DOCUMENT RESUME

ED 279 908 CE 046 706

AUTHOR Keenan, Dorothy; And Others
TITLE Illinois Vocational Home Economics Curriculum Guide. Addenda.
INSTITUTION Illinois Univ., Urbana. Dept. of Vocational and Technical Education.
SPONS AGENCY Illinois State Board of Education, Springfield. Dept. of Adult, Vocational and Technical Education.
PUB DATE 84
NOTE 245p.; For the curriculum guide, see ED 220 639.
PUB TYPE Guides - Classroom Use - Guides (For Teachers) (052)

EDRS PRICE MF01/PC10 Plus Postage.
DESCRIPTORS Adult Day Care; Computer Oriented Programs; *Computer Uses in Education; Course Descriptions; Courseware; Curriculum Guides; Educational Policy; *Entrepreneurship; Fashion Industry; *Home Economics; Learning Activities; Mathematics; Media Selection; *Occupational Home Economics; *Older Adults; Program Evaluation; Sciences; Secondary Education; Standards; *Technological Advancement; Transparencies

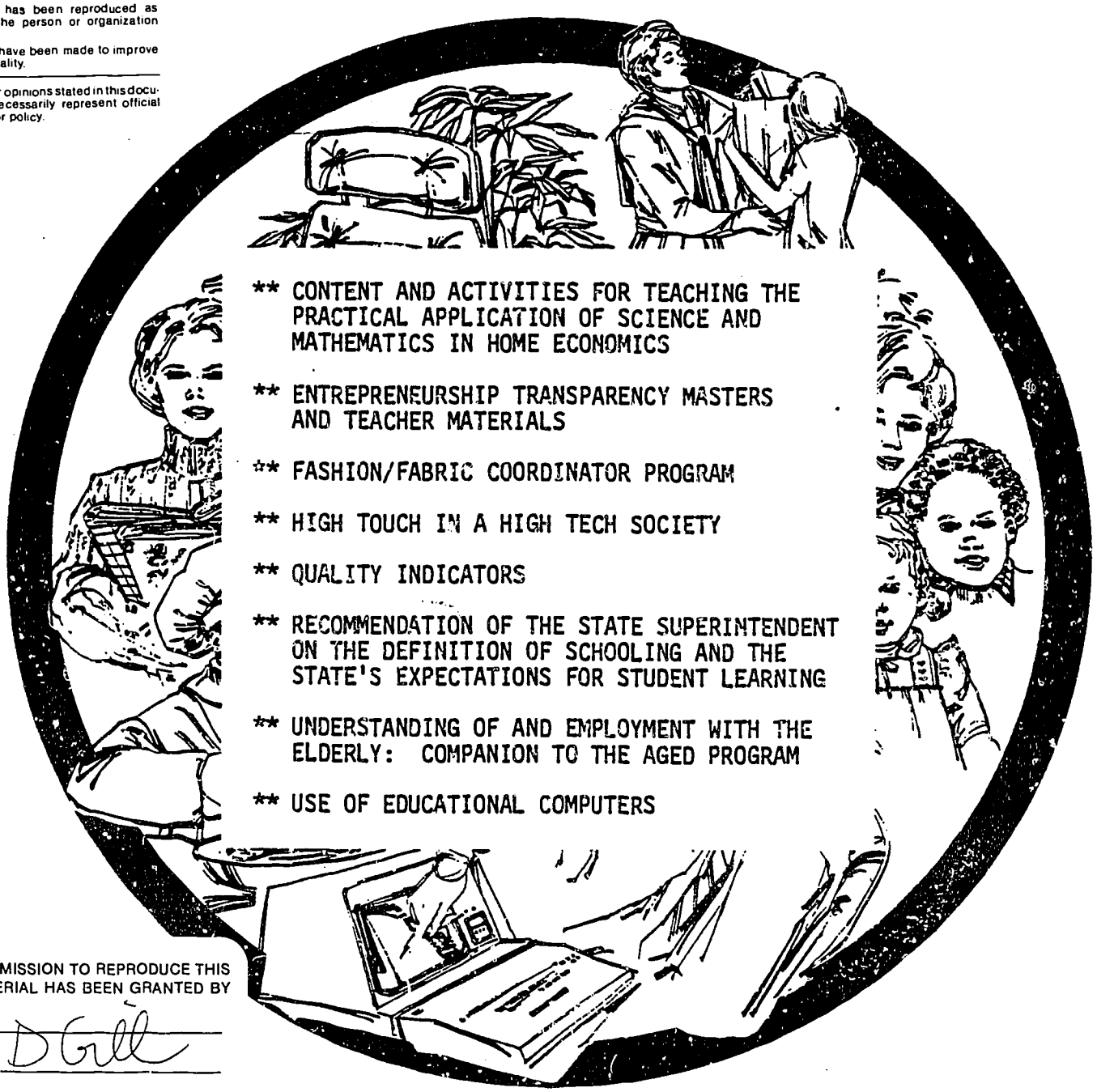
ABSTRACT

These addenda are divided into eight sections. Section 1 contains content and activities for teaching the practical application of science and mathematics in home economics classes. A number of activities are suggested for specific topics and objectives. Some general ideas for learning experiences are listed. Section 2 provides entrepreneurship transparency masters and teacher materials, including a content outline, selected bibliography, and lists of resource people and resource material. Section 3 is a fashion/fabric coordinator program. It presents a program flowchart, content outline, and activities. Section 4 is a unit entitled "High Touch in a High Tech Society." It contains a topic outline and activities on dealing with technological change. Section 5 provides quality indicators for use in assessing program components. Section 6 contains recommendations of the State Superintendent for the State Board of Education regarding its policy on the definition of schooling and the state's expectations for student learning. Section 7 contains materials for a companion course on interacting with the elderly, entitled "Understanding of and Employment with the Elderly." A content outline and activities are provided. Section 8 provides materials on computer selection, computer glossary, sources of home economics-related software, and brief descriptions of software. (YLB)

Addenda to the Illinois Vocational Home Economics Curriculum Guide

Illinois
State Board of
Education

Adult,
Vocational and
Technical Education



