

TEACHING HOME MANAGEMENT AT THE COLLEGE LEVEL
THROUGH SIMULATION: A FORMATIVE EVALUATION

by

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INTRODUCTION

In previous Home Management Laboratory classes a static, case-method approach has been used which has not demonstrated the element of time dimension and the inter-relatedness of decisions affecting the family. Students have seen only a small part of the management process at any one point and could conceivably conclude that the completion of a task or activity was the end product in the management process.

The objective of this study was to adapt a simulation game to the Home Management Laboratory which would provide a problem-solving approach relevant to family management decisions. The simulation game was to be designed to fulfill the objectives of the course while giving the students a sense of reality. The simulation game was to demonstrate the need to know techniques of decision-making, provide an opportunity to use and develop management ability, and demonstrate the interrelatedness of decisions.

REVIEW OF LITERATURE

The Home Management field of study has gone through several stages of development. Gross, Crandall, and Knoll (1973) describe these stages as being:

1. the dumping ground period
2. resource centered emphasis
3. human centered emphasis
4. process centered emphasis
5. values and decision-making emphasis
6. the holistic approach

Home Management courses typically include elements of all these stages with emphasis on the latter approaches. The holistic approach recognizes the family as the managerial unit. The authors emphasize the interaction between the family and its environments and the fact that a change in one part of management results in changes throughout the family unit.

Limitations and Dissatisfactions With Home Management Courses

Researchers have found attitudes of students toward Home Management courses somewhat negative. Langford (1977) stated that students reported the course was unrealistic. Simons (1971) found approximately 50 percent of the students felt they had not received benefits commensurate with the time

spent.

Lack of awareness of the managerial aspect of activities connected with the home was found by Vickers (1971). They did not perceive the function of management in use of resources, decision-making, or in evaluation of activities.

Knoll (1971) set forth the problem of home management educators to be how to make the best use of the growing amount of theoretical knowledge and still allow the students an opportunity to apply the theory in relatively realistic situations. Theory is valuable because it reduces the need to learn everything through experience. However, it may be difficult for students to see the relationship of theory to daily managerial activities of individuals and families. Proving this relationship is an educational task which requires attention.

Gross, Crandall, and Knoll (1973, p.608) state that studies have not shown significant transfers of cognitive learning from a theory course to the residence experience.

Review of Theory and Concepts to be Taught

Paolucci (1966, pp.6-7) describes home management as using the decision-making processes to clarify family goals and values. These are components of a home management model which consists of:

1. formulating and selecting family goals in light of family values
2. knowing the situation, analyzing it, and recognizing

the problems or opportunities for management
3. achieving family goals, which includes analysis and specification of alternative feasible means, choosing means to the goal, and carrying out the means by always guiding the ongoing action towards the goals
(Paolucci, 1966, pp.6-7)

These steps make up the decision-making process which is the crux of management, whether in the home or in a business.

Decision-making is an everyday activity. Decisions are made about values, goals, resources, standards, and sequences. According to Deacon and Firebaugh (1975, p.408), decisions are a part of every managerial component.

Paolucci identifies three types of decisions which occur in family settings:

1. social decision-making, originated by conflicts in values and goals in the family group
2. economic decision-making, originated by availability of resources and conflicting goals
3. technical decision-making, consisting in the implementation of decisions

Decisions concerning financial affairs are particularly complex. The economic condition of the country affects families through inflation and job opportunities. Resources (such as energy) may be relatively limited or plentiful. The satisfaction of a family with decisions they have made is dependent upon these and other variables.

Decisions relating to financial affairs are also affected by conditions within the family. The family life cycle requires differing amounts of resources at different stages. Sometimes the greatest financial need during the family life

cycle does not coincide with the years of greatest earning power. Deacon and Firebaugh (1975, pp.411-412) state the lifetime income can best be utilized through planning and controlling. The financial lifestyle can be improved through financial management. The result will be an improvement in financial position and/or a sense of accomplishment.

Ritchey (1978) asserted that the relationship between the family and the ecosystem needs to be fully recognized. The family is undergoing unprecedented pressure for change. There are external and internal forces with which the family has to contend. Economic, social, political, and technological conditions cause the family to undergo changes. The changes may be positive or negative for the family well-being. If the family is able to use their resources in an optimal way, their quality of life will be enhanced.

Other objectives of a home management course as stated by Gross, Crandall, and Knoll (1973, p.633) are:

1. to encourage an awareness of the intermeshing of group dynamics and the management of resources
2. to experience and accept results of selected types of household decisions
3. to develop an appreciation of the standards held by others

Meeting Objectives of Home Management Through Simulation

The terms "simulation" and "gaming" are generally used interchangeably by most writers as will be the case in this paper. However, Boocock defines gaming as having a method of determining a winner while simulation does not (1968,p.63).

A simulation game may have winners if goals are set forth at the beginning by the student, and then reached through the processes prescribed by the simulation game, according to Hanna (1976). He also differentiates between case studies and simulation games in that case studies are a simple type of game, but they treat problems in isolation and emphasize static decision-making.

Cruickshank states that simulation games can be played by the participants in order to provide them with life-like problem-solving experiences related to their present or future work (1966, p.23).

Simulation games convey a wealth of diverse material in a coherent form. The essentials of any situation can be represented. Shubik and Brewer (1972) found students learn about the represented reference system by re-creating elements of the simulation game. Students also learn from each other if results are introduced into the course of study and evaluations or analysis are conducted.

Gross, Crandall, and Knoll (1973, p.623) state that

students can find out for themselves and experience the principles governing real life situations through a simulation game.

In a simulation game designed by Hanna (1976), many subjects are united as in real life. Hanna suggested that use of his simulation game would help alleviate some problems with traditional educational techniques:

Students are usually exposed to topics in isolation (budgeting, use of credit, insurance, investments). Problems are often treated with a static approach, such as determining the life insurance needs of a family at a point in time. A related educational problem is that many students lack understanding of, and empathy for, various types of families, such as those in poverty. (Hanna, 1976)

Simulation games were credited by Gross, Crandall, and Knoll (1973, p.626) with utilizing real-world processes, providing experiences for long term planning, stimulating interest and involvement with the subject matter, and encouraging an interactive type of learning response.

Simulation games give a unified picture of management. Abt found that as the student begins to recognize a sense of structure among the elements of the game, the structure of the subject simulated by the game begins to take shape for the student (in Boocock and Schild, 1968, pp.80-81).

As a rationale for gaming, Shubik and Brewer (1972) state that making a game operate forces players to look some matters of fact squarely in the face. The student is forced to acknowledge the context.

DeFelice (1972) has found the students must have an exposure to the full range of concepts before starting the simulation game but he can not get the students to the point where they have a firm grasp of all the tools necessary before it becomes necessary (by time limitations) to start the simulation. DeFelice has observed, "Students are forced to jump in the water before they can really swim. Students take this as a challenge and very few 'drown'."

Forcing the decision-making situation of the simulation game upon them dramatically demonstrates the need to know techniques. It also demonstrates that a course is not using sterile theory when they can see its applications. The simulation represents reality which provides practical experiences and involves all students, as described by Stadeskley (1970).

Role-playing within the simulation game gives the student insight into the human motivational elements which affect outcomes, according to Shubik and Brewer (1972). This contributes to making role-playing an important motivational tool.

Abt (in Boocock and Schild, 1968, pp.80-81), asserted the increased motivation of students was a major advantage of simulation games. This is especially true when students maintain that course material is irrelevant. Motivation is emphasized by Wentworth and Lewis (1973, pp.432-439). They state that a teacher trying to involve students in learning can receive considerable help from the available simulations

and games. They acknowledge that simulation games do not have a clear advantage over traditional methods in teaching content but they do have a positive influence on student attitudes.

Shubik and Brewer (1972) consider motivation as an assured and important factor of gaming. It heightens student interest as compared with conventional learning techniques. They say, "It is the combination of this motivation with the creative process of scenario evaluation and redesign that holds great educational promise."

Cherryholmes (1966, pp.4-7) suggests strategies for using simulations in education:

1. give students the task of designing or re-designing an existing simulation. A major benefit of participating in a simulation may come from constructing it.
2. have students validate the theory used in a simulation by comparison with real-life situations

He suggests allowing sufficient class time to present the basic facts needed if students are expected to design or revise a model. The teacher should be aware of the considerable amount of class time which will need to be used in this manner.

Other suggestions as to the use of simulation games are offered by Gross, Crandall, and Knoll (1973, p.626). They suggest linking the simulation games with other educational devices such as group discussions or brainstorming sessions which may produce the desired learning.

Greenwald (1966, from Taylor's Instructional Planning

Systems, 1971, p.79), after having considerable experience in using business games as a teaching device and becoming familiar with related literature of educational psychologists has put forth ten concepts of learning. These concepts support the use of instructional simulation:

1. learning is re-enforced by repetition
2. learning is more effective if more faculties are brought into the learning process (sight, hearing, writing, thinking)
3. learning is enhanced if the dissatisfaction with the status quo comes from within (desire in the trainees)
4. learning is more effective where the student plays an active part in the learning process
5. learning is more effective in a small group working towards specified objectives
6. learning is enhanced by personal involvement
7. learning is more effective if the situation has (at least) the appearance of reality
8. learning is re-enforced by a prompt feed-back of the results of previous exercises
9. learning is enhanced by a contingency between present and past learning
10. learning is enhanced if further material brought into the learning situation is in the same problem areas

Limitations of and Dissatisfaction with Simulation Games

Some educators are doubtful of the use of simulation in the classroom. Cherryholmes (1966) reviewed six educational simulations. His empirical findings were that students were more interested in simulation activities than in conventional

classroom activities but he was disappointed to find students did not learn more facts, retain more information, or gain critical-thinking and problem-solving skills in a simulation relative to more conventional teaching methods. He found students in simulations do acquire realistic attitudes about the referent system but so also do students in more conventional learning activities. Cherryholmes stated that attitude is expected to change in direct relationship to the amount of information presented.

Testing for results from simulations proves to be a problem. Cherryholmes observed that establishing a criterion of results desired from a simulation is difficult as simulations may produce effects not stated; therefore the tests devised to measure results will not include measurements for that effect.

Fletcher (1971) and Norris (1978) also reported this problem. Fletcher raised the question as to which variables actually account for changes in the participants during a simulation. Norris found that meaningful evaluation is frustrated by the interactions of a myriad of factors that preclude isolation of causes and effects. Therefore, those who were doubters before a test find reasons to remain doubters.

Paper and pencil tests may have limited measurement capabilities for studies of simulation games according to Wentworth and Lewis (1973, pp.432-439). They tell little about the level of hostility or acceptance of the partici-

pants. Wentworth and Lewis warn about using evaluation instruments developed by the researcher for they might be biased. Instruments used should be those which are already developed and have been tested for reliability.

Testing the effects of a simulation game may bring out the Hawthorn effect, Taylor warns (1971, p.103). The students scores will rise on any test as they are more interested because of the testing being done with them.

Along the same line, Wentworth and Lewis suggest that a simulation's effectiveness is due to the novelty of the experience and not to the exercise itself.

Simplifying a situation to use it in a simulation game may make it less related to real life situations. According to Fletcher (1971, p.425) the roles students play in most simulation games do not correspond with the roles in which the student will likely be engaged in real life.

The number of available simulation games has increased. However, the use of simulation games in the classrooms has not kept pace with their increase in availability. Horn and Zuckerman (1973, p.433) attribute this fact to the view teachers have of simulations as being highly complex, strange, and slightly upsetting phenomena.

Review of Simulation Games

Simulation Games in the Classroom

Three different studies compared traditional teaching methods with the use of a simulation game or experiential learning. From twelve to eighteen groups were used in each study and divided into experimental and control groups. Posttests were used for measurement of achievement.

1. In Introduction to Management classes Hoover and Whitehead (1975) found that "experiential" labs (compared with "cognitive" labs) produced significantly higher levels of satisfaction and student involvement without sacrificing knowledge acquisition.

2. In teaching consumer credit and money management concepts in home economics classes in high schools, Clements (1970) found that the group of students experiencing the simulation game scored no differently on achievement tests than those experiencing traditional methods of teaching. She proposed that simulation games are a feasible method for teaching consumer credit and money management. The teachers and students in the experimental group appreciated the motivational qualities and relevance of the simulation game.

3. In teaching abstract home management decision-making concepts in high school home economics classes Lattes-Casseres (1968) studied the effectiveness of a simulation game ("Life Career"). She found no significant

difference in cognitive learning of home management decision-making facts, concepts, and principles. The experimental method taught abstract concepts involved in decision-making as well as the control method but the control method taught more at the knowledge level, the lowest level of cognitive learning. The application level was higher in the experimental classes. In the affective area no significant differences were found for interest in, enjoyment of, and perceived relevance of the experimental method. There were no significant differences in interest in the subject matter.

Lattes-Casseres recommends simplifying the "Life Career" game and reducing the number of rules, allowing more time for the game and more time for discussion of the outcome of the game, and having more than one teacher for large classes. The teacher's attitude could be influential. She needs thorough knowledge of the game and of home management decision-making theory, Lattes-Casseres emphasized.

Other Uses of Simulation Games

Boocock (1968) used two simulation games "Life Career" and "Legislative" with 1200 delegates at a National 4-H Conference. Quizzes were given before and after the game, all of which took place in one afternoon. The "Career" game generated a significant increase in empathy among boys taking girls roles in the game and produced evidence of factual learning. Considering that the games took place on one afternoon, Boocock suggests that any learning would be

impressive. She emphasizes that the experiment supports a basic tenet of the philosophy of educational gaming, that students can have fun and learn at the same time.

Price (1974) developed a simulation game called "Family Decisions" primarily as a research unit and secondarily as a teaching tool. It focuses mainly on one aspect of decision-making: the actual process of selecting an alternative. She found that some students are unwilling to accept the result of the alternative selection. They cannot accept the fact that no matter how good you are at decision-making you cannot totally control the situation.

PROCEDURES

Definition of Terms

Fall group

The fall group refers to students in the Home Management Laboratory in the 1978 fall semester.

Spring group

The spring group refers to students in the Home Management Laboratory in the 1979 spring semester.

Simulation game

A simulation game is a technique for studying complex real-life phenomena under controlled conditions. The simulation game used was the Family Financial Game.

Family Financial Game

The Family Financial Game is a simulation game that Hanna developed and that I adapted to teach family resource management to junior and senior college students in Home Management Laboratory.

Teammates or Partners

Two students who worked together on the Family Financial Game and household tasks were considered teammates or partners.

Attitude of Students

Attitude toward the course was measured by the IDEA Survey

Form and questions that I formulated.

Home Management Principles

Knowledge of home management principles was determined in two ways. Cognitive knowledge was measured by an achievement test. Affective knowledge was determined by use of a questionnaire from Evaluation of Management Competencies.

(Paynter, 1975)

Home Management Laboratory Class

Students enrolled in Home Management Laboratory 630-465 during fall 1978 and spring 1979.

Description of the Simulation Game

The simulation game used and evaluated in the Home Management Laboratory was originally developed by Sherman Hanna (1976) for an introductory consumer course called "Man the Consumer" at Auburn University. I adapted the game for use in the Home Management Laboratory.

