

ABSTRACT

Elizabeth W. Heal. CORRELATION OF CONSUMER AND HOMEMAKING EDUCATION AND HOME MANAGEMENT TASKS PERFORMED BY ADOLESCENTS. (Under the direction of Dr. Vila Rosenfeld) School of Education, December 1988.

The purpose of this study was to address the issues of relevance and effectiveness of the Consumer and Homemaking curriculum in the secondary schools in North Carolina. The objective was to measure the change in the number of home management tasks that home economics students performed in their homes as a result of completion of an introductory course at the secondary level. These students were tested for significant differences within the experimental group and compared to a group of students who had never been exposed to home economics education at the secondary level.

The quasi-experimental design was used to obtain data for this study. A survey was administered among 128 secondary home economics students from three rural high schools in Eastern North Carolina. They were compared to 128 students enrolled in non-vocational classes at the same schools. Both groups were administered a questionnaire at the beginning of the course and at the end of the school year. Subjects responded as to the number of times per week they completed 20 common household tasks. The t test was used at the .05 level of significance to determine mean differences for both groups according to the variables of: sex, age, race, family structure, and general academic

ability. The number of weeks of instruction each subject received in the home management unit was a variable that was tested within the experimental group only.

At the time of the pretest, no significant differences were found between the experimental and control groups. The experimental group showed a lower mean overall than the control group at the time of the pretest. Results indicated that when the two groups were compared at the posttest, no significant differences were found. A significant difference occurred in the experimental group in the number of home management tasks performed between the pretest and posttest.

In the experimental group positive differences were found between the pretest and posttest among: females, older students, black students, students who resided with one parent, those who were below average academically, and students who received four weeks of instruction in the home management unit as opposed to those students who received two weeks of instruction. When these same variables were tested against their control counterparts, no significant differences were found.

Within the experimental group positive change was noted in the area of food-related tasks with three tasks showing significant increases. This area also reflected the highest mean number of tasks performed. Clothing-related tasks showed overall low mean numbers of tasks performed, although three of the five tasks showed significant increases.

Family-related tasks reflected the poorest rate of change. Results in these areas were consistent with literature reviewed. Tasks classified as home care had positive changes with two tasks showing significant increases.

The experimental group showed positive increases in the number of tasks performed for all variables. The control group showed some positive increases as well, but none were as strong as the experimental group. Maturation of subjects may have played a role in these findings.

From the data analyzed, one may conclude that home economics at the secondary level did have a positive effect on the students' performance in home management tasks. The data indicated that some transfer of learning took place between the classroom and the home setting during the year in which the research was conducted as indicated by the increase in task performance. Further research is needed to determine if the behavior modification will be short or long term. Additional study may also be needed to determine why the area of food-related tasks showed greater increases than the other areas while the family-related tasks showed poor results. Home economics teachers may use research findings such as these to assess their curriculum and determine its effectiveness according to students' wants and needs.

CORRELATION OF
CONSUMER AND HOMEMAKING EDUCATION
AND HOME MANAGEMENT TASKS
PERFORMED BY ADOLESCENTS

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CHAPTER I

INTRODUCTION

There has been growing concern among vocational education teachers in North Carolina regarding the trend toward lower enrollments in vocational courses offered at the secondary level. As a result of this concern, many educators are taking a critical look at the effectiveness and relevance of their established curricula.

Some areas of the United States have experienced declining enrollments in home economics education (Coyle, 1984). Currently, enrollment in Consumer and Homemaking classes in North Carolina has shown a slight decrease in enrollment since the 1986-1987 school year (North Carolina Department of Education, 1988). However, with decreasing enrollments at the secondary level and with recent academic reforms, home economics enrollment is a concern of many home economics educators (Walker, 1988). Walker suggests that keeping the home economics curriculum at the secondary level interesting and relevant to students' needs may provide a basis for continued stable enrollments and perhaps enrollment growth.

One question addressed by this research is: are students who take home economics at the secondary level transferring learned concepts in the area of home care to everyday living as measured by behavioral tasks? In order to get an idea of the relevance of home economics education

to today's students, this research project examined the amount of housework, referred to in this research paper as home management tasks, performed by students enrolled in a consumer and homemaking course in relation to a similar group who had never taken any courses in home economics at the secondary level. Housework was selected as a topic of research because it encompassed a wide range of basic concepts typically learned in home economics education in the areas of food and nutrition, clothing and textiles, child care and family relations, and home care. Types of home management tasks performed and performance frequency can be measured to give educators an idea as to what concepts students are actually using in their daily lives thus revealing the skills and attitudes educators need to focus on in planning and implementing their curriculum.

Rationale

Studies such as this are important in establishing evidence regarding the importance of the consumer and homemaking program in the secondary schools. With the new educational trend back to basic academic courses, some educators seem to think that home economics is not an important and useful course (Walker, 1988). Some see home economics education as unimportant as it does not focus on math and science which is currently deemed as, ". . . the means for achieving U.S. supremacy in world economic and

political milieus" (Thomas, 1985). However, home economics education is specifically linked with math and science competencies thus making home economics and other vocational courses academic as well as vocational (Holsey & Rosenfeld, 1985).

It is hoped that data obtained from this study will provide information and direction in assisting home economics teachers in evaluating the effectiveness of the consumer and homemaking course content. It is further intended to provide data important to the study of vocational education programs in public schools, especially the consumer and homemaking curriculum on which this study focused.

Objectives

This research addressed the issues of the relevance and effectiveness of the consumer and homemaking curriculum in the secondary schools in North Carolina. The objective of this project was to measure the amount of change in home economics students' performance of home management tasks in their own homes as a result of completion of an introductory course at the secondary level. The resulting data may be used to provide information to help educators assess the extension of learning taking place between classroom instruction and students' practical application of learned skills to their own home environments.

The number of home management tasks each subject performed in his or her own home environment was the dependent variable in this study. Students' performance of home management tasks was studied and measured according to the independent variables of sex, age, race, and the student's overall academic achievement. In addition, each subject was assessed according to the family structure under which he or she was living at the time of the posttest. The length of instructional time spent in the classroom on home management was measured as an independent variable. The Consumer and Homemaking Curriculum Guide for North Carolina Public Schools recommends an instructional time period of four weeks in the housing and home furnishings unit of instruction (State Department of Public Instruction, 1972). The change in the number of home management tasks that students performed was measured and compared according to the amount of time they were exposed to the concepts in the home management instructional unit.

Delimitations

The following limitations were set by the researcher:

1. The study of the treatment group was limited to high school students enrolled in an introductory home economics course.
2. The study of the experimental and comparison groups was limited to classes whose teachers volunteered to participate in the study.

3. The study was limited to individual subjects within the volunteered classes who agreed to participate in the research.

4. The study was limited to one school year of investigation.

Limitations

The following limitations were recognized by the investigator:

1. The study was limited to three rural high schools within close proximity.

2. The study was limited by minimal controls on subjects in completing the questionnaire.

3. The study was limited by the possibility of intentional or unintentional falsification of responses by subjects.

4. The study was limited in that all independent variables could not be matched due to the sample size.

Null Hypotheses

The null hypotheses for this research project were as follows:

1. There is no significant difference in the average number of home management tasks performed by students in a period of one week before and after completion of an introductory consumer and homemaking course.

2. There is no significant difference in the average number of home management tasks performed between the experimental group and a comparison group.

3. There is no significant difference in the average number of home management tasks performed within the experimental group according to sex, age, race, general academic ability, family structure, and the number of weeks each subject received instruction in the housing and home management unit.

4. There is no significant difference in the average number of home management tasks performed between the experimental and comparison groups according to sex, age, race, general academic ability, and family structure.

Operational Definitions

Home management task was used to define a job that was performed in the student's home or surrounding property to maintain or upgrade the living conditions. This term also referred to interaction between family members including time spent together and physical care of family members.

The age range studied was ages 13 to 20 years old. The age group extended to age 20 to include students who had repeated a grade or interrupted their education, then later returned to continue in school.

All races were subject to study. No student was eliminated from the study on the basis of race. However,

the two major races studied were Caucasian and Negro, as these were the two races most prevalent in Eastern North Carolina.

Sexes studied included both male and female.

Consumer and homemaking courses are sexually nondiscriminatory.

Academic achievement was determined by the general grades each student made during that school year among all classes. Participating teachers categorized each student by assessing the grades the student had made on his or her report card up to the time of the post survey. Handicapping conditions were taken into consideration as well. Each teacher stated whether the student was above average, which signified those who were primarily "A" students; average, which signified those who were primarily "B" and "C" students; or below average, which signified those who were primarily "D" students. Teachers were given specific oral as well as written instructions. This categorization was determined at the time of the posttest. This afforded the teacher a full school year to work with the student to help her more accurately assess that student's academic ability.