** CONTENT AND ACTIVITIES FOR TEACHING THE PRACTICAL APPLICATION OF SCIENCE AND MATHEMATICS IN HOME ECONOMICS

** ENTREPRENEURSHIP TRANSPARENCY MASTERS AND TEACHER MATERIALS

** FASHION/FABRIC COORDINATOR PROGRAM

** HIGH TOUCH IN A HIGH TECH SOCIETY

** QUALITY INDICATORS

** RECOMMENDATION OF THE STATE SUPERINTENDENT ON THE DEFINITION OF SCHOOLING AND THE STATE'S EXPECTATIONS FOR STUDENT LEARNING

** UNDERSTANDING OF AND EMPLOYMENT WITH THE ELDERLY: COMPANION TO THE AGED PROGRAM

** USE OF EDUCATIONAL COMPUTERS

This publication is available from:

CURRICULUM PUBLICATIONS CLEARINGHOUSE
Western Illinois University
Horrabin Hall 46
Macomb, IL 61455

800-322-3905 (toll free in Illinois)
309-298-1917 (from outside Illinois)

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

Content and Activities for Teaching the Practical Application of Science and Mathematics in Home Economics Classes

Prepared by
Dorothy Keenan
Southern Illinois University

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors: Charlotte P. Carr, Illinois State University
Mildred B. Griggs, University of Illinois

Consultants: Betty J. Church, Bradley University
Dorothy Keenan, Southern Illinois University
Barbara Owens, Eastern Illinois University
Marian Swisher, Western Illinois University

State Home Economics Consultants: Susan P. Burge, Illinois State Board of Education
Catherine A. Carter, Illinois State Board of Education

SCIENCE AND INSTRUCTION IN HOME ECONOMICS

Science is concerned with finding out how things work and knowing why things happen. It is intimately related to the activities of our daily life. Principles from such natural sciences as chemistry, physics, biology, physiology and bacteriology apply in their operation to all areas of home economics. Thus it is hard to imagine how this subject can be taught well without a study of these principles. Science teachers cannot be given the entire responsibility for developing the scientific literacy now being promoted as a major goal of excellence in education. Some learning experiences in home economics classrooms should be designed to give students practice in

recognizing problems or questions

observing accurately

questioning productively

formulating hypotheses

setting up experiments to test hypotheses

drawing properly qualified conclusions from experiments or demonstrations

apply conclusions to practical situations at home and on the job

It is hoped that these materials will help teachers to guide their students in doing some of these things more frequently and more adequately.