The main focus of the game was family resource allocation. Resource allocations of finances and time were made on a yearly basis. Each week of class brought a new "year" thereby introducing the dynamic element of passing time. Resource allocation problems included annual budgeting, insurance, investments, housing choices, and hours of time to be divided into three categories: work, leisure, or household chores which included child care. Ten hours per day was automatically taken off for sleeping and personal maintenance.

The Family Financial Game-Information Guide, Player Record Sheets, and Lab Reports are included as Appendix I. The Information Guide provides information on how to fill out the Player Record Sheets. The prices are approximately typical prices for 1979. Students were to use either the prices given in the guide or document a lower price found on their own. The Lab Reports were to be handed in weekly along with the Player Record Sheets. Each week the Lab Report asked for more detailed information on a particular category.

The class was divided into "families", each with one or two parents. Approximately one third were low income, one third were middle income and another third above average income. Students were given the background of their family characters with enough description to enable one to perceive their values and goals. The first problem for the students was to arrive at their own description of the characters' goals and values in a realistic manner, and not impose their own. They then attempted to maximize satisfaction and work towards the characters' goals, working within the characters' money and time constraints.

Originally the game was set up to run for eight "years" (weeks) but for the Home Management Laboratory five "years" (weeks) was the time allocated for the game.

Each "year" a new Consumer Price Index and Energy Price Index was announced along with information concerning each family about their own job situation (whether or not their wages increased, lay-offs, promotions, etc.) and their family situation. The problem presented for the family situation called for use of the decision-making process. Some of the decision situations were: when or if they should start having children, should they have another child, how to care for their aging parents, should they buy a new house, how to provide more financial resources, should the wife seek employment, and how household tasks should be allocated.

The students changed game characters after three weeks with game characters on another income level. This provided

experience with more than one income level.

In class periods "family" problems were discussed thereby exposing all of the students to all of the situations and allowing input from them.

Description of the Class

Objectives of the Home Management Laboratory were to enable the student to:

1. identify and clarify values, goals, and standards operative in home management.
 2. set realistic personal and group goals
 3. apply management concepts in proposing alternative solutions to selected laboratory problems
 4. identify managerial behavior that is affected by patterns of living resulting from variations in family size and composition, family life cycle stage, socio-economic level, and socio-cultural values
 5. describe individual differences among people which serve as resources or constraints upon management in a group situation
 6. demonstrate skill in integrating management concepts in home economics content areas by planning, presenting, and evaluating a lesson geared for secondary students.
- (Appendix II.a.)

Typically the majority of the class was made up of Home Economics Education majors and the rest were Consumer Affairs majors. The fall and spring classes during this study were all female.

The semester started with an assignment to help the students become aware of personal managerial activities and provide an opportunity for analyzing personal management.

(Appendix II.b.)

This led into the module on time management.

Readings about time management were discussed in class. Due to the relatively small size of the class, there is opportunity for all to participate in discussions. Instructional objectives for the module were for the student to be able to:

1. identify personal patterns of time use
2. summarize ways to improve the effectiveness of time use.
3. summarize the major results of the Cornell household time allocation studies
4. analyze relevant issues concerning the relationship of time to values in home management by family members
(Appendix II.c.)

The class has traditionally had teaching presentations which consisted of a student presenting any subject with the application of the management process. This was video taped so the student can view her presentation. This semester topics were suggested for the presentations as a device to bring some information to the class which they would need for the Family Financial Game. (Appendix II.d.) Suggested topics were:

How to

1. obtain a good credit rating
2. prepare and serve a meal for twelve people
3. decide on the actual financial benefit of a working wife
4. be more efficient cleaning house
5. develop a savings plan with maximum increase in value
6. decide which type of life insurance policy to buy
7. make your dollars buy more at the grocery store
8. decide on a used car
9. understand obligations of buying on credit
10. plan a budget

Other topics dealt with special problems of management for:

11. low income families
12. elderly individuals
13. young families
14. families whose bread winner is on strike

Information was available in the Home Management files.

The Family Financial Game was then introduced to the class. A description of it has preceded this section.

As the Family Financial Game ended, several subjects encountered in the game seemed to need amplification. These subjects were randomly assigned to the game households so that two students would work together on an oral report. (Appendix II.e.). The subjects for reports were:

1. clothing needs and costs for lower income brackets
2. gasoline and car maintenance costs
3. cost and amounts of items included in "miscellaneous household purchases" category
4. utility payments for each utility listed and compared with costs in other areas of the U.S.
5. raising children in a changing society as it relates to management
6. financial planning objectives
7. housing for the elderly and/or disabled, possible modifications for existing home

As the lab reports and player record sheets for the Family Financial Game became more familiar, another home management experience was started. Each student (with assistance of another student) prepared a total of nine meals and cleaned two rooms. (Appendix II.f.) The objective was for the student to demonstrate skill in integrating management concepts in

home economics content areas through meal preparation and care of the house.

Activity analysis was carried out while cleaning the house and while watching another student prepare a meal. (Appendix II.g.) Work simplification had been discussed in class. .

Interviews of four families were conducted by each student. The objectives were to:

1. identify managerial behavior that is affected by patterns of living resulting from variations in family size and composition, family life cycle stage, socio-economic level, and socio-cultural values
2. describe individual differences among people which serve as resources or constraints upon management in a family situation
3. increase understanding of people whose lives are unlike our own

A written summary of the interviews was handed in. (Appendix II.b.)

These activities were completed by the spring semester class of 1979.

Differences in the assignments between the spring and fall classes were:

1. the fall class had a written assignment instead of group discussion for the Time Module

The following assignments were omitted for the spring class.

The fall class:

2. read five articles relating to home management and prepared a one page review of each article
3. presented one written and one oral report on articles

relating to women's roles

4. analyzed three case studies; prepared budget for one of them and handed in reports on all of them

5. selected and purchased a small item for the low income kitchen or living room

Hypotheses

1. There will be no significant difference from pre-test to posttest scores in change of attitude of the students in the spring group toward the Home Management class in general.
2. There will be no significant difference between the fall group and the spring group in measurement of attitude toward the Home Management class.
3. There will be no significant changes in management competencies of the student during the simulation game (Family Financial Game) as measured by self evaluation.
4. There will be no significant changes in management competencies of the student during the simulation game (Family Financial Game) as measured by a teammate.
5. There will be no significant difference of the self evaluations of management competencies compared with the partner's evaluations.
6. There will be no correlation between characteristics of the students and their management competencies.
7. There will be no significant difference between the score of the spring group and Craig's research group on Craig's Management Test.

Instrument Development

The measurement instrument for attitudes towards the class was the IDEA Survey Form, which is used nationwide (Appendix IV). Additional, more specific questions were added on the posttest of the IDEA Survey Form about attitude toward the course structure (seven questions) and attitude toward the Family Financial Game (thirteen questions) (Appendix V).

To measure students' growth in management competencies, a self rating scale developed at the University of Georgia by Paynter (1975) was used (Appendix VI). The ability of students to accurately do self-reports has been documented by Walsh (1967). Before and after each of two cycles of the Family Financial Game students rated themselves and their partners from one to nine on each of fifteen skills.

Cognitive knowledge of home management principles was measured in a posttest by using 32 questions from Part A of a test that Craig (1969) developed plus nine questions that I formulated (Appendix VII). Craig's test uses four topic areas: general management, basis for management (elements), decision-making, and work analysis and simplification. Craig claimed that her test had content validity as text books and course outlines were used to develop the test. The criterion related validity has a median correlation of 0.50. It was obtained by correlation

of the teacher-assigned grades with the test scores.

A test measuring home management ability is difficult to formulate. Craig's test was the only one found.

Data Collection

During the fall term of 1978-79 students from the fall group completed the IDEA Survey Form (Appendix IV). Data from student records were collected.

During the spring term of 1978-79 students from the spring group were given a pretest of questions taken from the IDEA Survey Form plus questions that I formulated to determine attitude toward the Home Management Laboratory class in general, attitude toward simulation games, and previous experience with simulation games (Appendix III).

When the students in the spring group were first paired, they were asked to evaluate their own and their partner's management competencies. At the end of three weeks they changed partners and were asked to reevaluate their previous partner, their new partner, and themselves (Appendix VI).

A posttest of cognitive knowledge of home management principles was administered to the spring group to determine if objectives of the course were being met while using the simulation (Appendix VII).

The IDEA Survey Form was used for the spring group as a posttest on attitude towards the class (Appendix IV). Other questions that I formulated were added to the posttest to determine attitude toward the course structure and attitude toward the Family Financial Game (Appendix V).

Assumptions

The validity of this study is based on the following assumptions:

1. tests were given under favorable conditions; the students were not impaired by illness, undue pressure, and were not emotionally upset
2. students were aware that attitude tests would not affect their grade in any way
3. evaluation of the simulation, the self evaluation, the partners' evaluation, and the class evaluation by the students was a candid, conscientious expression of their attitudes and opinions
4. abilities, knowledge, and attitudes develop from a person's experiences

Limitations

Limitations found in this study were:

1. the sample was small; 17 in the fall group, 15 in the spring group

2. the results depend on the personalities of the present students

3. instruments could not be too elaborate or time consuming as all the participants were full-time students and had limited time

4. the results depend on the ability of the students to make accurate self-assessments and to make honest, reliable assessments of their teammates

5. the attitude evaluation instrument did not actually measure the extent to which objectives of the course were achieved by use of the simulation game, but did measure the extent to which the simulation was believed by the students to be helpful in achieving progress and growth in management competencies

6. the validity of the study is limited by the reliability and validity of the instruments used to measure the students' attitude

Treatment of the Data

Non-parametric tests were used because the small sample size could not be presumed to be normally distributed. Parametric tests were run for comparison of results with the non-parametric tests. Even though the t-test corrects for small samples, non-parametric tests are usually recommended. (Korin, 1975, p.270) Both results are tabulated as a matter of interest.

For the paired data from the pre-post tests on attitude and management competencies the Wilcoxon Matched-Pairs Signed-Ranks test and the related t-test were used.

The Wilcoxon Rank test was used to test equality of means from the posttests on attitude of the fall group and the spring group.

Comparison of the tests for knowledge of the spring group with Craig's test group used the unpaired t-test.

Correlation tests used for management competencies and student characteristics were the Pearson Correlation Coefficients, Kendall's Tau, and Spearman Correlation Coefficients.

The means were reported for the additional course and Family Financial Game evaluation questions on the post-test and for the additional questions on the pretest.

Tests used for comparison of characteristics of fall and spring students were the Mann-Whitney U and the t-test.

Although both the sign test and the signed rank test could be used in dealing with the case of two independent samples by means of randomly "matching" pairs, the Mann-Whitney U-test is considered one of the most powerful of the non-parametric tests. Its use will generally result in a lower Type II error probability than will many other tests (Korin, 1975, p.279).

The level of significance is established at the .05 level for all statistical tests.

Sample Population

The students included in the research were those who enrolled in Home Management Laboratory (630-465) at Kansas State University in the fall of 1978 and spring of 1979. The course is required of Home Economics Education majors and is an option for Consumer Affairs majors. Eighteen students completed the fall semester and fifteen completed the spring semester. One student from the fall semester was eliminated from the research because she did not complete the class requirements until spring. Thus there were seventeen in the fall group and fifteen in the spring group.

There were no significant differences between fall and spring students in academic load, hours of employment, cumulative grade point average, class standing, geographical location, or living arrangements while in college. Significant differences were found in number of labs in which students were enrolled, major, and marital standing (Table 1).

Table 1. Comparison of fall and spring students.

Characteristic	Mean or proportion for fall N=17	Mean or proportion for spring N=15	T-value	Signif. level	Mann- Whitney Z	Signif. level
Academic load	16.29	15.87	0.54	0.59	1.02	0.31
Number of labs, including Home Mgmt.	2.29	2.93	2.09	.05	1.98	.05
Hours of employment	9.00	9.33	0.11	.92	0.33	.74
Cumulative grade point average	3.16	3.06	0.51	.61	0.06	.95
Class standing:			0.70	.49	0.71	.48
Seniors	16	13				
Juniors	1	2				
Geographical location:						
Metropolitan	3	3	1.10	.28	1.14	.25
Small town	12	6				
Rural	2	6				
Living arrangements:			NA	NA	NA	NA
Dormitory	1	8				
Apartment	15	8				
Sorority or Clovia	1	4				
Major:			2.05	.05	1.95	.05
Home Economics Education	16	10				
Consumer Interest	1	5				
Marital standing:			2.42	.02	2.25	.02
Single	12	15				
Married	5	0				

NARRATIVE DESCRIPTION OF BEHAVIOR PATTERNS

In the Family Financial Game, each game household must make decisions about their spending priorities, jobs, use of time and investments. The outcome of a decision is evident immediately, enabling players to change their plans to attain some degree of satisfaction. The students frequently changed their spending plans as the total was added up. In real life with the use of credit, the spending plan is altered when the total spent is added up, but by then it is already spent.

The students trying to balance their budgets were especially challenged on the first round of the game. The couple having the most problems in cutting their expenses to stay within their income proved to be not the low income families but the family with the highest income. Students were to allocate their game household's money on the first round according to the values and goals which were gleaned from the family case study background. This family, with a \$40,000 income, had a swimming pool, a large house, and social habits requiring a large expenditure of money. With inflation this family with an above average income did have to alter their spending pattern. The students found that even people with more than adequate income can suddenly find themselves either in debt for regular living expenses or having to sharply cut living expenses.

The allocation of time in the families was a frequent subject of debate. A set schedule of hours of household work was set up for the game, with hours varying according to number of children, number of cars, yardwork, and pets. Once the number of hours on household work for a particular family was determined, someone in the family had to be assigned those hours, or else hire outside help. The hours of the year had to be divided among household work, paid employment, and leisure. Ten hours per day was required by the Family Financial Game rules to be taken off for sleeping and personal maintenance. (Appendix I)

At first the students tended to assign the husband and wife the traditional male and female tasks. When they added up the total hours, they found the wife who worked outside the home with almost no leisure time. The students soon altered the traditional division of household tasks by giving more household tasks to the husband and children.

When the game was first introduced to the students, they felt slightly bewildered by the numerous papers and instructions for using them. It would have been less confusing if segments of the record sheets had been worked on in previous class sessions. Some of the topics had been included in previous classes in which the students had enrolled but needed review. Most of the students were unfamiliar with life insurance terms and determining the amount of Social Security and income tax deductions.

The subject of insurance had been briefly covered in the theory course which is a prerequisite for the laboratory course. Few of the students retained any working knowledge of the difference between whole and term life insurance. Life insurance was one of the subjects presented as an oral report by a student before the game started. However, the students had not had a chance to apply the knowledge to a specific situation.

Before starting the game, a list of topics which the students could use for individual oral reports was circulated. This was intended as a review of subjects about which the students would need to have knowledge as they participated in the game. References of books and pamphlets on the subjects were provided.

Social Security booklets were helpful in providing information on that subject but an extra resource for class was a class member who was working at the Social Security office. She was able to explain several things to the other students.