The single-parent family was defined as one in which only one parent of either sex was presently living in the household with the subject being studied. The two-parent family was defined as both natural parents or a

natural parent and a stepparent who were currently residing with the subject. A guardian included the subject's grandparents, relatives, foster parents, or any other caregiver other than those previously described above.

The housing and home furnishings unit of instruction referred to the implementation of the instructional objectives set forth in the Consumer and Homemaking Curriculum Guide (State Department of Public Instruction, 1972) provided to all Home Economics teachers by the North Carolina State Department of Public Instruction. At the time of this research the Consumer and Homemaking Curriculum Guide was in the process of being revised. However, many teachers, including those taking part in this project were still using the objectives in the 1972 publication in their instruction.

CHAPTER II
REVIEW OF LITERATURE

A study conducted in 1986 among 42 states and the District of Columbia showed that 50% of the 43 areas studied experienced a decrease in enrollment in home economics classes between 1984 and 1985. North Carolina was one of the states showing decreased enrollment (Walker, 1988).

Statistics compiled by the North Carolina Department of Education in Raleigh, North Carolina, revealed that enrollment in vocational education in 1988 in this state was at its lowest since the 1984-1985 school year. Since the 1986-1987 school year, enrollment in vocational education had seen a decrease of 6,784 students which was approximately a three percent decline. In the Consumer and Homemaking program, enrollment had hovered at the 31,500 student enrollment figure since 1984, but the unduplicated count for the 1987-1988 school year showed a decrease of approximately 1,500 students which was a drop of nearly five percent (North Carolina Department of Education, 1985; 1986; 1987; 1988).

The Basic Education Plan for North Carolina Public Schools calls for an increase from 18 to 20 units in academic requirements for graduation (North Carolina State Board of Education, 1986). This plan created a standard for all secondary schools in the state to follow regarding courses necessary for graduation. Eleven of the 20 units were specified by the plan, none of which were vocational.

The other nine units were left for each local education agency to determine. Before this plan was implemented there were no uniform requirements and each local agency determined its own required and elective courses.

In 1983 the North Carolina State Board of Education approved the North Carolina Scholars Program. This program provides strict requirements for ". . . a well-balanced, challenging high school program" (North Carolina State Board of Education, 1983). The purpose of this program is for academic recognition as well as for consideration for post-secondary scholarships. A review of this program revealed requirements of 22 units for high school graduation for those students who elect to participate for recognition as a Scholar. In this program one unit of vocational education is required. The student is allowed three elective courses but is required to use these electives for a concentration in one subject area. Vocational education is one of the possible concentration areas; but if the student elects a vocational concentration, all courses must be in the same field.

A Nation at Risk: The Imperative for Educational Reform, released in 1983 by the National Commission on Excellence in Education, called for increased requirements in the academic areas. This report stated that current education was not up to standard as compared to education in other nations and that Americans seemed to be content with

just mediocre education. High schools were the major target for the commission's report. It noted that basic achievement scores of high school and college students had declined during the past twenty years. It was reported that other nations' educational achievement had surpassed American educational standards. High school graduates had been slighted in the areas of math and science and upon graduation were not ready for either college or work. It also reported that high school curriculum was weak and had few requirements. Students were allowed too many electives in personal service and development courses; and as a result, the graduates were unable to fit into a more highly technological society. The Commission made a recommendation that course requirements be increased at the secondary level to mandate four years of English, four years of math, three years of science, three years of social studies, one-half year of computer science, and two years of foreign language. In addition, it was suggested that schools adopt higher standards of performance for students (Gardner, 1983). Consumer and Homemaking education is considered non-academic, and in many school systems it is not considered to be a high priority item (Vocational Education's Fight for Survival, 1984).

One recent study specifically linked math and science education with home economics education by identifying common competencies within the three subjects. This study also included Business and Office Education and Marketing

and Distributive Education competencies as well as those related to Home Economics Education. It cited mathematics and science education as being, ". . . education for living," and an ". . . important part of the practical education needed by all students" (Rosenfeld & Holsey, 1985). This study also suggested that these subjects be an integral part of developing vocational direction for high school students. Because many students seem to be weak in the areas of math and science, they should be afforded every opportunity to use these basic skills. Vocational education is one arena which affords the student the opportunity to practice these skills and put them to practical use for everyday living. At the same time, the student is developing occupational skills. Holsey and Rosenfeld further indicated that the vocational classroom setting is the perfect place, especially for students who are not college bound, to develop these skills since small class size and extended period time blocks enable vocational teachers a greater opportunity to work individually with students. In at least one state, students may choose an approved vocational alternative for one math or science course (Holsey & Rosenfeld, 1985).

Passage of congressional bills such as the Gramm-Rudman-Hollings Bill could mean a loss of federal funds to education. Vocational education could be one of the hardest hit programs (North Carolina Department of

Public Education, 1986). Sources consistently agreed that one way to combat funding cuts and their potential devastation to the vocational program itself was to keep home economics relevant to students' needs. These sources also indicated that this could be accomplished by keeping the courses in line with current trends, making them more meaningful and interesting to students (Bishop, 1983). One author cited the need for increasing enrollment and planning curriculum to meet the needs and interests of all students as the number one priority of home economics today (Spitze, 1985).

One article presented a "Model of Human Competence" as a basis for the necessity of continuance of home economics in secondary education (Thomas, 1985). Thomas suggested that this model, based on the four contexts of "community and society, home and family, work, and personal and individual situations, problems and functions," serve as a basis for the transfer of learning across these contexts. She also maintained that education is responsible for teaching these contexts and that home economics is the link between academic subject areas.

There have been few studies conducted since the late 1920's that have focused on "adolescent use of time, particularly the amount of time devoted to household work" (Lawrence, Tasker & Babcock, 1983). Most studies examined agreed that the sex of the adolescent did influence time

spent in home management tasks (Farmer, 1980; Lawrence, Tasker & Babcock, 1983). One study indicated that home management tasks which were performed by adolescents were highly sex-linked and were determined by the adolescents' perceptions of male/female roles (Keith & Brubaker, 1980).

Two recent studies were reviewed, one which investigated adolescent time use in household tasks and one which focused on types of tasks performed by adolescents. Both studies had similar findings. The majority of the adolescents spent some time doing household work (Cogle, Tasker & Morton, 1982). In their article "Children and Housework," Cogle and Tasker reported that food preparation and related activities were the tasks most frequently performed, while clothing care was least likely to be dealt with. This study included children ranging in age from six to seventeen. Cogle, Tasker and Morton, whose study strictly dealt with ages 12 through 17, reported the greatest amount of time was spent in shopping and care of home yard, car, and pets. It was also reported that the least amount of time was spent in clothing care, which included management and construction of clothing, and physical and nonphysical care of family members. Both studies agreed that sex was related to participation and time spent on housework, with females spending a greater amount of time and showing a greater participation rate than males. Both studies reported that females performed more

tasks inside the home while males were more likely to perform tasks outside related to yard and car maintenance and pet care. Cogle and Tasker also reported that, "Older children participated significantly more often in household work than did younger children" (Cogle & Tasker, 1982). This same study reported that children of working mothers actually performed fewer tasks than children of full-time homemakers. This, however, was not consistent with Cogle, Tasker and Morton's study which reported that full-time working mothers received more help in housework.

No studies were found which specifically linked the influence of home economics education and the amount of time spent on, or numbers of, home management tasks performed by adolescents.

CHAPTER III

METHODOLOGY

Design

The method used in this research was quasi-experimental. Selection of subjects for the experimental group in this study was based on their enrollment while in the secondary consumer and homemaking curriculum in North Carolina public schools.

Subjects and Setting

High school students representing three schools in Eastern North Carolina were included in this study. East Carteret High School in Beaufort, North Carolina, with an enrollment of 750 students and approximately 140 home economics students, contributed 44 experimental and 52 comparison subjects. West Carteret High School in Morehead City, North Carolina, with an enrollment of 1400 and approximately 200 home economics students, contributed 37 experimental and 41 comparison subjects. West Craven High School in Vanceboro, North Carolina, with an enrollment of 950 and approximately 140 home economics students, contributed 47 experimental and 35 comparison group subjects.

The experimental subjects enrolled in the courses "Introduction to Home Economics," NC Vocational code 7111, and "Family Life Education," NC Vocational code 7171, comprised the treatment sample. Both courses were

introductory level home economics courses and were selected because these students had no prior instruction in home economics at the secondary level. Both courses present basic foundations of home economics including instruction in the following areas: food and nutrition, child development, family relations, clothing and textiles, housing and home furnishings, grooming and personal appearance, career orientation, and consumer education. Introduction to Home Economics was primarily designed for ninth and tenth graders, while Family Life Education was geared for students in grades 11 and 12.

