX B

PERSONAL DATA

PERSONAL DATA

Directions: Please read and answer each of the questions carefully. Choose the response that best identifies your situation. Write the letter of your response in the blank provided to the left of the question.

- _____ 1. Are you a male or a female?
- A) Male
 - B) Female
- _____ 2. How old were you on your last birthday?
- A) 15 or younger
 - B) 16
 - C) 17
 - D) 18
 - E) 19
 - F) 20 or older
- _____ 3. Where do you live?
- A) Rural area (less than 2500 people)
 - B) Urban area (2500 to 25,000 people)
 - C) Urbanized area (25,000 to 50,000 people)
- _____ 4. Which of the following best describes you?
- A) Negro
 - B) White
 - C) American Indian
 - D) Oriental
 - E) Other
- _____ 5. How many people live in your home, including yourself, parents, brothers, sisters, relatives, and others who live with you?
- A) 2
 - B) 3
 - C) 4
 - D) 5
 - E) 6
 - F) 7
 - G) 8
 - H) 9
 - I) 10 or more

- _____ 6. How far in school did your father go?
- A) None, or some grade school
 - B) Completed grade school
 - C) Some high school, but did not graduate
 - D) Graduated from high school
 - E) Technical or business school after high school
 - F) Some college but less than 4 years
 - G) Graduated from a 4-year college
 - H) Attended graduate or professional school
 - I) Don't know
- _____ 7. How far in school did your mother go?
- A) None, or some grade school
 - B) Completed grade school
 - C) Some high school, but did not graduate
 - D) Graduated from high school
 - E) Technical, nursing, or business school after high school
 - F) Some college but less than 4 years
 - G) Graduated from a 4-year college
 - H) Attended graduate or professional school
 - I) Don't know
- _____ 8. Are you planning to go to college?
- A) Yes
 - B) No
- _____ 9. What is the current job title for the head of the household, if employed at present (if not employed at present, skip to item 10)
(write here) _____
- _____ 10. What is the current job title for the second adult, if employed at present
(write here) _____
- _____ 11. What is the sex of the head of household?
- A) Male
 - B) Female
- _____ 12. How many rooms are there in your home? Count only the rooms your family lives in. Count the kitchen (if separate) but not bathrooms.
- A) less than 3
 - B) 4
 - C) 5
 - D) 6
 - E) 7
 - F) 8
 - G) 9 or more

- ____13. Have you been enrolled in home economics before?
- A) One semester
 - B) Two semesters (1 school year)
 - C) Three semesters (1½ school years)
 - D) Four semesters (two school years)
 - E) More than four semesters (more than two years)

APPENDIX C

CONSUMER EDUCATION CONCEPTS

Consumer Education Concepts

Directions: Please write in the blank provided under Classes Pre and Post Tested the name of the class used in the study in addition to the group enrolled in the semester course in consumer education (e.g, housing, clothing and textiles, consumer and homemaking I).

The checklist contains concepts which might be taught in consumer education classes and other consumer and home-making classes. To the right of the concepts in the spaces provided for each of the two classes pre and post tested, please place a check (✓) if the concept was included in the course. (The list is not intended to suggest what ought to be taught. If you did not include the concept in the class, simply leave the space blank).

Example:

Concepts	Classes Pre and Post Tested	
	Consumer Education	Housing
1. Values	✓	✓
2. Goals	✓	
3. Lifestyles related to consumption	✓	

Concepts	Classes Pre and Post Tested	
	Consumer Education	Housing
1. Values		
2. Goals		
3. Lifestyles related to consumption		
4. Needs and wants		
5. Consumer resources		
6. Communication skills		
7. Decision-making		
8. Financial record keeping		
9. New worth		
10. Buymanship		

Concepts	Classes Pre and Post Tested	
	Consumer Education	Housing
11. Advertising	_____	_____
12. Rights and responsibilities	_____	_____
13. Credit	_____	_____
14. Insurance	_____	_____
15. Retirement	_____	_____
16. Estate planning	_____	_____
17. Change and the consumer	_____	_____
18. Conservation of resources	_____	_____
19. Taxes	_____	_____
20. Relationship between consumer and the economy	_____	_____
21. Economic environment	_____	_____
22. Pricing	_____	_____
23. Factors of production	_____	_____
24. Role of government	_____	_____
25. Consumer advocacy	_____	_____