It happened that this student was a member of the game household with the lowest income. The husband in the family had back trouble and was unable to work much. The student found that enough time had elapsed by the middle of the game year to qualify him for Social Security disability payments if declared truly disabled by a doctor. This was allowed to happen and the members of that game household were delighted with their new financial resources.

Since there was an uneven number of students in the class after one student left school, a "death" notice was given to the remaining partner. The "surviving" partner had to make adjustments accordingly. When the group switched couples to move to another income level, this person then was remarried and the last game character's name in the drawing was the next character to "die". This called for drastic changes in the household that received the "death" notice as they were already under the poverty level.

Interaction among all the students portraying their game character was common. When a poverty level person was out of work, they would ask the upper income characters if they could work for them. When preparing and eating their meals they would sometimes act the part of their game character.

Advice was freely shared when participants were undecided about choices. The students became very involved in making decisions for their game household, laboring over choices to be made. The first week or "year" of the game, choices were to be made by defining the values and goals of the game household. This meant that decisions were not the same as if the student could impose his own goals and values on the game household. In the following "years" the students could begin to change some of the household's goals to those thought more suitable. This enabled some of the households that were having financial and/or personal problems to solve some of their dilemmas.

Part of the game which the students reported they enjoyed was the opportunity to experience three different

income levels with their different family situations. This gave the students exposure to a variety of problems of families. Hopefully they developed empathy for the people who actually experience these situations. The situations were designed to be as realistic as possible. It was not clear if the students fully comprehended just how realistic some of those situations might prove to be.

RESULTS OF STATISTICAL ANALYSIS

The basic purpose of this study was to evaluate the Family Financial Game, its effect on management competencies, and attitude of the students.

Management Competencies Evaluation by Spring Group

Students were asked to complete a questionnaire (Appendix VI) on which they evaluated themselves and their partners' management ability. At the end of three weeks, partners were changed and the evaluation process again took place. The results were analyzed by using two different tests. The Wilcoxon Matched-Pairs Signed-Rank test is a nonparametric test which does not require the assumption that the population have a specific type of distribution. It is useful whether or not the sample size is small. It can be used whenever data can be ordered, or ranked. The Z score obtained from this test was compared to the t-value obtained from the t test which assumes a normal population and a random sample.

There were no significant differences in the first self evaluation compared with the first evaluation by the partner (Table 2), the second self evaluation compared with the second evaluation by the partner (Table 3), the second self evaluation compared with the evaluation by the second

Table 2 . Evaluation of management competencies, first self evaluation (S1) compared with first evaluation by partner (P1).

	Means		T-value	Signif. Level	Wil- coxon Z	Signif. Level
	S1	P1				
Attitude	6.27	6.13	0.32	0.75	-0.24	0.81
Cooperation	7.33	6.53	1.63	.13	-1.57	.12
Communication	7.00	7.00	0.00	1.00	-0.18	.86
Flexibility	6.53	6.80	-.74	.47	- .62	.53
Responsibility	8.00	7.53	1.13	.28	-1.12	.26
Leadership	6.87	6.40	.86	.40	- .76	.45
Creativity	6.87	6.53	.72	.49	- .49	.63
Time utilization	7.07	6.53	1.95	.07	-1.72	.09
Management of activities	7.33	6.93	.82	.42	- .89	.37
Awareness of objectives	7.20	7.07	.35	.73	.06	.95
Ability to recognize problems	7.40	7.20	.48	.64	- .51	.61
Ability to make decisions	7.47	7.27	.72	.49	- .53	.59
Ability to evaluate	7.00	6.60	.84	.42	- .98	.33
Ability to accept evaluation	6.93	6.60	.59	.57	- .50	.62

Table 3. Evaluation of management competencies, second self evaluation (S2) compared with second evaluation by partner (P2).

	Means		T-value	Signif. Level	Wil-coxon Z	Signif. Level
	S2	P2				
Attitude	6.93	6.67	0.39	0.70	-0.51	0.61
Cooperation	7.93	7.67	.77	.45	- .56	.58
Communication	7.73	7.60	.35	.73	- .12	.91
Flexibility	7.67	7.47	.46	.66	- .42	.68
Responsibility	8.13	8.27	-.38	.71	- .53	.59
Leadership	7.47	7.27	.40	.70	- .53	.59
Creativity	7.40	7.13	.62	.55	- .51	.61
Time utilization	7.53	7.47	.18	.86	- .09	.93
Management of activities	8.00	7.73	.65	.52	- .65	.52
Awareness of objectives	7.60	7.47	.31	.76	- .30	.77
Ability to recognize problems	7.40	7.40	.00	1.00	- .04	.97
Ability to make decisions	7.67	7.60	.29	.77	- .27	.79
Ability to evaluate	7.87	7.87	.00	1.00	.00	1.00
Ability to accept evaluation	7.87	7.40	1.33	.20	-1.27	.21
Growth after evaluation	7.00	7.13	-.18	.86	- .04	.97

partner (Table 4), and the evaluation by the first partner compared with the evaluation by the second partner (Table 5).

The means of several items increased on the self evaluation of management competencies from the first evaluation to the second evaluation (Table 6). There were significant increases in flexibility, management of activities, ability to evaluate, and ability to accept evaluation.

The means increased on the evaluation by the partner from the first to the second evaluation (Table 7). Those increases significantly greater than zero were cooperation, responsibility, time utilization, management of activities, ability to evaluate, and ability to accept evaluation.

Characteristics of Spring Group Correlated with Management Competencies

Pearson Correlation and Kendall's Tau correlation tests were run on the characteristics of the students and the management competencies. No correlations were significantly different from zero at the .05 level except between the employment status of the students' mothers and the management competencies of attitude and leadership as evaluated by the first or second partner, leadership, ability to recognize problems, ability to accept evaluation, and growth after evaluation as measured by self evaluation (Table 8).

Table 4. Evaluation of management competencies, second self evaluation (S2) compared with evaluation by second partner (Q1).

	Means		T-value	Signif. Level	Wil- coxon Z	Signif. Level
	S2	Q1				
Attitude	6.93	6.73	0.30	0.77	-0.38	0.70
Cooperation	7.93	7.73	.59	.57	-.49	.63
Communication	7.73	7.33	1.25	.23	-1.24	.21
Flexibility	7.67	6.93	1.75	.10	-1.63	.10
Responsibility	8.13	8.07	.21	.84	-.18	.86
Leadership	7.47	6.87	1.19	.26	-.98	.33
Creativity	7.40	7.13	.52	.61	-.63	.53
Time utilization	7.53	7.60	-.17	.87	-.20	.85
Management of activities	8.00	7.47	1.20	.25	-1.07	.29
Awareness of objectives	7.60	7.60	.00	1.00	-.04	.97
Ability to recognize problems	7.40	7.20	.56	.58	-.46	.65
Ability to make decisions	7.67	7.33	.77	.45	-.76	.45
Ability to evaluate	7.87	7.67	.56	.58	-.46	.65
Ability to accept evaluation	7.87	7.67	.48	.64	-.49	.63

Table 5. Evaluation of management competencies, evaluation by first partner (P2) compared with evaluation by second partner (Q1).

	Means		T-value	Signif. Level	Wil- coxon Z	Signif. Level
	P2	Q1				
Attitude	6.67	6.73	-0.13	0.90	-0.21	0.83
Cooperation	7.67	7.73	- .20	.84	- .25	.80
Communication	7.60	7.33	.72	.48	- .70	.48
Flexibility	7.47	6.93	.93	.37	- .65	.52
Responsibility	8.27	8.07	.61	.55	- .73	.46
Leadership	7.27	6.87	.82	.42	- .84	.40
Creativity	7.13	7.13	.00	1.00	.00	1.00
Time utilization	7.47	7.60	- .32	.75	- .21	.83
Management of activities	7.73	7.47	.81	.43	- .53	.59
Awareness of objectives	7.47	7.60	- .40	.70	- .41	.69
Ability to recognize problems	7.40	7.20	.76	.46	- .77	.44
Ability to make decisions	7.60	7.33	.89	.39	- .91	.36
Ability to evaluate	7.87	7.67	.72	.49	- .63	.53
Ability to accept evaluation	7.40	7.67	- .65	.52	- .53	.59

Table 6 . Evaluation of management competencies, first self evaluation (S1) compared with second self evaluation (S2).

	Means		T-value	Signif. Level	Wil-coxon Z	Signif. Level
	S1	S2				
Attitude	6.27	6.93	-1.21	0.24	-1.38	0.17
Cooperation	7.33	7.93	-1.96	.07	-1.68	.09
Communication	7.00	7.73	-3.21	.01	-2.40	.02
Flexibility	6.53	7.67	-3.90	.00	-2.75	.01
Responsibility	8.00	8.13	-0.56	.58	-.53	.59
Leadership	6.87	7.47	-2.07	.06	-1.87	.06
Creativity	6.87	7.40	-2.26	.04	-1.89	.06
Time utilization	7.07	7.53	-2.17	.05	-1.86	.06
Management of activities	7.33	8.00	-2.87	.01	-2.25	.02
Awareness of objectives	7.20	7.60	-1.70	.11	-1.57	.12
Ability to recognize problems	7.40	7.40	0.00	1.00	-0.53	.59
Ability to make decisions	7.47	7.67	-0.54	.60	-0.98	.33
Ability to evaluate	7.00	7.87	-2.30	.04	-2.13	.03
Ability to accept evaluation	6.93	7.87	-3.50	.00	-2.67	.01

Table 7 . Evaluation of management competencies, first evaluation by first partner (P1) with second evaluation by the same partner (P2).

	Means		T-value	Signif. Level	Wil-coxon Z	Signif. Level
	P1	P2				
Attitude	6.13	6.67	-1.02	0.33	-1.30	0.19
Cooperation	6.53	7.67	-2.75	.02	-2.24	.03
Communication	7.00	7.60	-2.07	.06	-1.87	.06
Flexibility	6.80	7.47	-2.00	.07	-1.84	.07
Responsibility	7.53	8.27	-2.75	.02	-2.25	.02
Leadership	6.40	7.27	-2.16	.05	-1.87	.06
Creativity	6.53	7.13	-2.07	.06	-1.77	.08
Time utilization	6.53	7.47	-3.11	.01	-2.45	.01
Management of activities	6.93	7.73	-2.35	.03	-2.09	.04
Awareness of objectives	7.07	7.47	-1.38	.19	-1.24	.21
Ability to recognize problems	7.20	7.40	- .90	.38	-0.80	.42
Ability to make decisions	7.27	7.60	-1.58	.14	-1.40	.16
Ability to evaluate	6.60	7.87	-5.10	.00	-3.06	.00
Ability to accept evaluation	6.60	7.40	-2.57	.02	-2.19	.03

Table 8 . Correlation between employment status* of mother and other variables

	Pearson Correlation Coefficient	Signif. level
Score on final test	0.25	0.20
Hours enrolled this semester	.16	.29
Hours employed	.11	.35
Cumulative grade point average	.06	.42
Previous home management experience	.13	.33
Attitude, eval. by second partner	.53	.03
Leadership, first eval. by first partner	.47	.05
Leadership, second self evaluation	.52	.03
Ability to recognize problems, first self evaluation	.56	.02
Ability to accept evaluation, second self evaluation	.49	.04
Growth after evaluation, second self evaluation	.53	.03

*One student was omitted from the correlation because her mother had died several years ago. Of fourteen remaining students, 71 percent of mothers were employed.

Pretest and Posttest of Spring Group

A pretest was given to the spring group to measure expectations of the course and compared to a posttest to measure reactions to the course (Table 9). The Wilcoxon Matched-Pairs Signed-Ranks and t-test were used. There were significant changes in the students' evaluation of the amount on reading in the course and the amount of work in other (non-reading) assignments.

According to the pretest, 54 percent enrolled because it was required, otherwise they would not have enrolled.

Attitude Posttests of Spring and Fall Groups

A posttest was given the fall and spring groups to determine attitude toward the course. Means comparison tests used were the Mann-Whitney U and the t test. (Table 10). There were no significant differences in the students' evaluation of either learning to apply course material to improve rational thinking, problem solving, and decision-making or in developing a sense of personal responsibility (self reliance, self discipline). The spring group's rating of the amount of required reading was significantly lower than the rating of the fall group.

Additional Pretest Questions for Spring Group

Eighty-eight percent of the students had had previous experience with simulation games (Table 11).

Table 10 Comparison of course rating by spring and fall students.

	Fall group mean n 17	Spring group mean N 13	t-value	Signif. level	Mann- Whitney Z	Signif. level
1. Learning to apply course material to improve rational thinking, problem-solving, and decision-making. 1-low, 5-high	2.82	3.15	0.93	0.36	0.81	0.42
2. Developing a sense of personal responsibility (self reliance, self-discipline) 1-low, 5-high	3.18	3.46	.63	.53	.56	.58
Comparison of course with others taken at this institution the course has: 1-much less, 5-much more than most.						
3. Amount of reading	2.29	1.31	2.76	.01	2.62	.01
4. Amount of work in other (non-reading) assignments	4.18	4.69	1.90	.07	1.73	.08
5. Difficulty of subject matter	2.29	2.23	.20	.84	.22	.82
Attitudes toward and behavior in this course: self-rating, 1-false, 5-true						
6. I worked harder on this course than on most courses I have taken.	2.76	2.85	.20	.84	.22	.83
7. I had a strong desire to take this course.	2.06	2.31	.50	.62	.80	.43

Table 11. Additional questions on pretest. Scale was from 1 to 12, 1 being most negative, 12 being most positive response.

	Mean	Standard deviation
1. Have you had any previous experience with computers?	3.98	2.30
2. Do you like the idea of learning to use a microcomputer?	8.48	2.97
3. Do you feel you are the type of person who would tend to have problems with something mechanical like a computer?	4.63	3.66
4. Do you think management skills can be learned by using a computer?	7.66	2.25
5. Do you think simulation games can be an aid to learning?	7.99	2.34
6. Do you think management skills can be learned by using simulation games?	8.61	2.93
7. Have you previously experienced simulation games in any of your classes?		
Lasting more than one class period: 4 answered yes, 12 no.		
Lasting one class period: 14 answered yes, 2 no.		

Additional Posttest Questions for Spring Group

The means and distributions reported in Table 12 indicate a negative attitude to the Family Financial Game and to the course. Students reported the game and the course in general took too much time and the game assignments were confusing and frustrating.

The statement, "The changes made in the Family Financial Game during the semester will eliminate most of the problems I encountered" received a slightly positive response.

Spring Group's Cognitive Test and Craig's Test

The group mean and t-value were calculated. The score (42.9 percent) for the spring group on a version of Craig's Management Test (scored by her method) was not significantly different from the score obtained from Craig's research group (43.5 percent). The t-value was 0.07.

Craig's method of scoring was to subtract the number wrong from the number right. This led to a much lower score than if the number wrong were subtracted from the total number of possible points.

Table 12. Additional course and Family Financial Game evaluation questions used for the spring group at the end of the semester.