The comparison group was used primarily to control for history and maturation of subjects. No subject in the comparison group had previously or was currently taking a home economics course at the high school level. Subjects in the comparison group were surveyed through their courses in English, math, or science. The experimental and comparison subjects were matched as closely as possible according to the variable of sex. This variable was selected because home economics classes generally have a greater female enrollment while non-vocational classes are more equally balanced. None of the other independent variables could be easily matched with the sample size used in this research.

Instrumentation

The instrument used in this study was a questionnaire which was created by the researcher from an oral survey of

randomly selected high school students regarding the types of household tasks they often performed. These tasks were divided into four categories: food, clothing, family relations/child care, and home management. These categories corresponded to four of the major units taught in the introductory courses that the treatment group would receive during the school year.

A pilot study was conducted on a group of home economics students and a comparison group at East Carteret High School in Beaufort, North Carolina, in 1986, the year prior to the actual implementation of the research. All students participating in the pilot study were graduating seniors and were not enrolled at the school at the time of the actual research so as not to confound the study. After the pilot study was evaluated, the questionnaire was revised and implemented the following September 1986, in a pretest/posttest manner to the subjects in the treatment group and the comparison group.

The instrument included demographic information on each individual subject and a list of 20 home management tasks. Each subject was asked to indicate the approximate number of times within a week that they performed each particular task. A sample instrument is included in Appendix A. At the time of the pretest, each teacher participating in this study was given specific written and oral instructions by the researcher regarding controlled

procedures in administering the questionnaire. This instruction was to minimize extraneous variables which could confound the study such as dates for administration, conditions for testing, directions given to subjects, discussion with subjects of the importance of this study, and accuracy of the subjects' answers.

When the posttest was administered, the teachers participating were asked to complete a section on each questionnaire stating the number of weeks the student received classroom instruction in the housing and home management unit during the school year. Teachers were asked to assess each subject's overall grades for the school year and to rate each student's academic achievement as above average, average, or below average. The above average student was one with an "A" average; the average student was one with primarily "B" and "C" average; the below average student included those students with grades primarily below a "C" average. This included all courses the student had taken during the school year and was based on report card grades and the teacher's evaluation of the student's performance during the school year. This assessment was not intended to be obtained strictly by numerical criteria.

Procedure

The pretest questionnaire was administered to each student between September 19 and October 1, 1986. Each

teacher participant returned the completed questionnaires to the researcher for data analysis.

The comparison group consisted of students in non-vocational classes in the same schools. This group also completed the same questionnaire. The comparison group provided a basis for comparing data and measuring change in performance in the number of home management tasks as well as serving as a control for the factors of history and maturation. No comparison group student had taken a home economics course at the secondary level at the time of this study.

During the first week in May of the same school year, an identical questionnaire was administered to the same treatment and comparison group subjects. These questionnaires were returned to the researcher for data analysis to determine the overall correlation of numbers of tasks performed before and after completion or non-completion of an introductory course. Each administrator responded verbally to the researcher that the guidelines for administering the survey had been followed as outlined in the Instructions for Administering Student Questionnaire as illustrated in Appendix C. No administrator indicated that any subject needed or received any assistance in completing the survey.

Mean scores were determined for each subject's responses according to individual tasks for the pretest and

posttest. The differences between the pretest and posttest means were calculated, and the t test was used to analyze the responses of the subjects regarding the number of tasks performed. The level of significance for all t tests was set at .05. The IBM computer along with the SAS System for Data Analysis was used to determine significant differences between the pretest and posttest responses within and between the experimental and comparison groups. The uncorrelated t test was used to determine that there were no significant differences between the experimental and comparison groups at the time of the pretest.

CHAPTER IV
RESULTS AND DISCUSSION

Description of Sample

The subjects in the experimental group consisted of 128 students enrolled in an introductory level home economics course. The comparison group consisted of 128 students enrolled in non-vocational courses at the same high schools for a total of 256 subjects. Table 1 depicts the demographic data of the subjects.

At the time of the pretest, subjects were matched between groups according to sex. Thirty-four males and 98 females were surveyed in each group. During the course of the year, four males dropped out of the experimental group and four females dropped out of the comparison group leaving 30 males and 98 females in the experimental group and 34 males and 94 females in the comparison group.

In the experimental group, 56 subjects were between the ages of 13 and 15, and 72 were between 16 and 18 years of age. In the comparison group, 81 ranged in age from 13 to 15, and 47 ranged in age from 16 to 18.

In the experimental group there were 77 white subjects and 49 black subjects. One subject was Oriental and one was Hispanic. In the comparison group there were 108 white subjects and 20 black subjects.

In the experimental sample, the teachers rated each subject academically as above average, average, or below average in general academic ability. In the experimental

Table 1

Background Data of Subjects Participating in Study of
Household Tasks

Variable	Respondents	
	Experimental (N=128)	Comparison (N=128)
	%	%
Sex		
Male	23.4	26.6
Female	<u>76.5</u>	<u>73.4</u>
Total	100.0	100.0
Age		
13, 14, 15 (group 1)	43.7	63.3
16, 17, 18 (group 2)	<u>56.3</u>	<u>36.7</u>
Total	100.0	100.0
Race		
White	60.3	84.4
Black	38.2	15.6
Other	<u>1.5</u>	<u>0.0</u>
Total	100.0	100.0
Academic rating		
Above average	19.5	30.5
Average	58.6	55.4
Below average	<u>21.9</u>	<u>14.1</u>
Total	100.0	100.0
Family structure		
Two-parent family	69.5	71.9
Single-parent family	21.1	20.3
Guardian	3.9	4.7
Grandparents	4.7	3.1
Spouse	<u>0.8</u>	<u>0.0</u>
Total	100.0	100.0
Instructional time in housing and home management		
Under 2 weeks	32.8	0.0
Four weeks or more	<u>67.2</u>	<u>0.0</u>
Total	100.0	0.0

group there were 25 subjects in the above average group, 75 in the average group, and 28 in the below average group. In the comparison group the subjects were rated as follows: 39 in the above average group; 71 in the average group; and 18 in the below average group. The majority of students in both groups were in the average range.

Eighty-nine of the subjects in the experimental group resided with two parents, while 27 lived in a single parent household. Five subjects lived with a legal guardian; one lived with a spouse; and six lived with grandparents. In the comparison group, 92 subjects resided in a two-parent household; while 26 lived with a single parent. Six subjects in the comparison group lived with a legal guardian, while four resided with grandparents.

Forty-two subjects in the experimental group received two weeks or less in the Housing and Home Management unit of instruction, and 86 received four or more weeks of instruction in this unit. No subject in the comparison group received any instruction in this area during this study.

In order to determine if there were significant differences in the number of household tasks performed by home economics students versus a comparison group, a survey was conducted. Data were collected by Home Economics teachers who administered a questionnaire to students enrolled in an introductory course at three high

schools located in Carteret and Craven Counties in Eastern North Carolina. These teachers were also instrumental in collecting pretest and posttest data from comparison groups in each high school. Each teacher participating in this research received oral as well as written instructions from the researcher on the procedure to use in the survey's administration. The subjects were asked to respond to the number of times each week they performed 20 common household tasks. The initial survey was administered to both groups during the last week of September, 1986. The follow-up survey was administered to the same sample during the second week of May, 1987. Each subject's pretest and posttest was matched according to student names on the survey.

Results and Discussion

The correlated t test was used in testing the first null hypothesis since each student's posttest was compared to his or her own previous score on the pretest. It was found that within the experimental group a significant difference was noted ($p < .01$) between the initial and follow-up surveys in the average number of tasks performed. Therefore the null hypothesis, there is no significant difference in the average number of home management tasks performed by students in a period of one week before and after completion of an introductory consumer and homemaking course, was not accepted.

Table 2 summarizes the increases and decreases for individual tasks as well as reporting mean values at the time of the posttest for each task for the experimental group. Within this group, there was a significant increase in eight tasks between the pretest and posttest. They included: family meal preparation, preparation of meal for self, setting the table, doing laundry, folding clothing, mending clothing, vacuuming, and emptying trash. Three of these tasks fell in the foods category, three in the clothing category, and two in the home management category. The home management area indicated a strong area of positive change as well but had fewer significant increases in task performance. The area of family relations/child care seemed to be the weakest area as it had only one positive increase and four negative changes.