Prepared by
Dorothy Keenan

ACTIVITIES RELATED TO SCIENCE

Part I

A few activities in the guide already incorporate scientific principles. You might check those related to the following topics.

a. Stain removal A-2 p. 84

b. Laundry accidents A-7 p. 93

c. Energy conservation A-42 p. 141

d. Time and motion study A-60 p. 213

e. Solar heating A-62 p. 217

f. Genetic considerations A-87 p. 272

g. Types of fibers A-135 p. 417

h. Comparison of appliances for baking A-158 p. 491

i. Sanitary practices in food handling A-160 p. 493, A-182 p. 529

j. Task analysis and work simplification A-183 p. 530

Part II

Other Activities to Teach/Apply Principles of Science

1. Program Area: Food Preparation

   Topic: Osmosis

   Objective: Explain the process of osmosis, and give examples of times when this principle is applied when preparing food.

   Activity

   1. Prepare, or have students prepare, three jars with 1 cup of water in each
   2. Dissolve 3 tablespoons of salt in the first jar and 1 teaspoon of salt in the second jar. Leave the third jar without any salt.
   3. Cut three 1½ inch cubes of pared raw potato. Be sure that each is exactly the same size.
   4. Put one potato cube in each jar of water and note the time.
   5. After one hour or longer, remove the cubes and measure each again.
   6. Note that one cube will be a little larger than the original, one a little smaller, and one the same size. (A variation would be to use cubes of raw beet.)
   7. Provide science texts so that students can look up the principle of osmosis and explain the results.
   8. Have students use a cookbook to find recipes where this principle is used.

Note: Osmosis occurs when a strong solution (or juice) is separated from a weak solution by a thin semi permeable membrane. The weaker solution moves through the membrane to the stronger one.

Some examples of use of the principle

- Sugar on sliced fruit will "draw out" the fruit juice
- If you want plump prunes or firm fruit for compote, start the product cooking in plain water.
- Salt on meat to be browned for stew or soup will draw out the meat juices into the liquid.
- If you want the flavor to stay in the meat, add salt toward the end of the cooking period. (Cooking changes the nature of the cell-wall, so that osmosis does not occur in cooked foods)
- To crisp limp lettuce or celery, soak in plain water
- etc.

2. Program Area: Food Preparation

Topic: Starch Cookery

Objective: Identify three different ways to break down the walls of starch grains

Activity

1. Perform, or have a student perform, the following demonstration
   a. Place a cup of water in each of two jars.
   b. Place 1 teaspoon of sugar or salt in one jar and 1 teaspoon of flour in the other.
   c. Shake or stir with a spoon and note the appearance.
   d. Allow each jar to stand undisturbed for a few minutes.
   e. Explain, or have students use a science text to find the explanation.

*** Flour is mostly starch. Starch will not dissolve in liquid because there is a tough wall of plant cells around each grain. Starch molecules cannot get out, or water or enzymes get in, unless the wall is broken. In cooking, we use different techniques to soften or break up the wall.***

2. Have students try these different ways of softening or breaking down the cell walls of the starch grains.
   a. Soaking in liquid (Muesli)

      Put ¼ c. of oatmeal in a cereal bowl and cover with ½ c. of milk. Sprinkle with a mixture of 1 tsp. of sugar and ½ tsp. of cinnamon. Cover and allow to soak overnight in the refrigerator. Before serving, coarsely grate a pared and cored apple, and stir it into the cereal mixture.

   b. Heating Popcorn

      Prepare popcorn. If you do not have a corn popper, this may be done in any saucepan with a tight lid.

c. Heating in liquid Rice

Measure ½ c. of rice (white or brown) and add the amount of water suggested on the package. Bring to a boil and note the time. Reduce heat so that the rice boils gently. Using a slotted spoon, take out a tablespoon of the rice after 5 minutes, 10 minutes, and 15 minutes of boiling.

Rub a grain of the cooked rice between your fingers and note the general appearance of the cooked rice at the end of each time period.

Measure the amount of rice you have at the end.

Answer these queations:

What happened to the starch grains as the rice cooked?

Why is it important to note whether a recipe calls for cooked or uncooked rice?

For which foods would you cook rice each length of time?

Note: Here is a recipe for the Italian rice dish called

RISOTTO

Melt 1 tbsp of butter in a saucepan

Add 2 tbsps of chopped onions

1 tsp. of chopped parsley

Sauté gently until browned.

Add 1 c. of white rice and stir for 5 minutes.