	Number of students responding					Means
	Defin. (1)	More false than true (2)	In- between (3)	More true than false (4)	Defin. true (5)	
40. The advice and assistance in this course was usually helpful.	0	4	5	4	0	3.0
41. The instructor was responsive to student requests for help.	0	0	3	6	4	4.1
42. The development of new viewpoints and appreciations was encouraged in this class.	0	3	3	5	2	3.5
43. The course was structured to account for students' individual abilities and problems.	0	3	5	3	2	3.3
44. The content of this course was good.	2	5	4	2	0	2.5
45. This course was worth the time I spent.	8	3	1	0	1	1.7
46. Individual help was available when needed.	0	1	3	6	3	3.8
47. The changes made in the Family Finance Game during the semester will eliminate most of the problems I encountered.	0	1	7	4	1	3.4
48. I felt challenged while working on the Family Finance Game.	1	3	7	2	0	2.8
49. Completing lab reports gave me a sense of accomplishment.	6	6	0	1	0	1.7
50. I would encourage my friends to take a course that uses the Family Financial Game.	1	9	2	0	1	2.3

Table 12- Continued.

	Number of students responding					Means
	Defin. false (1)	More false than true (2)	In- between (3)	More true than false (4)	Defin. true (5)	
51. The Family Financial Game helped me to identify management problems.	0	6	5	2	0	2.7
52. The material presented in the Family Financial Game could be presented just as effectively in other ways.	0	1	4	5	3	3.8
53. The Family Financial Game was boring.	0	1	6	4	0	3.5
54. The instructor was aware of my problems in the game.	0	1	5	7	0	3.5
55. I experienced frustration while working on the lab reports.	0	1	0	8	4	4.2
56. The game assignments were too time consuming relative to their contribution to my understanding of the course material.	0	0	1	4	8	4.5
57. Family Financial Game assignments were confusing.	0	0	3	6	4	4.1
58. Some aspects of the game were annoying.	0	1	0	7	5	4.2
59. The Family Financial Game was fun to do.	3	5	3	0	2	2.5

SUMMARY AND CONCLUSIONS

Summary of Findings

The comparison of the pretest measurement of expectations of the course with posttest reactions to the course found a change at the .05 level of significance in two areas. The results indicated the students did not have the expected amount of reading in the course and the amount of work in other (non-reading) assignments was more than they had anticipated.

The students in the spring semester did not rate the course significantly higher than did the fall semester students in development of thinking and problem solving, and development of personal responsibility.

Additional questions on the pretest indicated most of the students had some experience with simulation games in previous classes and were receptive to learning management skills by using simulation games.

The self evaluation of management competencies of flexibility, management of activities, ability to evaluate, and ability to accept evaluation increased significantly from the first evaluation to the second evaluation.

The partners' evaluations of cooperation, responsibility,

time utilization, management of activities, ability to evaluate, and ability to accept evaluation increased significantly.

Additional course and Family Financial Game evaluation questions used for the spring group at the end of the semester indicated that the students felt the course and game assignments and the game activities were too time consuming. They reported confusion about game assignments.

Statistically significant correlations were found between the employment status of students' mothers and the management competencies of attitude and leadership as evaluated by a partner, and leadership, ability to recognize problems, ability to accept evaluation, and growth after evaluation as measured by self evaluation.

There were no statistically significant correlations between employment status of students' mothers and previous homemaking experience.

The mean score on a version of Craig's Management Test was not significantly different from the mean score obtained in Craig's research group.

Conclusions

The conclusions drawn from this study are subject to the assumptions and limitations stated in the Procedures section, pp. 33-34.

Conclusions are discussed in relation to each of the seven hypotheses of this study and then discussed in general.

Hypothesis 1

Hypothesis 1 stated that there will be no significant difference from pretest to posttest scores in change of attitude of the students in the spring group toward the Home Management class in general.

This hypothesis is partially rejected, since the students' amount of reading in the course was significantly less than expected and the amount of work in other non-reading assignments was significantly more than they had anticipated. Other attitudes were not significantly changed (Table 9).

Hypothesis 2

Hypothesis 2 stated there will be no significant difference between the fall group and the spring group in measurement of attitude toward the Home Management class.

This hypothesis is not rejected, since there were no significant changes in the students' evaluations (Table 10).

Hypotheses 3 and 4

Hypothesis 3 stated there will be no significant changes in management competencies of the student during the simulation game as measured by self evaluation.

Hypothesis 4 states that there will be no significant difference in management competencies of the student during the simulation game as measured by a teammate.

Both hypotheses are rejected, since there were significant increases in the students' management competencies as evaluated by self evaluation and by a teammate (Tables 6 and 7).

Hypothesis 5

Hypothesis 5 stated there will be no significant difference of the self evaluations of management competencies compared with the partners' evaluation.

This hypothesis is not rejected, since no significant differences were found comparing either the first self evaluation with the first evaluation by the first partner, the second self evaluation with the first partner's second evaluation, the second self evaluation with the evaluation by the second partner, or the first partner's evaluation with the second partner (Tables 2,3,4, and 5).

Hypothesis 6

Hypothesis 6 stated there will be no correlation between characteristics of the students and their manage-

ment competencies.

This hypothesis is rejected. A significant correlation was found between the employment status of the students' mothers and the management competencies of attitude and leadership as evaluated by the first or second partner; leadership, ability to recognize problems, ability to accept evaluation, and growth after evaluation as measured by self evaluation (Table 8).

The correlation found between some of the variables and employment of students' mothers corroborates a study done by Hill (1970) who found that employment status of students' mothers and age were the only ones which correlated with any of the variables.

The lack of correlation between amount of homemaking experience of the students and those students with employed mothers coincides with the findings of the time use study by Walker and Woods. Children of mothers employed outside the home do not spend as much time doing household tasks as those children of full time homemakers.

Hypothesis 7

Hypothesis 7 stated there will be no significant difference between the score of the spring group and Craig's research group on Craig's Management Test.

This hypothesis is not rejected. The score on Craig's Management Test was not significantly different from the score obtained in Craig's testing. No pretest for cognitive

knowledge was given but the scores indicate the students' cognitive knowledge was in the same range as other Home Management students in Craig's research group.

General Conclusions

The students should have exposure to the full range of concepts before starting the simulation game but as DeFelice (1972) found, the students will not be to the point where they have a firm grasp of all the concepts before it becomes necessary (by time limitations) to start the simulation. Going ahead with the simulation game in this manner seems to be necessary but it will cause some confusion on the part of the students as reported by the students using the Family Financial Game.

The game as used was time consuming for both the students and the teacher. It needs to be simplified in some manner or else have fewer other class activities.

Testing for results from simulation games is a problem. As Cherryholmes (1966) observed, the simulation game may produce unexpected effects; therefore the instruments developed to measure results will not include measurements for that effect. As Norris (1978) found, the interactions of many factors make isolation of causes and effects difficult.

The question of whether or not to use a simulation game such as the Family Financial Game cannot be completely answered here. It would depend on individual circumstances.

Greenwald (1966, from Taylor's Instructional Planning Systems, 1971,p.79) maintains that a discussion of new techniques should not consist of arguments for or against but rather the degree of fitness as related to prescribed purposes.

Recommendations for Further Study

As a continuation of this study, the following additional research is recommended:

1. Put the Family Financial game on a computer. Use of the computer would alleviate some of the problems encountered in this study. The computer would do the math required by the record sheets and assign random events impersonally. It would require less time to complete the game, which should help maintain student interest.

2. Evaluate the game with survey instruments which indicate empathy for disadvantaged people.

3. Develop more valid instruments or other techniques to measure learning acquired during the simulation game and in the Home Management Laboratory.

4. Give pretest for cognitive knowledge before using the Family Financial Game.

5. Test relevance of game with older students and/or students who are married.

6. Use a follow-up test in five or ten years of students who had participated in the Family Financial Game to yield information as to the perceived relevance of the game at that stage of the ex-student's life.

7. Test two groups using the game, with one of the groups having more pre-game information. It would be helpful to know if a group with adequate information had better

results with the game than a group who had little knowledge of the areas covered in the game and who had to do a little studying to complete the record sheets. The former group may enjoy the game more and the latter group may learn the most.

8. Explore other possible alternatives for teaching home management.

REFERENCES

- Abt, Clark C.. 1967. "Why Educational Games Win Converts." Nations Schools. Vol.80, No.4:92-93,118.
- Abt, Clark C.. 1968. "Games for Learning." In Simulation Games in Learning. pp.65-84. Edited by Sarane S. Boocock and E.O. Schild. Beverly Hills: Sage Publications.
- Boocock, Sarane S. and Schild, E.O. editors. 1968. Simulation Games in Learning. Beverly Hills: Sage Publications.
- Cherryholmes, Cleo. H. 1966. "Some Current Research on Effectiveness of Educational Simulations: Implications for Alternative Strategies." American Behavioral Scientist. Vol.10, No.2:4-7. October.
- Clements, Irene Z. 1970. "The Development of a Simulation Game for Teaching a Unit on the Use of Consumer Credit." Ed.D. dissertation, Oklahoma State University.
- Craig, Karen E. 1969. "Development of Parallel Forms of a Standardized Achievement Test in Home Management for Use with Students at the College Level." Ph.D. dissertation, Purdue University.
- Cruickshank, Donald R. 1966. "Simulation: New Direction in Teacher Preparation." Phi Delta Kappan. Vol.58, No.1. September.
- Deacon, Ruth E., and Firebaugh, Francille M. 1975. Home Management, Context and Concepts. Boston: Houghton Mifflin Company.
- DeFelice, Frank. 1972. "Integrating Computer Programs in Economics VIA Time Sharing Terminals." Proceedings of the 1972 Conference on Computers in Undergraduate Curricula. Atlanta, Georgia.
- Fletcher, Jerry L. 1971. "The Effectiveness of Simulation Games as Learning Environments." Simulation and Games. Vol.II, No.4:425-454. December.

- Greenwald, H.A. 1966. "The Scope and Limitation of Dynamic Games in Management Education." Ph.D. thesis, Victoria University, Manchester. Quoted in John L. Taylor's "Instructional Planning Systems". pp.78-79. London: Syndics of the Cambridge University Press. 1971.
- Gross, Irma H., Crandall, Elizabeth W., and Knoll, Marjorie M. 1973. Management for Modern Families (3rd edition). New Jersey: Prentice-Hall, Inc.
- Hanna, Sherman 1976. "The Family Financial Game." Report presented at the Southeastern Regional Conference on Home Management and Family Economics, Tallassee, Florida. (Mimeographed)
- Hill, Mary L. 1970. "The Relationship of Selected Variables to the Achievement of Students Enrolled in a Home Management Course at Illinois State University." Ph.D. dissertation, Southern Illinois University.
- Hoover, J.D., and Whitehead, C.J. 1975. "An Experiential-Cognitive Methodology in the First Course in Management: Some Preliminary Results." In Simulation Games and Experiential Learning in Action, pp.25-30. Edited by Richard H. Buskirk.
- Horn, R.E. and Zuckerman, D.V. 1973. The Guide to Simulations: Games for Education and Training. Lexington, Massachusetts: Information Resources, Inc.
- Knoll, Marjorie M. 1971. "Home Management Theory and Practice." Journal of Home Economics. Vol.63, No.2: 89-92.
- Korin, Basil P. 1975. Statistical Concepts for the Social Sciences. Cambridge, Massachusetts: Winthrop Publishers, Inc.
- Langford, Melinda. 1977. "A Comparative Study of Two Methods of Teaching Home Management in the Residence Course." M.S. Thesis. Auburn University.
- Lattes-Casseres, Virginia. 1968. "Teaching Home Management Through Simulation and Other Methods: An Experimental Study." Ph.D. dissertation, Michigan State University. University Microfilms International.
- Norris, W.C. 1978. "Computer Technology, Education and the Bottom Line." The Association for Educational Data Systems Monitor. Vol.17, Nos.4,5,6:7-15. October/November/December.

- Paolucci, Beatrice. 1966. "Excerpts: Basic Elements of Home Management." In Approaches to Teaching Home Management: Proceedings of a Home Management Conference. Pullman, Washington: Washington State University.
- Price, Dorothy. 1974. "Actualizing Concepts in Home Management." Proceedings of a National Conference. American Home Economics Association.
- Ritchey, S.J. 1978. Home Economics Research Assessment, Planning and Projections. Association of Administrators of Home Economics and Agricultural Research Policy Advisory Committee.
- Shubik, Martin, and Brewer, Garry. 1972. "Methodological Advances in Gaming." Simulation and Games. Vol.III, No.3:329-348. September.
- Simons, Barbara. 1971. "Evaluation of a Change of Approach to Home Management Experience." Journal of Home Economics. Vol.63, No.2:123-125.
- Spurrier, Patsy J. 1973. "Home Management Satisfaction as Related to Knowledge of Management Principles and Certain Personal Traits of a Selected Group of Homemakers." Ph.D. dissertation, Texas Woman's University, Denton.
- Stadsklev, Ronald. 1970. "A Comparative Study of Simulation Gaming and Lecture Discussion Method." ERIC System No. ED 065 405.
- Taylor, John L. 1971. Instructional Planning Systems. London: Syndics of the Cambridge University Press.
- Vickers, Carole A. 1971. "Home Management Residence." Journal of Home Economics. Vol.63, No.2:93-96.
- Walsh, W. Bruce. 1967. "Validity of Self Report." Journal of Counseling Psychology. Vol.14, No.1:18-23.
- Wentworth, Donald R. and Lewis, Darrell R. 1973. "A Review of Research on Instructional Games and Simulations in Social Studies Education." Social Education. Vol.37, No.5:432-439.

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APPENDICES

FAMILY FINANCIAL GAME - INFORMATION GUIDE

Developed by Sherman Hanna, Kansas State University
Adapted for Home Management Lab by Harriette Janke

The Family Financial Game is intended to be a simulation of realistic situations. Hopefully players will gain insights into various problems facing families of various types. In order to gain full value from the Game, you should use your imagination and try to get into your role. This Guide attempts to explain how to play the Game. However, it cannot possibly cover all situations. When in doubt, ASK! You should play the game as if you are planning next year's budget in December.

This Information Guide contains some prices of goods and services to be purchased during the Game. The prices listed are based on roughly typical prices for 1979. They are not necessarily the lowest prices available. However, you must either use prices given in this Guide or document a lower price. This reflects reality - information is costly in terms of your time and money.

Your character will be assigned at the beginning of the game. Read the description of your family very carefully. Using the description as background, let your imagination fill in details of character, such as values and goals which were not mentioned. It is important to communicate with your game partner (if you have one) in order to realistically make decisions. You should try to make decisions and complete budgets within the lab period, but if you cannot, you are responsible for communicating with your lab partner in order to complete the lab assignments on time.

Your character's employment status will be given in the family description. If you want higher earnings, ask about overtime, a second job, or a new job. Your game household may have other incomes such as interest on savings accounts, dividends, or proceeds from sales of assets.

PAYROLL TAXES:

Your Social Security tax is computed by multiplying your salary, up to the maximum Social Security tax base, times the current Social Security tax rate. In year 1 the Social Security tax base will be \$17,700. The rate for employees will be 6.26%. The tax rate for self-employed persons is about 8%.

FEDERAL INCOME TAX:

To compute your Federal Income tax, see Internal Revenue Service booklet. Start with the number on line 10 and use the tables in the booklet. WARNING: The instructions are simplified for the game.