The uncorrelated t test was used to compare the experimental and comparison groups since group scores were being compared as opposed to individual scores. It must be noted that the mean number of each task performed by the experimental group ($\bar{X}=2.82$) at the time of the pretest was less than the number performed by the comparison group ($\bar{X}=3.03$). Thus the experimental group, beginning with a deficit, progressed farther than the comparison group. This accounted for the significant increase within the experimental group between the pretest and posttest, but showed no significant difference when the groups were

Table 2
Scores for Experimental Group

Variable	Pretest mean	Posttest mean	% Change	p
Food-related tasks				
Prepare family meal	1.16	1.80	+55	.01*
Buy food	1.36	1.51	+11	
Prepare meal for self	3.71	4.28	+15	.02*
Set table	2.46	3.05	+24	.02*
Wash dishes	3.64	3.96	+09	
Clothing-related tasks				
Hang clothes	2.94	3.08	+05	
Place clothes in hamper	6.03	5.86	-03	
Do laundry	1.92	2.49	+30	.01*
Fold clothes	2.41	2.88	+20	.02*
Mend	0.39	0.69	+77	.02*
Family-related tasks				
Watch TV with family	4.41	4.09	-07	
Care for siblings	2.01	2.11	+05	
Eat with family	3.75	3.89	+04	
Babysit	1.17	0.98	-16	
Discuss problems	3.10	2.95	-05	
Home care-related tasks				
Vacuum	2.26	2.75	+22	.01*
Empty trash	2.18	2.61	+20	.04*
Straighten own room	4.13	4.05	-02	
Clean den	3.27	3.69	+13	
Make bed	4.19	4.55	+09	
Total	$\bar{X}=2.82$	$\bar{X}=3.06$	+09	.01**
Total tasks performed	56.49	61.27		

Note *Significant increase for task between pretest and posttest

**Significant increase for group between pretest and posttest

N=128

compared to each other. At the time of the posttest the experimental group had a mean of ($\bar{X}=3.06$) when all tasks were considered with an increase between pretest and posttest of ($\bar{X}=.23$). The comparison group had a mean of ($\bar{X}=3.04$) at the posttest and showed a smaller increase ($\bar{X}=.01$). When the mean differences were compared, it was found that the experimental group had not significantly increased in the average number of tasks performed above the comparison group. Therefore the null hypothesis, there is no significant difference in the average number of home management tasks performed between the experimental group and a comparison group was not rejected. Table 3 lists scores for the pretest and posttest means and the percentage of change between the surveys for the comparison group.

In contrast to the experimental group, the comparison group had only one significant increase in the survey which was the task of preparing a meal for self. The comparison group had one significant decrease which was the task of eating with family. All other tasks reflected minimal positive or negative changes.

The third null hypothesis stated that there is no significant difference in the average number of home management tasks performed within the experimental group according to sex, age, race, general academic ability, family structure, and the number of weeks of instruction each subject received in the housing and home management

Table 3

Scores for Comparison Group

Variable	Pretest mean	Posttest mean	% Change	p
Food-related tasks				
Prepare family meal	1.85	1.71	-08	
Buy food	1.58	1.89	+20	
Prepare meal for self	3.95	4.50	+14	.02*
Set table	3.38	3.21	-05	
Wash dishes	3.17	3.11	-02	
Clothing-related tasks				
Hang clothes	2.39	2.89	+21	
Place clothes in hamper	6.27	6.16	-02	
Do laundry	2.16	2.30	+07	
Fold clothes	2.57	2.70	+05	
Mend	0.61	0.63	+03	
Family-related tasks				
Watch TV with family	4.25	3.97	-07	
Care for siblings	2.61	2.61	00	
Eat with family	4.90	4.38	-11	.01*
Babysit	0.92	0.92	00	
Discuss problems	3.64	3.47	-05	
Home care-related tasks				
Vacuum	2.35	2.54	+08	
Empty trash	2.11	2.10	-00.1	
Straighten own room	4.38	4.08	-07	
Clean den	3.37	3.34	-01	
Make bed	4.10	4.24	+03	
Totals	$\bar{X}=3.03$	$\bar{X}=3.04$	+00.3	
Total tasks performed	60.56	60.75		

Note * Significant change for task between pretest and posttest

N=128

unit. Each of these variables was tested for significant change between the pretest and posttest by using the correlated t test. Each student's pretest and posttest scores were matched and compared individually. When the different categories of the independent variables were compared, such as older to younger students, the uncorrelated t test was used as these groups did not have matched numbers of subjects.

Within the experimental group there was no significant difference between tasks performed when males and females were compared to each other. Therefore, for this variable the null hypothesis was not rejected.

Table 4 shows scores for the pretest and posttest and the percentage of change for both sexes. It should be noted, however, that females in the experimental group significantly increased in the average number of tasks performed between the pretest and posttest ($p < .02$). Females in this group showed an increase of ($\bar{X} = .24$). Experimental males showed an increase of ($\bar{X} = .19$) between the pretest and posttest, but this was not significant. Females in the experimental group performed an average of 66.4 tasks per week while the males performed 44 tasks per week.

In examining tasks performed by males and females in this group, it was found that females had positive increases in all food-related tasks with food preparation showing the greatest increase. While the males showed positive

Table 4

Summary of Tasks Performed by the Experimental Group According to Sex

	Male (n=30)			Female (n=98)			p
	Pretest X	Posttest X	Percent Of Change	Pretest X	Posttest X	Percent Of Change	
Food-related tasks							
Prepare family meal	.73	.73	00	1.29	2.13	+65	
Buy food	1.43	1.37	-04	1.33	1.55	+22	
Prepare meal for self	3.77	4.53	+20	3.68	4.20	+14	
Set table	0.80	1.23	+54	2.97	3.61	+64	
Wash dishes	2.13	2.43	+14	4.09	4.43	+34	
Clothing-related tasks							
Hang clothes	2.49	2.13	-14	3.08	3.37	+09	
Place clothes in hamper	5.64	5.67	+0.5	6.15	5.92	-04	
Do laundry	1.03	1.43	+39	2.19	2.32	+29	
Fold clothes	.60	1.57	+162	2.95	3.23	+11	
Mend	.07	.20	+186	.48	.34	+75	
Family-related tasks							
Watch TV with family	4.10	4.07	-01	4.50	4.09	-09	
Care for siblings	1.00	1.23	+23	2.31	2.38	+03	
Eat with family	3.04	3.07	+01	4.33	4.14	-04	
Babysit	.13	.07	-46	1.49	1.26	-15	
Discuss problems	1.80	1.30	00	3.50	3.30	-06	
Home care-related tasks							
Vacuum	1.04	1.27	+22	2.63	3.20	+22	
Empty trash	3.10	2.83	-09	1.89	2.54	+34	.04*
Straighten own room	2.97	3.47	+17	4.49	4.22	-06	
Clean den	1.80	1.67	-07	3.72	4.31	+16	
Make bed	2.87	3.57	+24	4.58	4.85	+06	
Total \bar{X}	2.03	2.22	+09	3.08	3.32	+08	.02**
Total tasks performed	40.54	44.34		61.65	66.44		

*Significant increase when males and females were compared

**Significant increase between pretest and posttest for female group

increases in only 60% of food-related tasks, they still had an overall positive increase in this group with tablesetting being the primary area of increase. However, according to the posttest mean, the males still set the table only slightly over once a week.

Females showed greater participation in clothing related tasks. Males showed greater increases in the percentage of tasks performed but still participated in fewer-clothing related tasks per week. The task of placing dirty clothes in a hamper showed high male participation, but this task showed only a slight percentage in increase.

Both males and females showed strong positive changes in home-care related tasks with males showing increases in all of the categories. In relation to home economics education and gender, home care was the category showing the greatest area of gain for males, not only in percentage of gain but also in the average number of tasks performed per week.

Subjects were divided into age groups of 13 through 15 (age group 1) and ages 16 through 18 (age group 2). Household tasks performed by age group 1 of the experimental group did not increase significantly between the pretest and posttest. Age group 2 in the experimental group had a significant increase in tasks between the pretest and posttest ($p < .03$). At the time of the posttest, age group 1 reflected an overall mean of $\bar{X}=3.19$ while age group 2

showed a lower mean ($\bar{X}=2.95$). Within the experimental group, age group 2 showed a greater increase in the average number of tasks performed ($\bar{X}=0.27$) than age group 1 ($\bar{X}=0.17$). However, this was not a significant difference. Thus, the part of the null hypothesis relating to age was not rejected.

Table 5 shows that both age groups had positive increases in all food-related tasks and positive increases in 80% of clothing-related tasks. The younger group had positive increases in 80% of the home-care related tasks while the older group showed increases in all of the home care categories. The younger group had an overall decrease in the family-related tasks while the older group showed an even greater decrease in this category.