Slowly pour in;

3 c. hot chicken broth or 3 c. of water in which 3 chicken bouillon cubes have been dissolved

Add 1 tsp. salt and

¼ tsp. pepper

Bring to a boil

Simmer until rice is tender

Add 1 c. of minced meat, fish or mushrooms or any desired combination of meat and vegetables (left-over may be used)

Add 3 tbsps of grated Parmesan or American cheese and stir lightly.

Note:

The broken cell walls of starchy foods are not digestible, that is, they cannot be acted on by our digestive enzymes. However, they are made up of cellulose, an essential part of any diet. The bulky cellulose, or fiber, helps keep food waste moving steadily through the large intestine, in preparation for elimination.

3. Program Area: Food Preparation

Topic: Starch Cookery

Objective: Identify two different ways to separate starch grains so that the cell walls can be broken down more easily by heat

Activity

1. Explain that digestive enzymes can get to food more easily when the food particles are separated in some way. When starch grains are separated, heat can reach them faster.
2. Have students try two ways of separating
   a. With Water Plain Crackers
      1. Set the oven at 450° F.
      2. Put ½ c. of flour and a shake of salt into a mixing bowl.
      3. Add a few drops of lemon juice and 1 tbsp. or more of water, just enough to form a paste about the consistency of modeling clay.
      4. Roll out to wafer thinness. Cut in shapes, dock with a fork and sprinkle with salt, if desired.
      5. Bake on ungreased cookie sheet for ten minutes. These crackers should dry out, but will not brown.
   b. With Water and Fat Pastry
      1. Set oven at 425° F
      2. Mix ½ c flour with a pinch of salt
      3. With a fork or a pastry blender, mix 1 tbsp. of butter or solid shortening into the flour until the mixture looks like bread crumbs.
      4. Sprinkle on enough cold water to hold the dough together in a ball.
      5. Roll out on floured board. Cut into strips or shapes. Sprinkle with grated cheese if desired.

6. Bake on ungreased cookie sheet for 10 minutes.

3. Ask students to compare the flavor, texture and appearance of the cracker and pastry and explain reasons for the differences.

4. Program Area: Food Preparation

Topic: Leavening Agents

Objective: Explain the way baking powder acts as a leavening agent to separate starch grains in flour mixtures

Activity

1. Perform, or have a student perform, the following demonstration
   a. Place ¼ c. of tap water in a jar and add ½ tsp. of B.P. Note reaction.
   b. When fizzing has ceased, place the jar in a pan of warm water and heat gently. Note reaction.
   c. Explain, or have students use a text to find the explanation

***Baking powder is a mixture of two substances. One is bicarbonate of soda. The other is an acid, or a substance which acts like an acid. A third substance, a starch, keeps the soda and the acid substance dry. When baking powder is moistened, a chemical reaction occurs which results in the production of carbon dioxide gas. The tiny bubbles of gas give the water a cloudy look and their movement produces the fizzing sound.

Most baking powders are "double-acting". This means that some of the gas is released when the powder is moistened, and more is released when a batter containing the powder is heated.

   d. Have student prepare <u>griddle cakes</u>
      1. Brush a griddle or heavy skillet with oil, if necessary. Or use a non-stick spray.

2. Measure and sift together into a mixing bowl

   1 c. of sifted flour

   2 tsps. of baking powder

   ½ tsp. of salt

3. Make a well in the center if the mixture.

4. In another bowl, beat one egg thoroughly and add

   1 tbsp. of melted butter or oil

   3/4 c. of milk

5. Preheat the skillet or griddle

6. Add the wet ingredients to the dry, all at once, and stir quickly until the ingredients are barely mixed. The batter should be lumpy.

7. Test the griddle by sprinkling a few drops of cold water on it. When the drops dance around and evaporate, it is ready.

8. Drop batter on the griddle by tablespoonfuls, leaving space between the cakes.

9. Cook until the tops are covered with gas bubbles which have not broken open.

10. Turn each cake carefully with a pancake turner and cook until the other side is nicely browned.

5. Program Area: Food Preparation

Topic: Starch Cookery

Objective: Describe three techniques for producing a smooth starch thickened mixture

Activity

1. Suggest a problem to students: "You would like to make a smooth, thick hot paste from flour and water. You have cold water and white flour. How many possible ways of combining these two ingredients can you think of?
2. Point out, if necessary, that certain factors can be varied, such as the amount of stirring, the intensity of the heat and the length of the cooking period.
3. Try to get enough "treatments" so that each class member or pair of class members can have one to try. Some suggestions are:
   a. Mix flour and water together and cook over high heat, stirring constantly
   b. Mix together and cook over high heat, without stirring
   c. Mix together and cook over low heat, stirring constantly.
   d. Mix together and cook over low heat, without stirring.
   e. Heat water to boiling first, then add flour while stirring, and cook, stirring constantly

f. Heat water to boiling first, then add flour

g. Mix flour with a little of the cold water and stir. Heat the rest of the water to boiling, add paste to it while stirring, and cook, stirring constantly.

h. Heat water to boiling, pour slowly over flour in a bowl and stir, but do not cook in the stove.

i. Heat water to boiling; pour slowly over flour in a saucepan and place on stove to cook, stirring.