Nontaxable income includes the first \$200 of dividend income for a married couple filing a joint return, half of the increase in value of assets sold, and interest from municipal bonds. Social Security checks are not subject to Federal Income tax.

STATE INCOME TAX:

For simplicity in the Game, assume that the state income tax equals 20% of the Federal Income tax.

RETIREMENT DEDUCTION:

Line 13 is the sum of the husband and wife's retirement deductions, if any. If your place of employment does not have a pension plan, it is possible to set up your own Individual Retirement Account. See booklet for details.

LINES 14,15: MEDICAL INSURANCE AND OTHER PAYROLL DEDUCTIONS

Persons whose employers do not have group medical insurance may buy private medical insurance policies. Unless specified by instructor, assume you cannot buy a group policy.

Some employees have group medical insurance which is partly paid for by their employers. The choices to be made are:

	Group	Private
1a. Individual Coverage, Low Benefit	\$120.00	\$225.00
1979 Annual Premium		
b. Family Coverage, Low Benefit	300.00	600.00
1979 Annual Premium		

The Low Benefit Policy has a \$100 deductible (you pay the first \$100 of medical bills resulting from any given hospital stay). The insurance company will pay the rate for a semi-private hospital room, up to 90 days. It will pay up to \$120 of other hospital charges, then 80% of hospital charges, up to a maximum of \$400.00, plus up to \$300 for surgical expense. Maximum benefits for maternity expense, \$200. No outpatient benefits.

	Group	Private
2a. Individual Coverage, High Benefit	\$300.00	\$600.00
1979 Annual Premium		
b. Family Coverage, High Benefit	675.00	1200.00
1979 Annual Premium		

The High Benefit Policy has a \$50 deductible, then will pay all medical expenses connected to all non-maternity related hospital expense up to a maximum of \$50,000. Maximum benefits for maternity related expenses, \$200.

Expenses not covered by either the Low or High benefit policies include those related to alcoholism, narcotic habits, war, routine medical examinations, eyeglasses or other corrective equipment, hearing aids, or dental work except as resulting from accidental injuries, and any other service not stated in Paragraph XV-a-III of Policy Supplement XC-A-z-IV.

LINE 17: SPENDABLE INCOME

Equals total family income (Line 6) minus total payroll deductions (Line 16). This is what you are free to spend.

LINE 18: AUTO INSURANCE

Several types of auto insurance should be purchased: 1) Liability Insurance—required in Kansas, legal minimum is 10/20/5, e.g., if someone sues you because of an accident, your insurance will pay up to \$10,000 for injury to any one person, \$20,000 for all injuries in an accident, and \$5,000 property damage. (Does not pay for damage to your car).

1979 Annual Premiums-Liability, Collision, and Comprehensive Insurance

<u>Coverage</u>	<u>One Car</u>
10/20/5	\$130
50/100/10	150
100/300/25	180
Liability Only 15/30/15	45

The annual premiums for any given coverage will increase at the same rate as the overall cost of living index increases, e.g., if the Consumer Price Index (CPI) is 1.50 in 1985, annual premium for 50/100/10 for one car will cost \$225.

INFLATION:

The cost of living will be increasing each year during the game, some years by very little, some years by a lot. If you are buying a good or service during a particular year, determine its price in 1979, then multiply by the appropriate price index for the current year in the Game. For the Game, all price indexes equal 1.00 in year 1 (1979). Each year the new price indexes and the annual percentage increases will be announced. To compute your expenditures in any particular category EITHER: Determine your desired level of consumption. If it is the same as the previous year, add on the percentage increase in the appropriate price index. OR: If you are changing your real level of consumption, determine the equivalent of year 1 price and multiply by the appropriate price index for the current year.

LINE 20: HOUSING PAYMENTS

1. Rent. The following rental alternatives are available or find others in newspaper. All rental choices require one month's rent for damage deposit.

- A. One bedroom shack, 10 miles out. Year 1 rent, \$600. Year 1 utility cost \$100.
- B. Three bedroom mobile home, 15 years old, 10 miles out. Year 1 rent, \$1080. Year 1 utility costs \$840.
- C. Three bedroom mobile home, 5 years old, 5 miles out. Year 1 rent, \$2190. Year 1 utility costs, \$840.
- D. One bedroom apartment (no children allowed). Year 1 rent, \$1800. Year 1 utility costs, \$540.
- E. Two bedroom apartment. Year 1 rent, \$2100. Year 1 utility costs, \$600.
- F. Three bedroom house in shabby neighborhood. Year 1 rent, \$2880. Year 1 utility costs, \$1200.
- G. Three bedroom house in nice neighborhood. Year 1 rent, \$3900. Year 1 utility costs \$1200.

2. Homeownership. If you wish to buy a home, consult the newspaper for prices and locations. Document your figures on your lab report.

Financing: In order to purchase a house, the purchase price, less the down payment must be financed. For the Game, the basic mortgage interest rate is given each year. This rate applies to mortgages with a down payment of 20% or more. Mortgages with a down payment of 10% or less have an interest rate 1% above the basic rate. Monthly mortgage payments can be computed by using the table below:

Monthly Mortgage Payments for a \$1,000 Loan

<u>APR</u>	<u>10 Years</u>	<u>15 Years</u>	<u>20 Years</u>	<u>25 Years</u>	<u>30 Years</u>	<u>40 Years</u>
4%	\$10.12	\$7.40	\$6.06	\$5.28	\$4.77	\$4.18
5	10.61	7.91	6.60	5.85	5.37	4.82
6	11.10	8.44	7.16	6.44	6.00	5.50
7	11.61	8.99	7.75	7.07	6.65	6.21
8	12.13	9.56	8.36	7.72	7.34	6.95
9	12.67	10.14	9.00	8.39	8.05	7.71
10	13.22	10.75	9.65	9.09	8.78	8.49
12	14.35	12.00	11.01	10.53	10.29	10.08
14	15.53	13.32	12.44	12.04	11.85	11.72

LINE 21: INSTALLMENT PAYMENTS

Expenditures for any major household purchases such as furniture and appliances purchased with cash should be included on line 23, miscellaneous household purchases. Prices should be realistic and based on 1979 prices times the Consumer Price Index. For purchases made with credit, such as a Sears charge account, compute monthly and annual installment payments based on the interest rate, (APR) and include annual payments on line 21. Cash expenditures to purchase a car should be included in line 37, "other flexible expenses". Find the 1979 price for the car you want, and multiply by the Consumer Price Index. For a car purchase made on credit, use either the new car interest rate announced for the current year, usually 9-12% (APR), or the used car interest rate, usually 11-14% (APR). The monthly installment payments can be computed by using the table below:

Monthly Installment Payments for a \$1,000 Loan

<u>APR</u>	<u>12 Mos.</u>	<u>24 Mos.</u>	<u>36 Mos.</u>	<u>48 Mos.</u>	<u>60 Mos.</u>
8%	\$86.99	\$45.23	\$31.34	\$24.41	\$20.28
9	87.45	45.68	31.80	24.89	20.76
10	87.92	46.14	32.27	25.36	21.25
11	88.38	46.61	32.74	25.85	21.74
12	88.85	47.07	33.21	26.33	22.24
18	91.63	49.92	36.15	29.38	25.39
24	94.56	52.87	39.23	32.60	28.77
36	100.46	59.05	45.80	39.58	36.13

For loans of less or more than \$1000, multiply monthly payment for \$1000 by proportional factor: e.g. for loan of \$3500 for 36 months at 12% (APR) multiply 3.5 times \$33.21 to get payment of \$116.24 per month. To calculate total finance charge multiply monthly payment times number of months, then subtract amount borrowed.

Homeowners must pay a property tax each year. To calculate, find year 1 property tax and multiply by the current Consumer Price Index.

Line 23: HOMEOWNERS OR RENTERS INSURANCE

For Homeowners Insurance, the annual premium is \$6 per year per \$1000 worth of coverage for a conventional home, \$12 per year per \$1000 worth of coverage on a mobile home. For insurance on possessions, and for renter's insurance the annual premium is \$50 per year per \$4000 coverage.

LINE 24: LIFE INSURANCE PREMIUMS

To compute life insurance premiums for different types of policies, use the table below:

Age	Annual Premium per \$1000 Death Benefits		
	Whole	Level Benefit Term	Decreasing
20-34	\$14	\$ 5	\$ 3
35-39	18	7	4
40-44	22	9	5
45-49	28	13	8
50-54	45	20	12
55-59	75	35	15

SOCIAL SECURITY SURVIVORS BENEFITS:

If a wage-earner in a family dies, his or her survivors may be eligible for Social Security Survivors benefits, if:

a. The wage-earner had been paying Social Security Payroll Taxes and

b. If there are surviving dependent children under the age of 19 (21 if in college).

The exact level of benefits is determined by a complex set of rules. In the real world, the local Social Security office should be contacted to estimate survivors benefits. For the Family Financial Game, benefits may be determined by consulting the Social Security booklet.

LINE 27: FOOD EXPENDITURES

Use the sheet "Cost of Food at Home" and multiply by 52. Add for meals eaten out.

LINE 28: MISCELLANEOUS HOUSEHOLD PURCHASES:

This category includes:

1. Cash purchases of household supplies, furnishings, appliances, lawn equipment, furniture, etc. Any household purchases made on a credit card or charge account should be included here, if paid off before finance charges are due.

2. Upkeep, maintenance, and repairs on housing. If your Game household owns a house or mobile home, some money must be spent on maintenance to prevent deterioration. Over the long run, annual maintenance expenditures average at least 1% of the current market value of the house, and may run as high as 3% if all services are hired.

LINE 29: MEDICAL CARE

This category includes all medical care, dental work, eye care, etc. that is not covered by medical insurance. For most families, medical insurance covers only costs connected to hospital care. Some typical costs are shown below:

Selected Medical Costs are listed below, as of 1979.

Initial Office Visit to M.D.	\$25
Follow-up Office Visit	12
Appendectomy	400
Total Costs for treatment of breast cancer	4000
Tonaillectomy	100 (plus 3 days in hospital)
Complete treatment for heart attack	5000
Oral exam by dentist	20
Complete x-rays by dentist	9
Teeth cleaning	20
Single root canal	120
Complete denture	145
Orthodontic work	500-2000
Routine emergency room examination	25+ 10 (or more for supplies)
Hospital Room (2 beds) semi-private	62/day
(4 beds)	58/day
Private	70/day
Intensive care	140/day
Average hospital cost of normal pregnancy with 3 day hospital stay	600
Abortions: Clinic, First trimester	175
Hospital, Late in pregnancy	500

"Average" Costs

In 1975, an average of \$547 per person was spent on all types of health care in the United States. This amount includes medical insurance premiums, tax supported medical programs, drugs, and all types of medical, dental, and other health related charges. Obviously, chronically ill people have higher than average costs and an adult in good health may have below average costs. A couple with two children might typically have out-of-pocket medical expenses of \$100-1000 in 1979 (including premiums for medical insurance). Extensive orthodontic work, surgical work, or long lasting illnesses might increase the total to well above \$1000 some years.

A large national survey on health care produced the following annual averages for frequent and/or different types of health care.

MALES:	Age	Days in Hospital	Visits to Doctor	Visits to Dentist
	Under 7	0.51	4.02	0.63
	7-17	0.31	2.30	1.76
	18-44	1.13	2.50	1.37
	45-64	1.16	3.43	1.20
	65 or over	2.15	5.03	0.68

FEMALES:

	Under 7	0.51	4.02	0.63
	7-17	0.28	2.05	2.00
	18-44	0.74	4.79	1.74
	45-64	1.28	4.44	1.40
	65 or over	2.62	5.30	0.73

There is considerable individual variation behind these averages. It is probably more meaningful to interpret them as something like: the average child under 7 would spend about 2 days in the hospital once every years. And of course, some individuals spend no time in the hospital, while others spend a lot of time in the hospital. But these figures can be useful for budget planning. Example: The Smith family consists of Mr. and Mrs. Smith, age 30, and Jack and Jill, age 10. The expected number of days in the hospital for the family would be 2.46. ($1.13 + .74 + .28 + .31$). At \$60 per day this would amount to about \$148. How much the family paid would depend on their medical insurance. The expected number of doctor visits would be 11.64 ($2.50 + 4.79 + 2.05 + 2.30$). At \$20 per visit (including drugs prescribed, lab tests, etc.) this would amount to \$233. The expected number of dental visits would be 6.87 ($1.37 + 1.74 + 2.00 + 1.76$). At \$20 per visit, this would amount to about \$370. Eye exams and glasses for the children could run another \$50 to \$150 extra. Hospital expenses would range from zero to \$200, depending on circumstances and the level of medical insurance coverage. The total medical expense expected would be in the neighborhood of \$600, not counting medical insurance premiums. But note: Uninsured accident or illnesses expense might run the total to thousands of dollars. The purpose of insurance should be to cover the large but infrequent expense. For the typical family, budget planning should take care of the small, predictable expense.

LINE 30: CLOTHING

To estimate clothing expenditures, choose a budget level, estimate and compute what household expenditures would be for 1979. For clothing made at home, deduct 50% of equivalent store price per item, but add time on Housework (line 54). The average person would take roughly 7 hours to construct a dress, and comparable time for other types of clothing. Multiply 1979 expenditure estimate by the Consumer Price Index for the current year.

1979 Approximate Annual Clothing Expenditure Per Person

Budget Level	Lower	Intermediate	Higher
	\$300	\$400	\$550

LINE 31: GASOLINE

For 1979, assume an average cost of 67¢ per gallon. Estimate total number of miles driven per year, divide by average miles per gallon to get number of gallons purchased during the year. Atypical American family might drive 6,000 miles, get roughly 12 miles per gallon, so it has to buy 500 gallons.

At 67c per gallon, this would cost \$335. But if the Energy Price Index rises to 2.00, gasoline will cost \$1.34 per gallon, so the family would spend \$670 on gasoline.

LINE 32: CAR MAINTENANCE

This category includes maintenance, tires, repairs, parking, tolls, license fees, and taxes. Use the following table to estimate annual costs (for a new car) in 1979:

Subcompact Car	Compact Car	Standard Size
\$120	\$180	\$240

Add \$100 for each year since the car was new, then multiply by the Consumer Price Index for the current year.

LINE 33: ENTERTAINMENT

Include expenditures for records, tobacco, magazines, books, movies, arts, beverages, crafts, music, theater, nightclubs, vacations, parties, etc. If you have young children, estimate the cost of babysitters when you go out. Estimate what it would cost in 1979, then multiply by the current Consumer Price Index.

LINE 34: CHARITABLE CONTRIBUTIONS

Note that the needs of various charities will increase with the Consumer Price Index.

LINE 35: GIFTS

Be realistic, there are social pressures and customs for giving at weddings, showers, birthday parties (all the children at your child's day care center?), etc. Estimate total in terms of 1979 prices, then multiply by the current Consumer Price Index.

LINE 36: HOUSEHOLD HELP

In 1979, regular household help must be paid \$2.90 per hour. This wage rate will increase with the Consumer Price Index. Also include day care for young children. Check local rates for prices.