In comparing the number of home management tasks performed by different races, only black and white subjects were studied as there were too few Hispanics and Orientals to compare. Within the experimental group, black subjects showed a greater increase in the number of tasks performed compared to the white group. They did not significantly increase over the white group. Thus, the part of the null hypothesis relating to race was not rejected.

The black subjects in the experimental group significantly increased in total tasks between the pretest and posttest, ($p<.01$) with a mean increase of ($\bar{X}=0.46$). The

Table 5

Summary of Tasks Performed by the Experimental Group According to Age

	Age Group 1 (n=56)			Age Group 2 (n=72)			p
	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change	
Food-related tasks							
Prepare family meal	1.15	1.79	+56	1.16	1.81	+56	
Buy food	1.16	1.25	+08	1.49	1.70	+14	
Prepare meal for self	3.42	4.01	+17	3.91	4.48	+15	
Set table	3.12	3.73	+21	1.94	2.48	+23	
Wash dishes	4.02	4.23	+05	3.33	3.75	+13	
Clothing-related tasks							
Hang clothes	2.81	3.19	+14	3.02	2.96	-01	
Place clothes in hamper	6.13	5.55	-10	5.91	6.09	+03	
Do laundry	2.04	2.50	+23	1.81	2.48	+37	
Fold clothes	2.84	3.07	+08	2.05	2.72	+33	
Mend	0.54	0.75	+39	0.25	0.63	+152	
Family-related tasks							
Watch TV with family	5.16	4.16	-19	3.31	4.02	+06	
Care for siblings	2.56	2.33	-09	1.55	1.93	+25	
Eat with family	4.65	4.26	-08	3.53	3.59	+02	
Babysit	1.43	1.50	+05	0.96	0.56	-42	
Discuss problems	3.16	3.48	+10	3.05	2.52	-17	
Home care-related tasks							
Vacuum	2.83	3.03	+09	1.80	2.43	+33	
Empty trash	1.81	2.33	+29	2.43	2.31	+16	
Straighten own room	4.09	3.80	-07	4.16	4.23	+02	
Clean den	3.23	3.92	+20	3.25	3.50	+08	
Make bed	4.10	4.89	+19	4.17	4.27	+02	
Total \bar{X}	3.02	3.19	+06	2.68	2.95	+10	.03*
Total tasks performed	60.35	63.87		53.58	59.03		

*Significant increase between pretest and posttest for Group 2

white experimental group showed a mean increase ($\bar{X}=.04$) between the pretest and posttest but this was not significant. Table 6 shows the values for the pretest and posttest and percentage of increase or decrease for each individual task for both groups.

In examining the changes in task frequency in relation to race, it must be noted that among the black group there was a positive change in all but one task with a significant increase in mending clothing. The white group showed only moderate changes in food, clothing and home care tasks but showed negative changes in all tasks relating to family.

Students who were rated above average academically by their teachers were compared to those who were rated average and then to those rated below average. There were no significant differences between those students who made above average, average, and below average grades. The part of the null hypothesis relating to academic achievement was not rejected.

In testing this hypothesis, it was reported that the below average experimental group significantly increased between the pretest and posttest ($p<.04$), whereas the above average and average groups did not significantly increase. Table 7 shows the values of the pretest and posttest and percentage of increase or decrease according to each group.

Table 6

Summary of Tasks Performed by the Experimental Group According to Race

	Black (n=49)			p	White (n=77)		
	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change		Pretest \bar{X}	Posttest \bar{X}	Percent Of Change
Food-related tasks							
Prepare family meal	1.23	1.84	+50		1.12	1.73	+54
Buy food	1.33	1.41	+06		1.36	1.58	+16
Prepare meal for self	3.68	4.78	+30		3.78	4.04	+07
Set table	1.36	2.22	+63		3.01	3.51	+15
Wash dishes	4.10	4.61	+12		3.33	3.58	+08
Clothing-related tasks							
Hang clothes	3.82	3.47	-09		2.37	2.81	+19
Place clothes in hamper	5.73	6.00	+05		6.13	5.73	-07
Do laundry	1.41	2.45	+74		2.19	2.53	+13
Fold clothes	2.26	3.03	+36		2.44	2.69	+10
Mend	0.44	1.20	+173	.02*	0.32	0.38	+19
Family-related tasks							
Watch TV with family	4.14	4.71	+14		4.51	3.73	-17
Care for siblings	2.39	2.80	+17		1.71	1.62	-05
Eat with family	3.72	3.96	+06		4.15	3.81	-03
Babysit	1.03	1.14	+06		1.23	0.83	-33
Discuss problems	3.27	3.35	+02		2.91	2.74	-06
Home care-related tasks							
Vacuum	2.84	3.47	+22		1.83	2.31	+26
Empty trash	2.41	2.92	+21		1.96	2.36	+20
Straighten own room	4.51	4.61	+02		3.81	3.60	-06
Clean den	3.60	4.31	+20		3.01	3.27	+09
Make bed	5.37	5.55	+03		3.34	3.83	+15
Total \bar{X}	2.93	3.39	+16	.01**	2.73	2.84	+04
<u>Total tasks performed</u>	58.69	67.88			54.59	56.73	

*Significant change when compared to white experimental group

**Significant change for black group between pretest and posttest

All groups showed positive increases in tasks related to foods. The above average group reflected the greatest changes in food-related tasks with the below average group in second place.

Among clothing-related tasks, all groups indicated they placed dirty clothing in a hamper more than five times per week, although the average and below average group showed a slight decrease in this frequency between the pretest and posttest. The below average group showed the greatest increases in this category. The average group showed the second greatest overall increase in clothing related-tasks, and the above average group showed the least. There was a borderline significant decrease found among the above average group in mending when compared to the below average group. In addition, the above average group showed the lowest mean in this task.

The area showing the greatest deficits among all groups was in family-related tasks. The below average group showed a significant decrease in the task of eating with the family when compared to the above average group. The above average group showed the highest mean number of family-related tasks performed than the other two groups, although this group showed the greatest percentages of decrease among tasks in this group.

The below average group showed increases in all tasks related to home care. The other two groups reflected

Table 7

Summary of Tasks Performed by the Experimental Group According to Academic Average

	Above Average (n=25)				Average (n=75)				Below Average (n=28)			
	Pretest X	Posttest X	Percent Of Change	p	Pretest X	Posttest X	Percent Of Change	p	Pretest X	Posttest X	Percent Of Change	p
Food-related tasks												
Prepare family meal	1.24	2.30	+126		1.20	1.73	+44		.96	1.10	+15	
Buy food	1.48	1.68	+14		1.31	1.48	+13		1.35	1.42	+05	
Prepare meal for self	3.88	4.60	+19		3.71	4.00	+08		3.54	4.75	+34	
Set table	2.80	3.88	+39		2.66	3.00	+13		1.60	2.46	+54	
Wash dishes	4.32	4.92	+14		3.61	3.77	+04		3.06	3.60	+18	
Clothing-related tasks												
Hang clothes	4.44	4.32	-03		2.37	2.61	+10		3.10	3.21	+04	
Place clothes in hamper	6.72	6.83	+02		5.98	5.65	-06		5.54	5.50	-00.7	
Do laundry	1.76	2.24	+27		2.13	2.65	+24		1.46	2.28	+56	
Fold clothes	2.04	2.63	+31		2.52	2.84	+13		2.39	3.14	+31	
Mend	0.12	0.08	-33	.057*	0.35	0.64	+83		0.71	1.35	+90	
Family-related tasks												
Watch TV with family	5.04	4.96	-02		4.35	3.74	-14		3.96	4.21	+06	
Care for siblings	2.40	2.32	-03		2.12	2.00	-06		1.32	2.21	+67	.057**
Eat with family	3.64	4.80	+32	.03***	3.95	3.60	-09		4.60	3.85	-16	
Babysit	0.76	0.32	-53		1.37	1.05	-23		0.99	1.35	+36	
Discuss problems	4.24	3.44	-19		2.84	2.85	+00.4		2.79	2.75	-01	
Home care-related tasks												
Vacuum	3.20	3.40	+06		1.99	2.52	+27		2.14	2.78	+30	
Empty trash	2.52	3.20	+27		2.24	2.61	+17		1.68	2.07	+23	
Straighten own room	5.20	4.60	-12		4.14	3.93	-05		3.14	3.85	+23	
Clean den	4.44	5.04	+14		3.22	3.37	+05		2.32	3.32	+43	
Make bed	4.86	5.10	+05		3.98	4.26	+07		4.04	4.75	+18	
Total X	3.26	3.56	+09		2.80	2.92	+04		2.53	3.00	+19	
Total tasks performed	65.10	71.26			56.04	58.30			50.69	59.95		

*Borderline significant decrease for Group 1 when compared to Group 3

**Significant increase for Group 3 when compared to Group 2

***Significant increase for Group 1 when compared to Group 3

a positive increase in 80% of the home care tasks, but the increases were small in comparison to the below average group. The above average group showed the greatest mean number of home care tasks performed per week, ($\bar{X}=4.27$), while the average and below average groups were nearly equal.