There are many other possibilities,

4. Assign one of the "treatments" to each student or pair of students and tell each to copy the directions carefully and make sure all procedures are understood before beginning the experiment.
5. Direct all students to use the same proportions of flour and water (2 levels tbsps. of flour and 3/4 c. of water works well) and to keep track of the time required for thickening but to stop cooking at the end of ten minutes.
6. Have all saucepans brought to a central spot where the products can be observed.
7. Compare results and draw conclusions as to the procedures which will produce a smooth, thick mixture.

Note: Some tudents (or parents) may object to "wasting food" in this manner. Often this is a reflection of the attitude that a foods class is a place where one eats. The teacher should emphasize that foods classes are for learning the principles of food preparation and that eating (tasting food prepared) is included mainly as a check on the adequacy of the techniques used in preparing food products.

6. Program Area: Food Preparation

Topic: Starch Cookery

Objective: Practice three techniques for producing a smooth starch thickened mixture

Activity

(This may be used as a follow-up to Activity #5)

1. Summarize the three ways to make a smooth starch thickened mixture.

First Method

a. Mix the starchy substance (flour or cornstarch) with a little cold milk or water, just enough so that the mixture will pour easily.

b. Heat the liquid (milk, fruit juice, drippings from roasted meat, or broth from simmered meat).

c. Pour the starch mixture slowly into the hot liquid, stirring until the desired thickeness is reached.

Second Method

a. Mix the starchy substance thoroughly with the cold liquid to be thickened (milk, fruit juice or liquid broth) either by shaking in a covered jar, or by stirring the liquid into the starch, a little at a time. Be sure all lumps are gone.

b. Heat the starch-liquid mixture very slowly, stirring constantly until it thickens to the desired consistency.

Third Method

a. Melt the fat called for in the recipe (unless it is already liquid). Mix it with the flour or cornstarch

until a smooth paste is formed.

b. Add the cold liquid slowly and heat the mixture, stirring constantly. At first the lumps of flour and fat will float in the liquid, but when the sauce gets really hot, these lumps will disappear. As the starch walls break and the starch mixes with the liquids, the sauce will suddenly thicken. Keep on heating and stirring for another minute. Otherwise there will be a raw starch taste in the finished product.

2. Find, or have students find, recipes which use each of these methods for thickening with starch.
3. Organize a laboratory for the preparation of these dishes.
4. Have students compare the flavor, smoothness and appearance of the products and review the principles of starch cookery.

Note: In starch cookery, it is necessary to break down the cell walls of the starch grains, so that liquid can be absorbed by the grains. Only then will the mixture thicken. If you heat the starch before the walls are softened or break, you will end up with a lumpy mixture. Beating with a rotary beater, may help remove some lumps, but the mixture will not be as smooth as if you had used correct techniques.

7. Program Area: Food Preparation

Topic: Starch Cookery

Objective: Use knowledge of starch cookery principles to write a recipe for a milk pudding

Activities

(This may be used as a follow-up to Activity #5)

1. Ask students how they think recipe proportions, ingredients, and procedures are determined.

***Knowledge of basic properties of ingredients and results of certain procedures.

Experimentation to perfect the techniques and to standardize the amounts of the ingredients to be used***

2. Remind them of what they learned about the techniques to use in getting a smooth starch-thickened mixture.
3. Challenge them to use what they know to work out a recipe for vanilla pudding and give them additional information needed

Cornstarch is usually used to thicken puddings

Cornstarch has twice as much thickening power as flour.

The liquid for a pudding is milk or fruit juice.

A milk pudding needs some flavoring, which may be vanilla, and some sweetening.

Two tablespoons of sugar or honey will sweeten a cup of milk.

4. Organize a laboratory for the preparation of one or more of the pudding recipes developed by the class.
5. Evaluate the products and suggest any desired changes.
6. Assign students to look for milk pudding recipes in available cookbooks and decide how the products would be different from the pudding made by the class recipe.