LINE 37: OTHER FLEXIBLE EXPENSES

Includes professional expenses such as dues in organizations, cash expenditures for the car, house downpayment, personal care items, anything not covered by any other category.

LINE 43: AMOUNT SAVED DURING THE YEAR

This is by definition, (in this game) the difference between spendable income and total expenditures on current consumption. (Strictly speaking, down payments, part of the premiums on whole life insurance, and certain other

items that are not for current consumption, are considered savings, but it is simpler to ignore this distinction). If the total consumption is greater than the spendable income, the amount saved will be negative. Each year this happens you must on the back of page 1 of the Players Record Sheet neatly write a detailed explanation of how you covered the deficit. For instance, you run up a \$1000 balance at Sears in December. This will have to be paid off in 36 months (or less) at 18% (APR), at \$36.15 per month, or \$434 per year for three years. This will be included on line 21 for the following year. Another way to cover a deficit is to sell an asset or withdraw money from savings. If the total consumption is less than the spendable income, you must put the amount saved into one or more of the investments on lines 40, 41, 42.

If you wish to set up a savings account which you will use to replace major appliances, a valuation table is available. This savings account would enable you to pay cash and eliminate credit charges. The valuation table helps you determine the redemption fund payment needed. (If you have had Household Equipment class you will have done this before.)

LINE 44 - 52: FINANCIAL INVESTMENTS

Enter here the amount saved this year plus the carryover from previous years. You may use the computer to determine your earnings on your investments.

Passbook savings pays 5.25% annual interest

One year certificate of deposit pays 6.5% annual interest, \$1000 minimum deposit

Four year certificate of deposit pays 7.5% annual interest, \$1000 minimum deposit

Municipal bonds earn 6.5% annual interest, \$1000 minimum deposit. The interest on municipals is tax free.

One year C.D.'s and four year C.D.'s must either be left on deposit for the stated time or incur a substantial penalty for early withdrawal.

Earnings on Money Market certificates, mutual funds, and vacant land will be determined by the computer's random number selection function. Use the program "Investment Game", enter your figures and record the amounts given by the computer.

LINE 53 - 56: TIME ALLOCATION

It will be assumed that each adult family member spends 10 hours per day, (70 hours/week, 3640 hours/year) on sleeping, eating, and personal hygiene. Each character must allocate the remaining 5120 hours per year between jobs, housework, and leisure.

In order to reach the average level of cleanliness, etc. in housecleaning and related activities, the following chart shows the time needed for various types of households. The time needed for Average Level for household work (includes food, preparation, clean-up, housecleaning, clothing care, child care, marketing, and record-keeping.)

<u>Household Type</u>	<u>Hours per Week</u>	<u>Hours per Year</u>
Childless Couple	35	1820
Couple with 1 child, under 1 yr.	60	3120
Couple with 1 child, age 1	56	2912
Couple with 1 child, age 2-5	52	2730
Couple with 1 child, age 6-11	49	2548
Couple with 1 child, age 12-17	42	2184
Second child	add 7	, add 364
Third child, etc.	add 4	add 208

Note: May allocate less time for lower than average standards, or if a household worker is hired. Add time if have garden, make own clothes, etc. Add one hour per week for each car. Add 3 hours per week if have a yard. Add 2 hours/week for a pet.

On each lab report, show the total household time allocated for housework and comment briefly on adequacy. Example: A couple with two children, ages 2 and 4, need 3094 hours of housework and childcare per year. With no babysitting, maid service, or day care, the husband's time and wife's time for housework must total 3094 hours to reach the average level.

Note: Details of any purchases, sales, investments, job changes, or use of credit should be fully described on the lab report. Each character should record all transaction.

PROCEDURES FOR LAB SESSIONS

Price indexes and other economic changes for the new year will be written on the board. Your player record sheet will be returned to you with your salary and any other changes for the new year. You should work with your lab partner to decide all major changes, during the lab session. Each student must write his or her own lab report. If you cannot work well with your lab partner, ask for a "divorce."

Lab Report # 1, Due Friday, Feb. 23.

1. Briefly evaluate the situation of your game household. What problems and limitations does your household have? Evaluate the level and adequacy of expenditures. What resources does it have?
2. Discuss your household's time allocation. Is enough time spent on housework and child care to reach average standards? Is there enough leisure time? Is the division of housework between the husband and wife fair?

Lab Report # 2, Due Friday, March 2.

1. Turn in your player record sheet with your lab report. Briefly explain all major changes since the previous year, listing line number from the record sheet, e.g.
"Line 18 - Premiums decreased because collision insurance dropped."
"Line 27 - Maintained same diet, but food prices up 5%."
2. Explain any major purchases, including price, credit terms, etc.
3. Briefly discuss the savings and investments situation of the household. Discuss possible goals. Use the computer program "Investment Game" to predict possible outcome in future years.

Lab Report # 3, Due Friday, March 9.

1. Explain last year's purchases and major changes in income, budget, savings, and investments.
2. What will be the financial situation of this family in 1986?

Lab Report # 4, Due Friday, March 23.

1. Explain last year's purchases and major changes in income, budget, savings, investments, and time use.

Lab Report #5, Due Friday, March 30.

1. Explain last year's purchases and major changes in income, budget, savings, and investments.
2. Discuss your household's use of credit during 1979 to the present time.

Lab Report # 6, Due Friday, April 6.

1. Explain last year's purchases and major changes in income, budget, savings, and investments.
2. Use the computer program on "Life Insurance" to determine life insurance needs of your household. Estimate the annual premium costs. Would the premiums fit into the household's budget? Include in this report your answers to questions from the computer which are not available in the record sheet.

Lab Report # 7, Due Friday, April 13.

1. Explain last year's purchases and major changes in income, budget, savings, and investments.
2. Analyze in detail your game household's current transportation budget. Show how you estimated all costs.

Lab Report # 8, Due Monday, April 23.

1. Explain last year's purchases and major changes in income, budget, savings, and investments.
2. If not done previously, use the computer program on "Home Financing" to determine your household's ability to finance a new home. If a new home is unquestionably out of the range for your household, use the figures from a household which is in the upper or upper middle income bracket. Report on findings.

FAMILY FINANCIAL GAME
PLAYER RECORD SHEET

Game name:

Student name:

Actual name of Game partner:

Age of Game characters:

Age of Game characters:	1979	1980	1981	1982	1983	1984	1985	1986
Husband								
Wife								
Oldest child								
2nd oldest child								
3rd oldest child								
4th oldest child								
5th oldest child								

[illegible]

	1 1979	2 1980	3 1981	4 1982	5 1983	6 1984	7 1985	8 1986
31. Gasoline								
32. Car maintenance								
33. Entertainment								
34. Charitable contributions								
35. Gifts								
36. Household help								
37. Other								
38. Total flexible expenses 27+...+37								
39. Total consumption 26+38								
SAVINGS								
40. \$ added to passbook savings								
41. \$ added to Certificate of Deposit								
42. \$ added to other investments								
43. Total amount saved 40+41+42								
FINANCIAL INVESTMENTS ON JAN. 1								
44. Balance in passbook savings								
45. Balance in 1 yr. C.D.								
46. Balance in 4 yr. C.D.								
47. Amount in money market certificate								
48. Value of shares of mutual fund								
49. Value of vacant land								
50. Amount in Municipal Bonds								
51. Other investments								
52. Total value 44+...+51								

1 2 3 4 5 6 7 8
1979 1980 1981 1982 1983 1984 1985 1986

TIME USE

3670 hours per year allowed for sleeping and other personal maintenance.

53. Hours of employment (include commuting & education)								
54. Hours of housework, child care, shopping, lawn care, etc.								
55. Leisure time								
56. Total hours 53+54+55 should total 5120 hours								

1979

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1980

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1981

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1982

87

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1983

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1984

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1985

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

1986

HOUSING SITUATION

FOOD LEVEL

AUTO INSURANCE

LIFE INSURANCE

LOANS

OTHER

HOME MANAGEMENT LABORATORY
630-465

Spring, 1979

COURSE DESCRIPTION

Residence or equivalent laboratory experiences in home management including analysis and evaluation of management at different family life-cycle stages and socio-economic levels. Arrange enrollment before registration.
Pr.: F. Ec. 460.

RATIONALE

Management is planning and implementing the use of available resources to meet demands and to attain individual and/or family goals. The analysis of managerial behavior is important because it affects the quality of living achieved by individuals and families.

OBJECTIVES

This course has been designed to enable the student to:

1. identify and clarify values, goals, and standards operative in home management.
2. set realistic personal and group goals.
3. apply management concepts in proposing alternative solutions to selected laboratory problems.
4. identify managerial behavior that is affected by patterns of living resulting from variations in family size and composition, family life cycle stage, socio-economic level, and socio-cultural values.
5. describe individual differences among people which serve as resources or constraints upon management in a group situation.
6. demonstrate skill in integrating management concepts in home economics content areas by planning, presenting, and evaluating a lesson geared for secondary students.

COURSE MANAGEMENT

The purpose of this course is to provide students with an opportunity to use management concepts in proposing solutions to a variety of lab problems.

ORGANIZATIONAL PATTERNS

Purpose: To increase student awareness of personal managerial activities and provide an opportunity for analyzing personal management.

Directions: Plan your activities for the next four days. The format you use is not important; you may arrange the plan by the hours of the day, by large blocks of time, or by activities. The important thing is that you have a good outline of your "life" for the week. Indicate additional goals, demands, and plans that emerge as the week progresses. At the end of each day, record the changes you have made as you tried to carry out the plan, including additional activities, changes in standards or sequence, and how you feel about the day end why.

No value judgments will be rendered on the way you choose to use your time, that is, there are no penalties for "frivolities" or leisure time or good marks for accomplishing a lot of work. The important thing is that the plan reflect your ideas of your life. At the end of the time (actually four days) analyze your activities, using the following questions as a guide. Give examples.

1. Did you manage your affairs more in reaction to events and external demands or in accordance with goals?
2. How much of your time was spent on responding to demands and events you had not anticipated at the beginning of the week? How satisfying were these responses? What values and goals do they reflect?
3. What methods of control did you use? What kinds of checking and facilitating did you do?
4. When you adjusted plans, did you more often change your standard or the sequence of actions? Which was usually the first to change and under what conditions?
5. What factors accounted for the greatest satisfaction with each day's activities? What caused dissatisfaction?

HOME MANAGEMENT LAB
630-465TIME
A Module on Time Management*INTRODUCTION

Of all resources at our disposal, time is the only one each of us shares equally. Our lives span different periods in history, but during our life-times, each of us has the same amount of daily time: 24 hours. Yet, how differently humans use their time! The output of time management is a good example of MULTIFINALITY, where given similar initial conditions, different ends results are achieved.

This module is about time: its allocation and its management.

INSTRUCTIONAL OBJECTIVES

After completing this module, you should be able to:

1. identify your personal patterns of time use
2. summarize ways to improve the effectiveness of time use
3. summarize the major results of the Cornell household time allocation studies
4. analyze relevant issues concerning the relationship of time to values in home management by family members

INSTRUCTIONAL ACTIVITIES

1. Review briefly, Chapter 5, "Time Management" in Management in Family Living by Nichell and Dorsey, 1968 edition.

OR

Chapter 8, "Controlling Time, Energy, and Fatigue Costs Through Planning", 1942 edition.

2. Read the following articles and be prepared to discuss the questions on the Personal Time Management Study Guide.
3. Mackenzie, R. Alec. "Toward a Personalized Time Management Strategy" Management Review, 63:10-15, February 1974.
4. Mackenzie interview. "How to Make the Most of Your Time", U.S. News and World Report, pp. 45-53, December 3, 1973.

* Originally written by Nancy L. Granovsky, April 1977;
revised in January 1979 by Harriette G. Janke.

PERSONAL TIME MANAGEMENT

Study Guide

1. Mackenzie article.

Mackenzie has listed 20 time management principles. Select five that seem to be the most relevant to you and describe briefly how you could apply the particular principle in your personal time management strategy.

2. Mackenzie interview.

What are your five leading time wasters?

What is the difference between efficiency and effectiveness?

What suggestions do you think home economics can make to help families manage their time better?

How do you think the concept of "flexible time" for workers would affect management in the home?

TIME AND VALUES

Read the following articles and be prepared to discuss the questions on the Time and Values Study Guide.

Cornell University has conducted research on household work time and you should be familiar with the major results of this important study. It was done by Kathryn Walker.

1. Walker, Kathryn E. "Household Work Time: Its Implication for Family Decisions", Journal of Home Economics, pp. 7-11, October, 1973.
2. Love, Nancy. "Are You Trying to be a Superwoman?" American Home pp. 56+, April, 1977.
3. Margolis, Maxine. "In Hartford, Hannibal, and (New) Hampshire, Heloise is Hardly Helpful", Ms. pp. 28-27+, June, 1976.
4. McGrady, Mike. "The Fifty-fifty Marriage", Woman's Day, p. 38+, May, 1976.
5. Turner and Wallace. "Management as a Survival Skill for Employed Women", Illinois Teacher, pp. 42-47, Sept./Oct., 1978.
6. Cobe, P. "Spin the Family Work Wheel" Forecast, pp. 122-123, Sept., 1978.

TIME AND VALUES

Study Guide

1. Walker article

- 1.1 How does Walker define household work?
- 1.2 What was the purpose of the Cornell Study?
- 1.3 How and where was the study conducted?
- 1.4 What did the study discover about the relationship of household time to number and age of children in household, women's employment, and men's contributions?
- 1.5 How can greater equality in household work distribution be achieved?

2. Love article

- 2.1 What is the "superwoman syndrome"? In terms of your values, do you think the "superwoman syndrome" is good or bad? Is being a superwoman the output of effective management?
- 2.2 Do home economics teachers reinforce the "superwoman syndrome"? If so, how? If not, how do they avoid it?

3. Margolis article

- 3.1 Why do middle class housewives spend as much time doing housework as they did 50 years ago?
- 3.2 How does Parkinson's Law apply to work in the home?
- 3.3 What is your reaction to the author's allegation that Heloise stereotypes the role of women and promotes a "make-work syndrome"?

4. McGrady article

- 4.1 Discuss the pros and cons of a 50-50 marriage à la McGrady style.
- 4.2 What effect would such a system have on the family? Would it be positive or negative?

5. Turner & Wallace article

- 5.1 How can resources be increased?
- 5.2 How can fatigue from energy expenditure be reduced?

6. Cobe article

- 6.1 How can household activities be desexed?
- 6.2 In families with which you are acquainted, how would it work to assign jobs by spinning a "Family Work Wheel"?

HOME MANAGEMENT LAB
630-465

TEACHING PRESENTATIONS

You are to develop and teach a lesson to a coed high school class in Family Living. The class includes many students who will not be going to college and will probably not receive this information at home.

Place your initials by the subject you would like to present or suggest a different one.