In dealing with the number of home management tasks performed by students according to family structure, only the single-parent families and the two-parent families were tested. There was an insufficient sample of students who resided with someone other than parents to compare any other mode of living.

In the sample that reported residing in a single-parent household, there was a significant increase between the pretest and posttest in the experimental group ($p<.01$). Among the students living in the two-parent household, the experimental group did not show a significant increase between the pretest and posttest. Within the experimental group, the mean increase in the number of tasks performed by students in a single-parent home was ($\bar{X}=.43$), while in the two parent home the increase was ($\bar{X}=.19$). Although the students living with a single parent performed more tasks than in the two-parent home, this was not a significant difference. Therefore, the part of the null hypothesis dealing with family structure was not rejected.

Table 8

Summary of Tasks Performed by the Experimental Group According to Family Structure

	Single-Parent (n=27)				Two-Parent (n=39)			
	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change	p	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change	p
Food-related tasks								
Prepare family meal	1.11	2.33	+110		1.14	1.62	+42	
Buy food	1.44	2.11	+47		1.27	1.40	+10	
Prepare meal for self	3.85	4.85	+26		3.70	4.10	+11	
Set table	1.60	2.93	+83		2.73	3.11	+14	
Wash dishes	2.92	3.81	+30		3.76	4.01	+07	
Clothing-related tasks								
Hang clothes	2.52	2.89	+15		2.82	2.80	-01	
Place clothes in hamper	6.37	5.70	-11		5.85	5.74	-04	
Do laundry	2.30	2.93	+27		1.85	2.40	+30	
Fold clothes	2.37	3.33	+41		2.28	2.67	+17	
Mend	0.41	0.56	+37		0.30	0.70	+133	
Family-related tasks								
Watch TV with family	4.33	4.00	-08		4.26	4.00	-06	
Care for siblings	2.73	1.85	-33		1.87	2.21	+18	.02*
Eat with family	3.37	3.52	+04		4.16	3.89	-06	
Babysit	1.48	1.26	-15		1.14	0.90	-21	
Discuss problems	2.89	2.95	+01		3.04	2.92	-04	
Home care-related tasks								
Vacuum	1.73	3.00	+69		2.24	2.63	+17	
Empty trash	2.59	3.20	+26		2.00	2.39	+20	
Straighten own room	4.45	4.78	+07		3.72	3.69	-01	
Clean den	3.93	4.30	+09		2.91	3.48	+20	
Make bed	3.93	4.74	+21		3.96	4.16	+05	
Total \bar{X}	2.82	3.25	+15	.01**	2.75	2.94	+07	
Total tasks performed	56.42	65.02			55.00	58.82		

*Significant increase for two-parent group when compared to single-parent group

**Significant increase for single-parent group between pretest and posttest

Table 8 shows the mean values and percentage of change for each task according to family structure. In examining the task responses for this variable, it was found that the area of food-related tasks showed the greatest increases. Preparation of the family meal showed the greatest increase among single-parent families. Students of single parents also showed strong increases in home care related tasks.

Among the two-parent families, clothing-related tasks showed only moderate changes; however, mending strongly increased. It should be noted however, that mending had the lowest mean of any task for both groups.

The family-related tasks showed the least amount of positive change for single and two-parent groups. Care of siblings had the greatest negative change for the single parent family while showing the greatest increase for the two parent family.

Only the experimental group was tested in regard to the number of home management tasks performed in relation to the number of weeks of classroom instruction in the home management unit. Those students who had two weeks of instruction during the school year did not significantly increase in the number of tasks performed between the pretest and posttest. Those students who received four weeks of instruction significantly increased ($p < .01$). The group receiving two weeks of instruction showed a lower mean number of tasks performed at the time of the pretest

($\bar{X}=2.70$), and the four-week group showed a higher mean ($\bar{X}=2.90$). These pretest differences were not significant. Those students with two weeks of instruction had a mean increase in the number of tasks ($\bar{X}=.05$), while those with four weeks showed a mean increase of ($\bar{X}=.32$). This, however, was not a significant increase over the two-week group. Thus the part of the null hypothesis relating to the number of weeks of instruction in home management was not rejected.

Table 9 lists the values of the individual tasks at the time of the pretest and posttest and the percentage of change for each. Students who received four weeks of instruction in housing and home management showed overall higher percentages of increase as well as higher mean values for each task.

Neither group had increases in family-related tasks except for sibling care which showed a small increase for both groups. Family-related tasks, however, were not directly related to the home management unit which focused on maintenance, organization, and repair of the home. Therefore, this group of tasks may be eliminated for this variable.

When the experimental group was compared to the control group for the variables of sex, age, race, family structure, and general academic ability, no significant differences were found. It should be noted, however, that the

Table 9

Summary of Tasks Performed by the Experimental Group According to
Number of Weeks of Instruction in the Housing and Home Management Unit

	Two Weeks (n=42)			Four Weeks (n=36)			p
	Pretest X	Posttest X	Percent Of Change	Pretest X	Posttest X	Percent Of Change	
Food-related tasks							
Prepare family meal	1.12	1.29	+15	1.18	2.06	+75	
Buy food	1.38	1.55	+12	1.34	1.49	+11	
Prepare meal for self	3.88	4.19	+08	3.62	4.33	+20	
Set table	2.24	2.64	+18	2.57	3.26	+27	
Wash dishes	2.93	3.45	+18	3.97	4.21	+06	
Clothing-related tasks							
Hang clothes	2.66	2.40	-10	3.07	3.41	+11	
Place clothes in hamper	6.43	5.69	-12	5.84	5.94	+02	
Do laundry	2.00	2.21	+11	1.87	2.63	+41	
Fold clothes	2.26	2.33	+03	2.47	3.14	+27	
Mend	0.35	0.21	-40	0.40	0.92	+130	.01*
Family-related tasks							
Watch TV with family	4.93	4.43	-10	4.13	3.90	-06	
Care for siblings	1.69	1.76	+12	2.15	2.23	+06	
Eat with family	3.65	3.36	-08	4.22	4.15	-02	
Babysit	1.12	0.81	-28	1.20	1.06	-12	
Discuss problems	2.90	2.83	-01	3.20	2.98	-07	
Home care-related tasks							
Vacuum	1.82	2.24	+23	2.48	3.00	+21	
Empty trash	2.39	2.60	+09	2.07	2.62	+27	
Straighten own room	3.98	4.10	+03	4.21	4.02	-05	
Clean den	2.57	2.74	+07	3.60	4.15	+15	
Make bed	3.61	4.04	+12	4.45	4.79	+08	
Total \bar{X}	2.70	2.75	+02	2.90	3.22	+11	.01**
Total tasks performed	53.96	54.97		58.04	64.34		

*Significant increase for Four-Week Group when compared to Two-Week Group

**Significant increase for Four-Week Group when comparing pretests and posttests

experimental group showed greater increases in the mean number of tasks performed and percentage of change when compared to the control group. Because these increases were not significant, the null hypothesis, there is no significant difference in the number of home management tasks performed between the experimental and comparison groups according to sex, age, race, general academic ability, and family structure, was not rejected. The pretest and posttest mean scores and the percentage of change for each of the variables for the experimental and comparison groups may be found in Table 10. These data indicated that, even though the differences between the experimental and control groups were not significant, the experimental group showed greater overall increases than the comparison group.

Summary of the Findings

A summary of the analysis of the data showed that there was a significant difference in the average number of home management tasks performed in one week for students who completed an introductory course in home economics.

The experimental group in this study began with a lower average number of tasks completed at the time of the pretest. Although this group significantly increased within itself, it did not show a significant increase over the comparison group. Mean scores, however, were higher for the experimental group than for the comparison group.