APPENDIX D
INSTRUCTIONS FOR ADMINISTERING THE
CONSUMER EDUCATION TEST

INTRODUCTION

Thank you for agreeing to participate in collecting data to be used for my research. As Mrs. Ballard probably told you, the data will be used to compare the effect of student knowledge gain of consumer education concepts in different types of consumer and homemaking programs.

To assure privacy of each individual's responses, students and teachers are asked not to write their names on response sheets. Each instrument has a code number. To preserve the school's anonymity, no identification of schools or school system will be made in the study. Of course it will be necessary to keep your name on a separate sheet with the materials from your school until after the post-test. At that time the data will all be grouped together and the identification number and names of teachers will be destroyed in front of a witness.

Please check carefully how to keep records so that the same student is #1, #2, #3, etc. for the pre- and post-test. This information is contained in the "General Instructions".

GENERAL INSTRUCTIONS FOR TEACHERS

In any study, the students surveyed will be comparable only if all test administrators adhere to a common set of procedures. Please go over the instructions prior to the testing time so that all groups will take the test under as similar circumstances as possible.

1. Check to be sure that the quantities of tests equal the number of students in the two classes to be tested.
2. Please test only the classes indicated on the "Check Sheet".
3. During the time between receipt of materials and the testing time all materials should be kept locked up if possible. They should not be accessible to anyone other than yourself.
4. Each test is numbered. There are two separate sheets enclosed. One is titled "Consumer Education Semester Course" and the other one is titled "Other Class Tested". Each sheet has the test booklet numbers and a place opposite for the name of the student who receives that booklet, i.e.

<u>Test No.</u>	<u>Name</u>	<u>Test No.</u>	<u>Name</u>
001	Mary April	025	Jane Abbott
002	Bill Blass	026	Bob Best

This record is essential in order for Mary April, etc. to get #001 post-test later in the school year.

On the second sheet, please put the student's score from a standardized test and indicate what test was used for the score. This sheet should be returned with the other materials. The first one with names and numbers for the students should be kept in your files and then used for the post-test.

5. The test should be administered during the first week of the new semester, preferably the first day.
6. Students who are absent on the testing day should not be provided a made-up time. They will not be included in the study.
7. Please use #2 pencils only on the answer sheets provided. These are enclosed for your convenience. Please keep these for the post-test.
8. There will be no need for additional paper and all unnecessary materials should be removed from the desks.

9. If you are asked about guessing, the score will be the number of correct responses. There is no penalty for incorrect answers.
10. If you have a student who could circle answers but cannot follow instructions well enough to check the answer sheet, you may confer with that student(s) individually on how to do that. Then return the answer sheet together with the booklets with the others.
11. It would be helpful if you could move about the room to assure that all students are following directions carefully. You may also pronounce words for students but please do not elaborate further.
12. Before students are dismissed, all test booklets, answer sheets, and pencils should be collected from the students.

PACKAGING INSTRUCTIONS

Please return the following the materials the day after the test is administered.

Check list for packaging:

1. All test booklets and answer sheets for students including any which were not used. The count should correspond with the Check Sheet of materials received.

2. The Student Information Sheet with the standardized scores opposite the corresponding student number.

APPENDIX E

TABLES IX THROUGH XXX

TABLE IX
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN CONSUMER
 EDUCATION AND OTHER CONSUMER AND HOME-MAKING CLASSES
 BY PRIOR ENROLLMENT IN CONSUMER AND HOME-MAKING

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Prior Enrollment in Consumer and Home-making				
One semester	46	29.49	28	18.92
Two semesters	30	19.23	40	27.03
Three semesters	23	14.74	27	18.24
Four semesters	53	33.97	50	33.78
Five semesters	4	2.56	3	2.03
Non-response	10		10	
Total	166	99.99	158	100.00