Suggested Topics

How to manage to:

- Obtain a good credit rating
- Prepare and serve a meal for 12 people
- Decide actual financial benefit of working wife
- Be more efficient cleaning house
- Develop a savings plan with maximum increase in value
- Decide which type of life insurance policy to buy
- Make your dollars buy more at the grocery store
- Decide on a used car
- Understand obligations of buying on credit
- Plan a budget

Special problems of management for:

- Low income families
- Elderly individuals
- Young families
- Families whose bread winner is on strike

Subjects from Family Financial Game for Oral Reports

UTILITY PAYMENTS: Deposits, variation between towns, house sizes. Kinds of utility payments. How to figure cost per KWH. Use interviews, information from Household Equipment class. Breakdown utility figures in Family Financial Game Guide (for line 20) into costs per month for each utility.

MISCELLANEOUS HOUSEHOLD PURCHASES: Get figures from game households and analyze 1 low, 1 middle, and 1 high income. Decide what could be purchased and what is in that category for each family. How often could appliances be replaced? Make 20 year plan for replacing appliances (assume cost is same as now). Use information from Household Equipment.

CLOTHING: Use game family figures and decide what clothing could be purchased in lower and middle income brackets. Use catalog and visit second hand clothing store. Figure amounts of clothing and their costs for a 6 year span.

GASOLINE AND CAR MAINTENANCE: Break down costs into actual items. Use Consumer Reports and Changing Times, other sources. Plan expenses for 10 years for lower-middle income, 10 years for upper-middle income. How much should family allow in budget for car? How can one decide if one can afford a second car?

RAISING CHILDREN IN A CHANGING SOCIETY: Find magazine articles or research articles on subject; present subject as it relates to management; "new breed" vs. "traditionalists". We have booklets on hand of The General Mills Family Report.

FINANCIAL PLANNING: Financial objectives, why some succeed, some fail. Analyze Family Financial Game savings, how could participants have increased earnings? Use Ch. 20 & 21 in The New Money Dynamics plus other sources.

HOUSING FOR THE ELDERLY AND/OR THE DISABLED: Report on modifications desirable for the home. Use wheel chair to demonstrate needs of the disabled. How could the kitchens in the Home Management house be adapted for their use?

HOME MANAGEMENT EXPERIENCE

OBJECTIVE:

The student shall demonstrate skill in integrating management concepts in home economics content areas through meal preparation and care of the house.

INSTRUCTIONS FOR MEALS:

Each student will be responsible for planning, preparing, eating, and cleaning up 3 meals (breakfast, lunch, and dinner) for three different income levels- a total of 9 meals during the semester. The student's partner in the Family Financial game will be responsible for helping with the meals for approximately 15 to 30 minutes before the meal and helping clean up the kitchen and dining area afterwards.

The first three meals should be completed by March 9, the second three meals by April 6, and the third set by April 27. A large calendar is provided on which you are to sign up (with pencil) for your meal preparation times. Consult your partner and your own calendar for conflicting events.

Prepare meals for the income level in which your Game household is. There should be an opportunity for you to manage a food budget at high, medium, and low income levels.

Plan Breakfast and dinner for five people; yourself, your helper, Allen, Harriette, and Steve. Prepare weekday lunches for four people. Steve eats at school.

During your high income phase, four to six adults should be invited to be your guests for dinner. The guests should be faculty members or other adults with as established residence and permanent position in the community. Plan to spend the evening visiting or entertaining them in some way.

Amount to spend for the different income levels will be limited by the figures given on the hand out sheet. You will receive a check for your grocery shopping from the instructor when your menus and work plan have been checked.

Hand in your menus and work plan three days before your planned shopping trip. The menus should be nutritious and creative. Consider the available equipment (no oven or toaster for low income) and your time limitations. The meal should fit the apparent values of your Game household. Indicate the cost of each meal on your menus and the recipe source.

When planning menus, consider the style of service to be used. Sometime during your nine meals, use four styles of food service; English, country, blue plate, and buffet.

Your work plan is merely a listing of what needs to be done to prepare the meal, when it is to be done, and who is to do it.

Friends may be invited to meals by the hostess and her helper if they have made plans for them. Pay the Instructor for any guest meals.

It is the responsibility of the hostess to have the linens washed, ironed if necessary, and ready for the next hostess to use.

NOTE: If the washing machine and dishwasher are turned on at the same time, it will blow a fuse. So BEWARE! Don't do it!!

CARE OF THE HOUSE:

Two students will be responsible for caring for the house one week during the semester. Sign up on the large calendar.

Various kinds of cleaning equipment is provided for your use. This assignment is to acquaint you with different types of equipment and provide an opportunity for you to practice Activity Analysis. More instructions will be provided for this exercise.

HOUSE CARE STANDARDS

Weekly

Dining Room:	Dust furniture Vacuum rug Dust wood floor Dust window sills
Living Room:	Dust furniture and fixtures Vacuum rug Dust window sills
Hallway:	Sweep and mop floor Dust furniture
Kitchen:	Sweep and mop floor Clean refrigerator-wipe out drawers & shelves Wipe doors of cabinets Set stove controls to clean oven if necessary

II.g.
ACTIVITY ANALYSIS

98

Activity evaluated: _____

Starting time: _____

Date: _____

Stopping time: _____

Name: _____

Time required: _____

PLANNING

How do you plan to do the activity?

IMPLEMENTING

Are supplies gathered before starting to work?

Are excess motions used: arm motions, bending, are both hands used to work?

Should the following be considered? Why?

Different order of work.

Different work area.

Different materials.

Use of equipment.

Change of equipment.

Arrangement of equipment.

How could trips have been saved from one place to another?

Was dovetailing used? When?

EVALUATION

Does your work meet your standards?

Use the back of this sheet for comments, observations, or ideas.

Home Management Lab
Interviews

Objectives:

- (1) Identify managerial behavior that is affected by patterns of living resulting from variations in family size and composition, family life cycle stage, socio-economic level, and socio-cultural values.
- (2) Describe individual differences among people which serve as resources or constraints upon management in a family situation.
- (3) Increase understanding of people whose lives are unlike our own.

Directions:

Interview four families. Choose families to represent a broad spectrum within one category such as those mentioned in objective #1.

A questionnaire will aid your interview. You may develop this questionnaire with another member of this class if you desire. You will each do your own interviewing.

We will go over your questionnaires together. March 2nd is the very latest they should be handed in. We will be happy to go over them anytime before that. There may be some additions or corrections to be done before duplicate copies are made.

After the interviews are completed, a written summary of the interviews should be handed in by March 23rd.

Include the following information in the summary paper:

1. Describe the family in terms of size, age, activities, background, etc.
2. How are the household responsibilities divided among family members? Explain.
3. How many hours are spent on various household tasks by each member of the family?
4. How do the family members feel about the present allocation of household tasks? Do some members feel overworked? etc.
5. What tasks does each family member like best? Least? Explain.
6. How do the family members perceive the role of the wife in reference to household tasks? How does the wife perceive her role?
7. Explain how the wife perceives the role of other family members.

8. What activities does the wife/mother have to give up now that she is working? Explain.
9. Explain how the woman feels she might use her time more effectively.
10. How has the energy shortage affected the family's lifestyle?
11. What specific differences do you see in the families you interviewed?
12. What management techniques or examples did you learn from the families you interviewed? i.e. use of resources, planning, facilitating, events, etc.

KANSAS STATE UNIVERSITY - OFFICE OF EDUCATIONAL RESOURCES

We are asking for your cooperation in a study of how student expectations at the beginning of a course compare with their reactions at the end of the semester. If you agree to participate, it will be necessary for you to print your name in the space provided below so that we will be able to match your answers on this sheet with those you give later in the course. Once the study is completed, the names will be destroyed. Your instructor will never see your name. The Office of Educational Resources will assign a number to each name. This number will placed on each survey sheet. If you have any questions, please don't hesitate to ask.

I agree to participate in this study. I know that I am free to withdraw from participation at any time I wish.

(DATE)

(SIGNATURE)

(PRINT NAME)

On these three questions, compare your expectations of this course with your experiences in other courses you have taken at KSU. Use the code below:

- | | |
|---------------------------------|-------------------------|
| 1 - Much Less than Most Courses | 4 - More than Most |
| 2 - Less than Most | 5 - Much More than Most |
| 3 - About Average | |

- | | | Circle One | | | | |
|--|---|------------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1. Amount of reading | 1 | 2 | 3 | 4 | 5 | |
| 2. Amount of work in other (non-reading) assignments . . . | 1 | 2 | 3 | 4 | 5 | |
| 3. Difficulty of subject matter. | 1 | 2 | 3 | 4 | 5 | |

Use the following code to answer the next two questions.

- | | |
|--------------------------|--------------------------|
| 1 - Definitely False | 4 - More True than False |
| 2 - More False than True | 5 - Definitely True |
| 3 - In Between | |

- | | | Circle One | | | | |
|---|---|------------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 4. I expect to work harder on this course than on most courses I have taken | 1 | 2 | 3 | 4 | 5 | |
| 5. I have a strong desire to take this course. | 1 | 2 | 3 | 4 | 5 | |

Choose one response in the following question.

6. Which of the following best describes your reason for enrolling in this course?
1. Required; otherwise I wouldn't have enrolled.
 2. Required; but I would have enrolled anyway.
 3. Not required; it will be helpful in my major field.
 4. Not required; I'm just interested in the topic.
 5. Other; (explain) _____

Answer the following questions by placing a mark on the line.

1. Have you had any previous experience with computers?

no experience _____ a great deal of experience

2. Do you like the idea of learning to use a microcomputer?

definitely do not like the idea _____ like the idea

3. Do you feel you are the type of person who would tend to have problems with something mechanical like a computer?

no problems _____ many problems

4. Do you think management skills can be learned by using a computer?

no, cannot be learned _____ yes, can be learned

5. Do you think simulation games can be an aid to learning?

never _____ always

6. Do you think management skills can be learned by using simulation games?

no, cannot be learned _____ yes, can be learned

Answer the following question by checking the correct response.

7. Have you previously experienced simulation games in any of your classes?
(lasting more than one class period) _____ lasting one class period

Yes _____

Yes _____

No _____

No _____



SURVEY FORM -- STUDENT REACTIONS TO INSTRUCTION AND COURSES

Your thoughtful answers to these questions will provide helpful information to your instructor.

Describe the frequency of your instructor's teaching procedures, using the following code:

- | | |
|------------------|-------------------|
| 1 — Hardly Ever | 3 — Sometimes |
| 2 — Occasionally | 4 — Frequently |
| | 5 — Almost Always |

The Instructor:

- Promoted teacher-student discussion (as opposed to mere responses to questions).
- Found ways to help students answer their own questions.
- Encouraged students to express themselves freely and openly.
- Seemed enthusiastic about the subject matter.
- Changed approaches to meet new situations.
- Gave examinations which stressed unnecessary memorization.
- Spoke with expressiveness and variety in tone of voice.
- Demonstrated the importance and significance of the subject matter.
- Made presentations which were dry and dull.
- Made it clear how each topic fit into the course.
- Explained the reasons for criticisms of students' academic performance.
- Gave examination questions which were unclear.
- Encouraged student comments even when they turned out to be incorrect or irrelevant.
- Summarized material in a manner which aided retention.
- Stimulated students to intellectual effort beyond that required by most courses.
- Clearly stated the objectives of the course.
- Explained course material clearly, and explanations were to the point.
- Related course material to real life situations.
- Gave examination questions which were unreasonably ostentatious (picky).
- Introduced stimulating ideas about the subject.

On each of the objectives listed below, rate the progress you have made in this course compared with that made in other courses you have taken at this college or university. In this course my progress was:

- | |
|---|
| 1 — Low (lowest 10 per cent of courses I have taken here) |
| 3 — Low Average (next 20 per cent of courses) |
| 4 — Average (middle 40 per cent of courses) |
| 5 — High Average (next 20 per cent of courses) |
| 5 — High (highest 10 per cent of courses) |

Progress on:

- Gaining factual knowledge (terminology, classifications, methods, trends).
- Learning fundamental principles, generalizations, or theories.
- Learning to apply course material to improve rational thinking, problem-solving and decision making.
- Developing specific skills, competencies and points of view needed by professionals in the field most closely related to this course.
- Learning how professionals in this field go about the process of gaining new knowledge.
- Developing creative capacities.
- Developing a sense of personal responsibility (self-reliance, self-discipline).
- Gaining a broader understanding and appreciation of intellectual-cultural activity (music, science, literature, etc.).
- Developing skill in expressing myself orally or in writing.
- Discovering the implications of the course material for understanding myself (interests, talents, values, etc.).

On the next four questions, compare this course with others you have taken at this institution, using the following code:

- | |
|---------------------------------|
| 1 — Much Less than Most Courses |
| 2 — Less than Most |
| 3 — About Average |
| 4 — More than Most |
| 5 — Much More than Most |

The Course:

- Amount of reading
- Amount of work in other (non-reading) assignments
- Difficulty of subject matter
- Degree to which the course hung together (various topics and class activities were related to each other)

Describe your attitudes toward and behavior in this course, using the following code:

- | | |
|--------------------------|--------------------------|
| 1 — Definitely False | 4 — More True than False |
| 2 — More False than True | 5 — Definitely True |
| 3 — In Between | |

Self-rating:

- I worked harder on this course than on most courses I have taken.
- I had a strong desire to take this course.
- I would like to take another course from this instructor.
- As a result of taking this course, I have more positive feelings toward this field of study.
- I have given thoughtful consideration to the questions on this form.

Describe your status on the following by blackening the appropriate space on the Response Card.

A. To which sex-age group do you belong?

- | | |
|----------------------|------------------------|
| 1 — Female, under 25 | 3 — Female, 25 or over |
| 2 — Male, under 25 | 4 — Male, 25 or over |

B. Do you consider yourself to be a full-time or a part-time student?

- | |
|---------------|
| 1 — Full-time |
| 2 — Part-time |

C. Counting the present term, for how many terms have you attended this college or university?

- | | |
|------------|---------------|
| 1 — 1 term | 3 — 4 or 5 |
| 2 — 2 or 3 | 4 — 6 or more |

D. What grade do you expect to receive in this course?

- | | | |
|-------|------------|-----------|
| 1 — A | 3 — C | 5 — Other |
| 2 — B | 4 — D or F | |

E. What is your classification?

- | | | |
|---------------|----------------------|-----------|
| 1 — Freshman | 3 — Junior or Senior | 5 — Other |
| 2 — Sophomore | 4 — Graduate | |

F. For how many courses have you filled out this form during the present term?

- | | |
|------------------------------|-----------------------|
| 1 — This is the first course | 3 — 4 or more courses |
| 2 — 2 or 3 courses | |

G. How well did the questions on this form permit you to describe your impressions of this instructor and course?

- | | |
|----------------|-------------------|
| 1 — Very well | 3 — Not very well |
| 2 — Quite well | 4 — Poorly |

If your instructor has extra questions, answer them in the space designated on the Response Card.

Your comments are invited on how the instructor might improve this course or teaching procedures. Use the back of the Response Card (unless otherwise directed).