Table 10
 Summary of All Tasks for Subjects in the Experimental and
 Comparison Groups According to Independent Variables

Independent Variable	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change	Pretest \bar{X}	Posttest \bar{X}	Percent Of Change
Sex						
Male	2.03	2.22	+09	2.46	2.33	-03
Female	3.08	3.32	+08	3.24	3.23	+01
Age						
Group 1	3.02	3.19	+06	3.04	3.07	+01
Group 2	2.68	2.95	+10	2.98	2.96	-01
Race						
White	2.73	2.84	+16	2.96	2.92	-01
Black	2.93	3.39	+04	3.40	3.69	+09
Academic rating						
Above average	3.26	3.56	+09	3.28	3.31	+01
Average	2.80	2.92	+04	2.81	2.72	-03
Below average	2.53	3.00	+19	3.28	3.65	+11
Family structure						
Two-parent family	2.75	2.94	+07	3.14	3.11	-01
Single-parent family	2.82	3.25	+15	2.87	2.96	+03

When the number of tasks were analyzed according to the independent variables of sex, age, race, general academic ability, family structure, and number of weeks of home management instruction received, no significant differences were found. Within each of these variables, though, significant increases were noted among the following groups: females, older students, black students, below average students, students living in a single-parent household, and students who received at least four weeks of instruction in home management. The factor of maturation may have played a role in the change in the number of home management tasks performed as evidenced by the comparison group showing some minor increases in task performance. Although the experimental group showed consistently higher percentages of change, no significant differences were found when these variables were compared to the control group.

Throughout this study several trends were noted. The group of tasks showing the highest mean and greatest increases were in the area of food-related tasks. Students may be utilizing concepts and skills learned in food-related instruction more than in the other instructional areas. This was consistent with literature which stated that adolescents were more concerned with food-related activities than other types of housework.

Clothing care showed moderate positive and negative changes, but mending clothing was done least often of all

variables. Family-related tasks showed the lowest scores with decreases noted throughout each of the independent variables tested. Home care showed substantial increases overall. The amount of home management tasks performed by subjects in this research were consistent with Cogle and Tasker (1982) and Cogle, Tasker, and Morton's (1982) research findings.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Vocational education in public schools across the United States is being closely examined by local, state, and federal agencies as well as the general public. North Carolina has experienced a three percent decrease in enrollment in vocational education since 1985. Publications such as A Nation at Risk (1983) have begun a movement back toward the basics which could be detrimental to enrollment in vocational education classes as vocational education courses are not considered academic. Many vocational educators are reexamining their course content and its relevance to today's students' wants and needs.

The purpose of this study was to take a look at home economics education in the secondary public school curriculum. This study examined the effect of an introductory level home economics course on the amount of home management tasks the students performed in their homes.

A sample of 128 home economics students and 128 comparison group students from three Eastern North Carolina high schools completed a questionnaire at the beginning of the 1986 school year and completed a follow-up questionnaire at the end of the same school year. The survey's purpose was to gather demographic data as well as to assess the

number of home management tasks completed by the students at the beginning and end of the course. The t test was used to determine significant differences within and between groups. The level of significance was set at .05 for each null hypothesis. The experimental and comparison groups were tested for significant increases between the pretest and posttest within the groups. Then the groups were compared to each other. The experimental and comparison groups were also tested within and between groups for the variables of: sex, age, race, academic ability, and family structure. The experimental group was tested according to the number of weeks the students received instruction in home management.

Conclusions

Significant differences were found in the experimental group in the number of tasks performed between the pretest and posttest. The experimental group was not found to do significantly more tasks than the comparison group at the time of the post survey. Significant differences within the experimental group between the pretest and posttest occurred for the variables of: sex (female); age (older subjects); race (black); academic average (below-average group); family structure (single parent households); and number of weeks of instruction in home management (those receiving four weeks or more showing a significant increase). These same variables, when compared to a control group, did not show significant increases. From this information one may

conclude that home economics education was more effective for some types of students than others but did not significantly influence the performance of learned concepts and skills over other groups.

Findings in this research were consistent with literature reviewed. Data agreed with that of Cogle and Tasker (1982) and Cogle, Tasker, and Morton (1982) who found that females participated more in home care than males. It is possible that the males might have shown greater participation if more male-oriented tasks had been presented such as yard and pet care. These results also suggested the possibility that home economics education may be directed more toward female populations thus decreasing the potential for greater male enrollment.

Results indicating that older children participated more in housework than younger children were consistent with Cogle and Tasker (1982) and Cogle, Tasker, and Morton's (1982) studies. Data showed that older students had a greater positive change indicating that this group may be using more of the learned home economics concepts in their personal living than the younger group.

Types of tasks performed were consistent with Cogle and Tasker's (1982) research which reported that food preparation ranked highest and physical and non-physical care of family members ranked lowest among adolescent participation. Low scores in clothing-related tasks were

consistent with Cogle and Tasker (1982) and Cogle, Tasker and Morton's (1982) studies.

From these results one may conclude that home economics at the high school level did have a positive effect on the students' participation in home care beyond the classroom setting. The data seemed to indicate that overall there was some transfer of learning taking place between the classroom and the home setting. One must not discount the possibility that those students who enrolled in home economics were more inclined toward performing these tasks than those students who did not want home economics instruction. One must also take into account the possibility of student responses being inflated especially at the time of the posttest because the subjects felt their teachers might examine their responses, and this could affect their class grades. Maturation of subjects, which may have caused an increase in the number of tasks completed for both groups, could have an effect on these results. In addition, the frequency in task completion reflected in the posttest may be low due to the time of year. In the spring many students are involved in sports or other extra-curricular activities thus reducing time for completion of these tasks.

Recommendations

Further research is needed to help determine if student responses were accurate. Parent involvement in a survey such as this may make the study more valid. It is suggested

that a follow-up survey be administered to the same subjects one or two years after the course in home economics is completed. This would give a better picture of the long-term effect of home economics education and its effect on the performance of home management tasks.

Further study is needed to determine reasons why home economics education had so little effect on the tasks in the area of family relations and child care but showed such strong influence in the area of foods. This study indicated that home economics education was beneficial to all groups, but further study may be needed to determine if there are sex and racial related biases in instruction. Further study may also reveal curriculum changes that may be needed in the area of clothing care.

This research involved an adequate number of subjects to obtain a picture of student behavior change. However, because this study took place in a relatively small area in two rural counties, it should not be generalized to other populations of students in North Carolina. Although this study showed positive correlation between home economics education and change in home care, it is suggested that home economics educators continue to examine current curriculum. The home economics program needs to be monitored continually as to its importance and relevance to today's student needs. Efforts such as these may be a key factor in obtaining

continued funding for vocational programs in the public schools of North Carolina.

References

- Bishop, C. (1983). Home economics--the challenge you've accepted. Forecast for Home Economics, 28 (3), 26-29.
- Cogle, F. L., & Tasker, G. E. (1982). Children and housework. Family Relations, 31, 395-399.
- Cogle, F. L., Tasker, G. E., & Morton, D. G. (1982). Adolescent time use in household work. Adolescence, XVII (66), 451-455.
- Farmer, H. S. (1980). The importance of family and career roles for high school youth. Illinois University, Urbana: National Institute of Education (DHEW), Washington, DC.
- Gardner, David P. and others. (1983). A nation at risk: The imperative for educational reform. An open letter to the American people, a report to the nation and Secretary of Education. Washington, DC: National Commission on Excellence on Education, 72 pages.
- Holsey, L. G., & Rosenfeld, V. M. (1985). Science competencies in vocational education. Department of Home Economics Education, School of Home Economics East Carolina University.
- Keith, P. M., & Brubaker, T. H. (1980). Adolescent perceptions of household work: expectations by sex, age, and employment situation. Adolescence, XV (57), 171-181.

Lawrence, F. C., Tasker, G. E., & Babcock, D. H. (1983).

Time spent in housework by urban adolescents. Home Economics Research Journal, 12 (2), 199-205.

North Carolina Department of Education. (1984). Ninth through twelfth vocational enrollment by program area--unduplicated count. Raleigh, NC.

North Carolina Department of Education. (1985). Ninth through twelfth vocational enrollment by program area--unduplicated count. Raleigh, NC.

North Carolina Department of Education. (1986). Ninth through twelfth vocational enrollment by program area--unduplicated count. Raleigh, NC.

North Carolina Department of Education. (1987). Ninth through twelfth vocational enrollment by program area--unduplicated count. Raleigh, NC.

North Carolina Department of Education. (1988). Ninth through twelfth vocational enrollment by program area--unduplicated count. Raleigh, NC.

North Carolina Department of Public Education. (1986). Reduction act to cut federal education programs. Education report, 1 (5), 3.

North Carolina State Board of Education. (1983). North Carolina Scholars Program. Raleigh, NC.

North Carolina State Board of Education. (1986). The basic education program for North Carolina public schools. Raleigh, NC. p. 41.

- Rosenfeld, V.M. & Holsey, L.G. (1985). Mathematics competencies in vocational education. Department of Home Economics Education, School of Home Economics, East Carolina University.
- Spitze, H. T. (1985). Observations in forty high schools: is our nation at risk? Journal of Home Economics, 77 (3), 7-11.
- State Department of Public Instruction. (1972). Consumer and homemaking curriculum guide. 373, 487. Raleigh, NC.
- Thomas, R. G. (1985). Home economics in secondary education and the development of human competence. Journal of Home Economics, 77 (3), 2-6.
- Vocational education's fight for survival. (1984). Forecast for Home Economics, 30 (1), 60-61.
- Walker, R. (1988, February). Study cites pressures on vocational education. Education Week, p. 16.