TABLE X
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN
 CONSUMER EDUCATION AND OTHER CONSUMER AND
 HOMEMAKING CLASSES BY GENDER

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Male	44	26.5	38	24.0
Female	119	71.7	115	72.8
Non-response	3	1.8	5	3.2
Total	166	100.0	158	100.0

TABLE XI
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN
 CONSUMER EDUCATION AND OTHER CONSUMER AND
 HOMEMAKING CLASSES BY AGE

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
15 or younger	42	25.3	31	19.6
16	51	30.7	39	24.7
17	52	31.3	60	38
18	14	8.4	17	10.7
20 or older	1	.6	2	1.3
Non-response	3	1.8	9	5.7
Total	163	99.9	158	100.0

TABLE XII
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN
 CONSUMER EDUCATION AND OTHER CONSUMER AND
 HOMEMAKING CLASSES BY RACE

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
American Indian	2	1.2	4	2.5
Black	91	54.8	69	43.7
Oriental	1	.6	2	1.2
White	70	42.2	78	49.4
Non-response	2	1.2	5	3.2
Total	166	100.0	158	100.0

TABLE XIII
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN CONSUMER
 EDUCATION AND OTHER CONSUMER AND HOMEMAKING
 CLASSES BY LOCATION OF RESIDENCE

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Rural	144	86.7	126	79.7
Urban	22	13.3	32	20.3
Total	166	100.0	158	100.0

TABLE XIV
 NUMBER AND PERCENT OF RESPONDENTS ENROLLED IN CONSUMER
 EDUCATION AND OTHER CONSUMER AND HOMEMAKING
 CLASSES BY COLLEGE PLANS

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Yes	125	75.3	106	67.1
No	38	22.9	44	27.8
Non-response	3	1.8	8	5.1
Total	166	100.00	158	100.00

TABLE XV
 GENDER OF HOUSEHOLD HEADS OF RESPONDENTS ENROLLED IN
 CONSUMER EDUCATION AND OTHER CONSUMER
 AND HOMEMAKING CLASSES

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Male	105	63.3	100	63.3
Female	57	34.3	52	32.9
Non-response	4	2.4	6	3.8
Total	166	100.0	158	100.0

TABLE XVI
 EDUCATIONAL LEVEL OF THE MOTHERS OF RESPONDENTS
 ENROLLED IN CONSUMER EDUCATION AND OTHER
 CONSUMER AND HOME MAKING CLASSES

Classes	Consumer Education		Other Consumer and Homemaking	
Education Level	N	Percent	N	Percent
None, or some grade school	7	4.2	12	7.6
Completed grade school	16	9.6	5	3.1
Some high school	40	24.1	38	24.1
Graduated from high school	39	23.5	43	27.2
Technical or business school	10	6.0	2	1.3
Some college but less than four years	13	7.8	10	6.3
Graduated from a four year college	6	3.6	7	4.4
Attended graduate or professional school	1	.6	4	2.5
Don't know	31	18.7	27	17.1
Non-response	3	1.8	10	6.3
Total	166	99.9	158	99.9

TABLE XVII
 OCCUPATIONAL PROFILE OF HOUSEHOLD HEADS OF RESPONDENTS
 ENROLLED IN CONSUMER EDUCATION AND OTHER
 CONSUMER AND HOMEMAKING CLASSES

Classes	Consumer Education		Other Consumer and Homemaking	
Categories	N	Percent	N	Percent
Professional, technical and kindred	9	5.4	8	5.1
Managers, officials and proprietors, except farmers	14	8.4	21	13.3
Clerical and kindred workers	4	2.4	3	1.9
Sales	8	4.8	6	3.8
Craftsmen, foremen and kindred	12	7.2	19	12.0
Operatives and kindred workers	50	30.1	30	19.0
Private household workers	3	1.8	19	12.0
Service workers, except private household	20	12.0	4	2.5
Laborers, except farm and mine	8	4.8	3	1.9
Homemaker	3	1.8		
Non-response	35	21.1	45	28.5
Total	166	99.8	158	100.0