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Please respond on the computer card to these items according to the following code:

- | | |
|--------------------------|--------------------------|
| 1 - Definitely False | 4 - More True than False |
| 2 - More False than True | 5 - Definitely True |

40. The advice and assistance in this course was usually helpful.
41. The instructor was responsive to student requests for help.
42. The development of new viewpoints and appreciations was encouraged in this class.
43. The course was structured to account for students' individual abilities and problems.
44. The content of this course was good.
45. This course was worth the time I spent.
46. Individual help was available when needed.
47. The changes made in the Family Finance Game during the semester will eliminate most of the problems I encountered.
48. I felt challenged while working on the Family Finance Game.
49. Completing lab reports gave me a sense of accomplishment.
50. I would encourage my friends to take a course that uses the Family Financial Game.
51. The Family Financial Game helped me to identify management problems.
52. The material presented in the Family Financial Game could be presented just as effectively in other ways.
53. The Family Financial Game was boring.
54. The instructor was aware of my problems in the Family Financial Game.
55. I experienced frustration while working on the lab reports.
56. The Family Financial Game assignments were too time consuming relative to their contribution to my understanding of the course material.
57. Family Financial Game assignments were confusing.
58. Some aspects of the Family Financial Game were annoying.
59. The Family Financial Game was fun to do.

What have you liked most about the Family Financial Game?

What have you liked least about the Family Financial Game?

What comments, criticism, or suggestions do you have for making more effective use of the Family Financial Game in this course?

EVALUATION OF MANAGEMENT COMPETENCIES*

Rate yourself and your partner's management competencies. Each set of criteria reads from left to right, from the least desirable behavior "1", to the most desirable behavior "9". Circle the number under the characteristics which best describe the person being evaluated.

1. Attitude

Pessimistic, hypercritical, listless, has a poor sense of humor. Reluctant to participate.

Usually cheerful, sometimes complains; occasionally moody. Some sense of humor; needs encouragement to participate.

Optimistic, cheerful, enthusiastic; has a good sense of humor. Eager to participate.

Self rating

1 2 3 4 5 6 7 8 9

Rating of partner

1 2 3 4 5 6 7 8 9

2. Cooperation

Does not work well with others. Self-centered.

Works moderately well with others. Sometimes does more than personal share when asked.

Works well with others. Willing to do more than personal share.

Self rating

1 2 3 4 5 6 7 8 9

Rating of partner

1 2 3 4 5 6 7 8 9

3. Communication

Poor listener, expresses self poorly, tactless. Exhibits little understanding of others; interacts poorly.

Sometimes listens well. Has difficulty expressing self; sometimes tactful. Exhibits some understanding of others, sometimes interacts well.

Good listener; expresses self effectively, usually tactful. Exhibits understanding of others, interacts well.

Self rating

1 2 3 4 5 6 7 8 9

Rating of partner

1 2 3 4 5 6 7 8 9

4. Flexibility

Adapts slowly to new situations and ideas. Unwilling to modify plans and opinions; upset by sudden change.

Tries to adjust. Usually successful in adjusting but sometimes upset by change.

Adjusts readily and pleasantly to new situations and ideas. Seldom flustered by sudden change.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

5. Responsibility

Fails to recognize and assume own share of group responsibilities.

Slow to recognize and or assume own share of group responsibilities.

Recognizes and assumes promptly and willingly personal responsibilities in the group.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

6. Leadership

Lets others take initiative.

Sometimes initiates and stimulates group responsibilities.

Initiates group action, inspires confidence and is able to motivate the group to effectively achieve their goals.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

7. Creativity

Exhibits little
creativity.
Not resourceful.

Exhibits some
creativity.
Occasionally
resourceful.

Exhibits much
creativity, is
resourceful.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

8. Realistic Time Utilization

Sees each respon-
sibility in class
as a unit isolated
from other respon-
sibilities, and sel-
dom coordinates
activities.

Sees some rela-
tionship between,
and sometimes co-
ordinates class
and activities.

Recognizes relation-
ships between, and
coordinates class
experiences with
other academic and
social activities.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

9. Management of Activities

Unorganized in
work. Wasteful
of energy, not
conscious of
time and energy
required by
activities.

Shows some or-
ganization of
work; usually
conscious of
time and energy
required by
activities.

Is well organized
and uses time and
energy effectively
in completing
activities.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

10. Awareness of Objectives

Usually unable to visualize desired results, or to establish goals.

Sometimes able to visualize desired results but has difficulty in establishing objectives.

Able to clearly visualize desired results, and establishes objectives accordingly.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

11. Ability to Recognize Problems

Unable to sense opportunities or problems for self or the group

Senses some opportunities or problems. May recognize those for self, but not for group or vice versa.

Keen sensitivity to opportunities and problems for self and group

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

12. Ability to Make Decisions

Unable to see or evaluate alternatives, resists making a choice, and doesn't assume responsibility for choice(s).

Can see and evaluate limited number of alternatives, has difficulty making a choice; sometimes takes responsibility for choice(s).

Can readily see and evaluate alternatives, can choose an alternative and accept the responsibility for choice(s).

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

13. Ability to Evaluate

Unable to be objective in analysis of self. Does not see value in analyzing past experiences.

Usually objective and analytical but may not make a complete analysis. Sees value in some analysis. Usually honest in estimating self.

Able to analyze behavior of work done and judges results clearly and objectively. Sees value in analyzing past experiences. Honestly estimates self.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

14. Ability to Accept Evaluation

Resents suggestions; utterly discouraged by or misinterprets criticism.

Sometimes resents, but usually accepts critical analysis.

Readily accepts suggestions. Initiates critical analysis by instructors and members of the group.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

15. Growth

Does not change method of behavior after evaluation.

Evidence of some change in behavior after evaluation.

Clear evidence of change in behavior after evaluation.

Self rating

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Rating of partner

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

* Taken from Evaluation of Management Competencies, HM 6369 Home Management Practicum, School of Home Economics, University of Georgia (Paynter, 1975)

1. Which of the following is not a part of planning?
 1. Applying organization.
 2. Deciding who will be responsible for specific tasks.
 3. Maintaining a schedule.
 4. Identifying resources.
2. Which of the following is not a procedure in planning homemaking tasks?
 1. Making decisions.
 2. Developing an order of importance for the parts of the task.
 3. Dividing, planning time equally among all tasks.
 4. Learning how to do a task.
3. Which of the following best describes poor control in management?
 1. No progress is made toward goals.
 2. The work is not completed.
 3. The plan does not work.
 4. Changes are made.
4. Evaluation in management is:
 1. Estimation of the worth of the product.
 2. Adjustment of goals sought.
 3. Checking on plans.
 4. Appraisal of progress toward goals.
5. Management is of greatest service to families as a:
 1. Work simplification tool.
 2. Guide to attaining goals.
 3. Device increasing resources for family use.
 4. Source of satisfactory group relations.
6. Management is taught because:
 1. It helps families accumulate reserves for security.
 2. It is necessary to use resources well.
 3. The steps of the process lead to desirable ends.
 4. It is a means to the ends sought by families.
7. Poor management is revealed by the:
 1. Excessive use of resources.
 2. Fatigue of the family members.
 3. Time spent in household tasks.
 4. Family dissatisfaction about what they have.
8. Management is most important in the family as a means of:
 1. Seeing what has been achieved.
 2. Eliminating indecision about goals being sought.
 3. Standardizing work activities.
 4. Attaining family goals.

9. The Jones family is managing well on their current annual income of \$10,000. Which of the following would be the most probable reason?
1. They have a budget.
 2. They conserve resources.
 3. Family goals are identified with means of attaining them.
 4. Objectives are formulated democratically.
10. Which of the following is the most inclusive statement describing the development of family goals?
1. Goals are formed by interaction with an observation of others.
 2. Individual goals are summated to arrive at family goals.
 3. Goals are developed from experience.
 4. Goals are learned from peer groups.
11. When families state their goals well, they:
1. Provide themselves with a means of evaluating their management.
 2. Stabilize their family.
 3. Use their resources to greater advantage.
 4. State goals every family member holds.
12. Which of the following would probably not be a goal held by a family in the retirement stage of the family life cycle?
1. Accumulate durable goods.
 2. Increase funds in savings accounts.
 3. Maintain their home.
 4. Preserve security provisions.
13. After the Browns were married they stayed on in the family business, although there was hardly enough for the two families. They wanted to be independent but felt family love and loyalty deeply. This reflects:
1. Long term values.
 2. Poor management in the family.
 3. Values as a determining factor in family life.
 4. Conflicting goals.
14. Why is statement of values important to the family?
1. Goals cannot be held without a statement.
 2. It helps in maximizing satisfactions.
 3. Society has values which should be respected.
 4. Families cannot have goals without values.
15. Which of the following is the best reason to change standards?
1. The rationale of the standards is questionable.
 2. The family cannot agree on the current standard.
 3. The current standard is inappropriate.
 4. The standard should be raised.
16. Which of the following describes all resources? Resources:
1. Provide the same satisfaction for all.
 2. Are limited.
 3. Are perfectly substitutable.
 4. Are independent of each other.

17. The relationship of resources and planning is correctly described as:
 1. The analysis and allocation of resources.
 2. Analysis of goals.
 3. Choosing tasks to do or products to attain.
 4. Analysis of past resource use.
18. With regard to resources, control in the managerial process involves:
 1. Evaluating the allocation of resources in the midst of the task.
 2. Buying additional goods as more money is available.
 3. Preserving goods in use.
 4. Making new decisions.
19. All resources must be allocated carefully. Which of the following descriptions illustrates the nature of resources?
 1. They substitute perfectly.
 2. They are independent of each other.
 3. Resources are scarce.
 4. All resources can be increased.
20. Which is the best definition of decision-making? Decision making is the:
 1. Planning of the use of resources.
 2. Process by which choice is made toward a desired end.
 3. Choosing of the resource to achieve a goal.
 4. Weighing of alternative goals to attain.
21. Decision-making is made easier when goals and values are well defined because:
 1. Goals are no longer competitive.
 2. Most conflict is eliminated.
 3. There is a consistency in thinking through alternatives.
 4. The cost in resources is decreased.
22. Choosing an alternative is difficult because:
 1. Alternatives may lose their desirability.
 2. There are many alternatives.
 3. Many outcomes and cross-purposes are present in each alternative.
 4. We know nothing of outcomes.
23. Development of a good decision-making system include:
 1. Allocation of community resources.
 2. Addition of family resources.
 3. An objective basis for selecting alternatives.
 4. Looking at specific alternatives.
24. Decision-making is important to families because it:
 1. Is the means to the ends sought.
 2. Improves the level of living families can enjoy.
 3. Reduces poor use of resources.
 4. Increases family happiness in management.

25. The most inclusive basis for including family members in the decision-making process is:
1. The family will be thought of as a democratic group.
 2. All family needs will be satisfied.
 3. The family will more willingly accept decision consequences.
 4. The entire family must sacrifice for the decision.
26. Conflict in decision-making is the result of:
1. Environmental influences.
 2. Different ages in the group members.
 3. Choosing an incorrect alternative.
 4. Varying perception of how to achieve goals.
27. When work analysis is effective:
1. Important savings in time occur.
 2. Standardized methods are available.
 3. Standards are improved.
 4. Quantity and/or quality of output can be increased.
28. Current philosophy in time management indicates that: .
1. Time schedules are necessary.
 2. Time spent in work should be creative.
 3. Balance is important in the use of time.
 4. Equal time should be spent in production, consumption and leisure.
29. Which of the following is not a good rule for storing tools and equipment.
1. Store heavy items at a convenient height.
 2. Store everything in a cabinet where it is not exposed to air.
 3. Store where bending and stretching to reach it is at a minimum.
 4. Store at point of first use.
30. The effect of fatigue on management is minimized if:
1. Work is stopped when the fatigue is experienced.
 2. Rest periods are taken.
 3. Minimum energy is used.
 4. The worker likes all tasks.
31. Which of the following is the best means of controlling fatigue?
1. Use large muscles.
 2. Alternate the types of work.
 3. Take a break every day at 10:00 AM.
 4. Complete work more quickly.
32. The product of a work process is desirable when it:
1. Uses resources acceptable to the peer group.
 2. Results from household production.
 3. Is acceptable to society.
 4. Meets family standards.

33. Generally, the lowest credit costs can be obtained from
1. Small loan companies.
 2. Department stores.
 3. Illegal lenders.
 4. Local banks.
34. The major purpose of insurance of all types is
1. Protection from loss.
 2. Accumulation of savings.
 3. Investments.
 4. None of these.
35. Inflation is particularly hard on people that
1. Have large families.
 2. Exist on a fixed income.
 3. Have not saved any money.
 4. Have not studied home management.
36. If a \$30,000 life insurance policy has a cash value of \$2,500 when the policyholder dies, the beneficiaries will receive
1. \$27,500.
 2. \$32,000.
 3. \$30,000.
 4. \$2,500.
37. The most insurance for the least amount of money can be provided with
1. Whole life insurance.
 2. Ordinary life insurance.
 3. Term insurance, renewable and convertible.
 4. Endowment insurance.
38. Endowment insurance is considered to be
1. The best buy in insurance.
 2. The most economical way to save money for a child's future college education.
 3. A means of forcing people to save regularly.
 4. All of the above.
39. When evaluating the performance of a task in accordance with work simplification principles, the most important question to ask yourself is
1. Am I using excess motions?
 2. Are the motion sequences rhythmical?
 3. Can the task be done in a different work area?
 4. Is the task really necessary?

40. Write a short case study dealing with summer vacation and money management. The case study should use the management terms discussed in this class and its prerequisite. Underline and label each term used in your case study.
41. Name at least 7 factors that influence home management. State in a few sentences for each factor the reason it is included.

TEACHING HOME MANAGEMENT AT THE COLLEGE LEVEL
THROUGH SIMULATION: A FORMATIVE EVALUATION

by

Harriette Grove Janke

B.S., Kansas State University, 1977

AN ABSTRACT OF A MASTER'S THESIS

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ABSTRACT

The major objective of the study was to apply and test an alternate method of teaching home management at the college level.

A simulation game that Dr. Sherman Hanna developed was adapted for use in the Home Management Laboratory. The main focus of the game is resource allocation. Various family situations and levels of income are utilized and an attempt is made to create realistic situations calling for the decision-making process. Each game household must make decisions according to their perceived goals and values about their spending priorities, jobs, and use of time.

Results indicate that the simulation game used needs to be simplified or more class time needs to be devoted to background material and explanations. A significant difference ($\leq .05$ level) was found in the students' management competencies as evaluated by themselves and by a teammate at intervals during the course. The scores on a version of Craig's Management Test were not significantly different from the scores obtained in Craig's testing.

Students with employed mothers were rated significantly higher on some management competencies by themselves and their partners. These competencies were attitude, leadership,

ability to recognize problems, ability to accept evaluation, and growth after evaluation.

No correlation was found between employment status of mothers and amount of homemaking experience by the student.

This evaluation will provide information for future teachers of classes dealing with family resource management. The inclusion of the Family Financial Game in a course could demonstrate the interrelatedness of decisions, provide a broad view of management procedures, and provide an opportunity to use and develop management ability.

Recommendations offered for further use of the simulation game are: put the game on a computer to simplify record keeping, evaluate the game with survey instruments which indicate empathy and understanding for disadvantaged people, and develop more valid instruments to measure learning acquired during the simulation games and Home Management Laboratory experiences.