APPENDIX A
QUESTIONNAIRE

STUDENT QUESTIONNAIRE

The following questionnaire is part of a research project being conducted through East Carolina University in Greenville, NC. As a student of home economics, you are asked to take part in this survey by completing the following questions. You do not have to participate in this project, and you do not have to answer any particular question if you do not wish to. All of your answers will be kept confidential. All answers will be reported as a group. No individual results will be reported. After this project ends, your questionnaires will be destroyed. COMPLETING THIS QUESTIONNAIRE WILL MEAN THAT YOU GIVE PERMISSION FOR YOUR RESULTS TO BE INCLUDED IN THE GROUP STUDY. It will be most helpful in this research project if you will answer all the questions as truthfully as possible. Completing this questionnaire should take about 20 minutes.

1. NAME _____ 2. AGE _____
3. SEX (circle one) 1. MALE 2. FEMALE
4. Circle one of the following: ARE YOU
 1. SINGLE
 2. MARRIED
 3. SEPARATED OR DIVORCED
5. Circle one of the following: ARE YOU
 1. BLACK
 2. WHITE
 3. HISPANIC
 4. ORIENTAL
 5. OTHER RACE
6. Circle one of the following: DO YOU LIVE WITH:

1. ONE PARENT	5. A GUARDIAN
2. TWO PARENTS	6. YOUR SPOUSE
3. GRANDPARENTS	7. ALONE
4. FOSTER PARENTS	

HOUSING AND HOME FURNISHINGS

	0	1	2	3	4	5	6	7	8+
HOW MANY TIMES PER WEEK DO YOU:									
22. SWEEP OR VACUUM A FLOOR IN YOUR HOME?									
23. EMPTY A TRASH CAN OR CARRY OUT TRASH?									
24. STRAIGHTEN UP AND PUT AWAY ITEMS LEFT OUT IN YOUR ROOM?									
25. STRAIGHTEN UP AND PUT AWAY ITEMS LEFT OUT IN THE FAMILY ROOM OF YOUR HOME?									
26. MAKE YOUR BED?									

Thank you so much for your participation. Your part in this survey has been very important. Later in the year you will be asked to help continue this project by completing an additional questionnaire.

Elizabeth Heal

APPENDIX B
FOLLOW-UP QUESTIONNAIRE

CHILD CARE AND FAMILY RELATIONS

HOW MANY DAYS PER WEEK DO YOU:

	0	1	2	3	4	5	6	7	8+
11. WATCH TELEVISION WITH YOUR FAMILY MEMBERS?									
12. HAVE THE RESPONSIBILITY FOR CARING FOR YOUR SISTERS OR BROTHERS OR FOR YOUR OWN CHILD?									
13. EAT A MEAL WITH ALL OF YOUR FAMILY MEMBERS?									
14. BABYSIT FOR PAY?									
15. DISCUSS SCHOOL OR PERSONAL NEEDS WITH A PARENT?									

HOUSING AND HOME FURNISHINGS

HOW MANY TIMES PER WEEK DO YOU:

	0	1	2	3	4	5	6	7	8+
16. SWEEP OR VACUUM A FLOOR IN YOUR HOME?									
17. EMPTY A TRASH CAN OR CARRY OUT TRASH?									
18. STRAIGHTEN UP AND PUT AWAY ITEMS LEFT OUT IN YOUR ROOM?									
19. STRAIGHTEN UP AND PUT AWAY ITEMS LEFT OUT IN THE FAMILY ROOM OF YOUR HOME?									
20. MAKE YOUR BED?									

Thank you so much for your participation in this research project.

Elizabeth Heal

APPENDIX C
ADMINISTRATION INSTRUCTIONS

GUIDELINES FOR ADMINISTERING STUDENT QUESTIONNAIRE

The following student survey is designed to assess the number of times within a one-week period that a student performs each of the home management tasks listed below. The data obtained from this survey will be compared with data obtained later in the year from the same students. The goal of this project is to determine the correlation of home economics education and the behavior modification of the students as a result of the education. The data analysis will hopefully give us as educators information in regard to the degree of the extension of learning taking place between classroom and the home environment.

In order to make this study as reliable as possible, please follow the guidelines set forth below. Please feel free to call me if you have any additional questions. Call collect evenings to 726-7243.

1. This survey must be administered between September 1, and October 1, of the current school year.
2. The only home economics classes this survey may be used with is Family Life Education and Introduction to Homemaking, Courses 7111 and 7171. The control group may be any subject in the high school who has not previously taken or is now taking a home economics course.
3. After giving each student a questionnaire, the teacher should read aloud to the class the introductory paragraph. Please make sure each student understands what they are about to do and that none of their answers will be shared with parents, peers or school officials.
4. After completing the personal information section on page 1, have each student begin on page 2, orally noting that some sections want information on numbers of times "per week" and other sections on numbers of "days per week".
5. It is permissible to read the entire survey aloud to any student(s) who have reading difficulties.
6. Please look over each survey carefully to make sure that the answers given are realistic, especially the section on personal information. These will be matched later in the year with the final survey and hopefully will produce valid results. Please discard any survey in which you feel that the student willfully or otherwise falsified their answers.
7. Please place the completed questionnaires in the envelope provided and return to me by mail.

Thank you so much for your participation in this research project. I will be in contact with you in April in regard to issuing the final survey.

Elizabeth Heal

GUIDELINES FOR ADMINISTERING POST SURVEY

MAY 9, 1987

DEAR SURVEY ADMINISTRATOR,

IF YOU WILL REMEMBER, BACK IN SEPTEMBER YOU ADMINISTERED A QUESTIONNAIRE TO YOUR STUDENTS FOR THE INITIAL PRETEST OF MY THESIS. IT IS NOW TIME FOR THE POSTTEST. PLEASE ADMINISTER IT FOLLOWING THESE GUIDELINES:

1. PLEASE ADMINISTER THE POSTTEST ONLY TO THE STUDENT WHOSE NAME APPEARS ON IT. DO NOT MAKE ANY SUBSTITUTIONS!!!
2. PLEASE NOTE THAT MANY OF THE ORIGINAL STUDENTS HAVE HAD TO BE ELIMINATED DUE TO NOT MEETING SOME OF THE PREDETERMINED CRITERIA. THAT'S WHY SOME STUDENTS MAY ASK WHY THEY DID NOT RECEIVE A FOLLOW UP.
3. AT THE TOP OF EACH STUDENT'S QUESTIONNAIRE YOU WILL SEE 3 CATEGORIES: AVG.____, WEEKS_____, AND CLASS_____. PLEASE RATE EACH STUDENT ACCORDING TO THESE GUIDELINES:

FOR AVG._____, IF YOU BELIEVE THE STUDENT TO BE AN OVERALL ABOVE AVERAGE STUDENT, PLACE A "1" IN THE BLANK. IF YOU BELIEVE THE STUDENT TO BE AVERAGE OVERALL, PLACE A "2" IN THE BLANK. IF YOU BELIEVE THE STUDENT TO BE BELOW AVERAGE, PLACE A "3" IN THE BLANK.

FOR WEEKS_____, THIS IS REFERRING TO THE NUMBER OF WEEKS YOU SPENT TEACHING HOUSING AND HOME FURNISHINGS. PLEASE INDICATE THE ACTUAL NUMBER OF WEEKS THIS STUDENT SPENT BEING INSTRUCTED IN THIS UNIT (HOME ECONOMICS TEACHERS ONLY!).

FOR CLASS_____, IF THE STUDENT IS AN IDENTIFIED HANDICAPPED STUDENT (LD, EMH, TMH, VISUALLY OR HEARING IMPAIRED, ETC.) PLACE A "Y" IN THE BLANK. IF THE STUDENT IS NON-HANDICAPPED PLACE AN "N" IN THE BLANK.

4. IF ANY STUDENT HAS TRANSFERRED FROM YOUR CLASS AND YOU NO LONGER TEACH HIM/HER, OR THE STUDENT HAS DROPPED OUT OF SCHOOL, ETC. PLEASE RETURN THE UNANSWERED QUESTIONNAIRE.

THANKS AGAIN SO MUCH FOR PARTICIPATING IN MY GRADUATE WORK. IF I CAN EVER RECIPROCATE PLEASE FEEL FREE TO CALL ON ME.

SINCERELY,

ELIZABETH HEAL