TABLE XVIII
 EDUCATIONAL LEVEL OF THE MOTHERS OF RESPONDENTS
 ENROLLED IN CONSUMER EDUCATION AND OTHER
 CONSUMER AND HOME MAKING CLASSES

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
None, or some grade school	2	1.2	1	.6
Completed grade school	7	4.2	14	8.9
Some high school	61	36.7	42	26.6
Graduated from high school	50	30.1	59	37.3
Technical or business school	12	7.2	5	3.2
Some college but less than four years	7	4.2	4	2.5
Graduated from a four year college	6	3.6	8	5.1
Attended graduate or professional school	1	.6	2	1.3
Don't know	17	10.2	13	8.2
Non-response	3	1.8	10	6.3
Total	166	99.8	158	100.0

TABLE XIX
 OCCUPATIONAL PROFILE OF THE SECOND ADULT IN HOUSEHOLDS OF
 RESPONDENTS ENROLLED IN CONSUMER EDUCATION AND
 OTHER CONSUMER AND HOME MAKING CLASSES

Classes	Consumer Education		Other Consumer and Homemaking	
	N	Percent	N	Percent
Professional, technical and kindred	9	5.4	8	5.1
Managers, officials and proprietors, except farmers	3	1.8	4	2.5
Clerical and kindred workers	10	6.0	16	10.1
Sales	6	3.6	3	1.9
Craftsmen, foremen and kindred	4	2.4	2	1.3
Operatives and kindred workers	22	13.3	20	12.7
Private household workers	4	2.4	1	.6
Service workers, except private household	13	7.8	13	8.2
Laborers, except farm and mine	1	.6	2	1.3
Homemaker	17	10.2	18	11.4
Non-response	77	46.4	71	44.9
Total	166	99.9	158	100.0

TABLE XX

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND PRIOR ENROLLMENT
IN CONSUMER AND HOME MAKING

Source	df	F Value	P
Prior enrollment in consumer and homemaking	4	2.24	.0644
Error	299		

TABLE XXI

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND GENDER

Source	df	F (F') Value	P
Gender		1.03	0.897
Male	81		
Female	233		

TABLE XXII

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND AGE

Source	df	F Value	P
Age	5	.53	0.756
Error	306		

TABLE XXIII

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND RACE

Source	df	F Value	P
Race	3	0.78	0.507
Error	313		

TABLE XXIV

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS IN THE STUDY AND LOCATION OF RESIDENCE

Source	df	F Value	P
Location of Residence	1	1.22	0.271
Error	322		

TABLE XXV

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS IN THE STUDY AND COLLEGE PLANS

Source	df	F Values	P
College Plans	1	0.88	0.348
Error	311		

TABLE XXVI

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS IN THE STUDY AND GENDER OF THE HOUSEHOLD HEAD

Source	df	F (F') Value	P
Gender			
Male	205	1.30	0.1274
Female	109		

TABLE XXVII

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS IN THE STUDY AND OCCUPATIONAL CATEGORY OF HEADS OF HOUSEHOLDS

Source	df	F (Value)	P
Occupational Category of Heads of Household	9	0.49	0.880
Error	234		

TABLE XXVIII

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A CONSUMER
EDUCATION PRE-POST TEST TAKEN BY ALL STUDENTS
IN THE STUDY AND EDUCATIONAL ATTAINMENT
OF FATHER

Source	df	F Value	P
Father's Education	8	1.48	0.162
Error	302		

TABLE XXIX

F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND OCCUPATIONAL
CATEGORY OF SECOND ADULT
IN HOUSEHOLD

Source	df	F Value	P
Occupation Category of Second Adult	9	1.10	0.368
Error	166		

TABLE XXX
F VALUE DEPICTING DIFFERENCES IN MEAN SCORE GAIN ON A
CONSUMER EDUCATION PRE-POST TEST TAKEN BY ALL
STUDENTS IN THE STUDY AND MOTHER'S
EDUCATION ATTAINMENT

Source	df	F Value	P
Education Attainment of Mother	8	0.42	0.909
Error	302		

VITA

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