Note: A recipe may be worked out by the class as a whole, or individuals or pairs may work on separate recipes.

Some students might try the recipe, using flour as a thickener, and see if they can decide why cornstarch is usually used in milk puddings.

8. Program Area: Food Preparation

Topic: Comparison of milk puddings

Objective: List different thickening agents which can be used to make puddings and compare products in terms of time needed for preparation, cost and nutritive value.

Activity

1. Organize a laboratory in which class members will prepare milk puddings using different thickening agents. The following are suggested
   a. Commercial instant-milk added
   b. Commercial requiring cooking-milk added
   c. Tapioca-using the pre-cooked tapioca product
   d. Custard-whole egg-baked
   e. Junket
   f. Milk pudding with flour as the thickener
   g. Milk pudding with cornstarch as the thickener
   h. Milk pudding with cornstarch and egg as the thickener
   i. Milk pudding using plain gelatin as the thickener
   All should be of the same flavor.
2. Prepare an evaluation sheet with space to record cost per serving, time to prepare, texture and flavor, nutritive value, and calories per serving.
3. Supervise the preparation of the puddings and arrange for them to chill overnight.
4. Conduct taste-testing and evaluation of the puddings in terms of the criteria listed on the score sheets.
5. Help students to generalize and draw concusions.

Note: Another laboratory to help students make comparisons of cost, flavor and time of preparation could be set up for cocoa. In this case the choices might be cocoa made with;

a. diluted evaporated milk

b. liquid skim milk

c. non-fat dry milk

d. low-fat (2%) milk

e. sweetened cocoa mix containing milk

f. sweetened cocoa mix without milk

g. chocolate syrup prepared at home

h. commercial chocolate syrup

i. chocolate milk from a dairy

9. Program Area: Food Preparation

Topic: Application of Science Principles to Food Preparation

Objective: When given a science principle, identify a procedure in foood preparation which is based on that principle

or

When given a procedure in food preparation, explain the scientific principle which supports the procedure.

Activity

1. As foods units are planned, identify science principles related to those units.
2. Use these principles as explanations for techniques to be followed in food preparation.
3. Make flash cards, or matching card games, which students can use to review and check their knowledge of the principles.
   * Specific directions for a game using two sets of information are given for Activity A-31 on p. 127 of the Curriculum Guide. The material which follows may also be used to make a three set card game.

	Principle	Application to Food Preparation	Indicated Behavior
1.	Light rays are refracted ("bent") when passing from one substance to another of different density.	Liquid in a glass measuring cup appears to vary in height when viewed from different angles.	When measuring liquid in a glass measuring cup, read the measurement at eye level.
2.	Gas expands when heated in the direction which offers the least resistance to its movement.	When heated, batter containing bubbles of gas (air, carbon dioxide) will rise in the pan.	Spread batter evenly so that it will rise ever
3.	Carbon dioxide gas is formed when an acid reacts with a base in the presence of a liquid.	Baking powder is a standardized mixture of a base, a material having acid properties and a buffer material, such as starch, which produces carbon dioxide when moistened.	Sift baking powder with other dry ingredient in order to insure a more even distribution of carbon dioxide gas when the batter is moistened.
4.	Some chemical changes can be influenced by the physical manipulation of a mixture.	Strands of gluten, with elastic properties, will develop when mixture of certain proportions of flour and liquid are stirred or kneaded.	Mix muffins only enough to moisten flour, not enough to develop gluten strands.
5.	The rate at which heat and gases travel through a substance is influenced by the density of the substance.	A large mass of thick batter offers resistance to a gas movement and also heats through slowly.	Allow a large mass of batter (as in a heavy loaf bread) to stand 20 to 30 minutes before baking to allow time for gas formation in the center.
6.	Heated air expands, moving away from the source of heat and toward cooler air of greater density.	Heated air circulates in an oven and free circulation is necessary to maintain an even temperature.	Do not fill an oven too full, allow pans to touch each other or the oven sides, or line it in any way which will interfere with air circulation.

	Principle	Application to Food Preparation	Indicated Behavior
7.	The volume of solids, liquids and gases increases when they are heated and decreases with cooling.	Flour mixtures which contain incorporated air or gas will increase in size when baked.	Fill baking tins or pans only from ½ to 2/3 full of batter before baking.

Some other principles which may be used for this exercise:

1. Microorganisms may be killed or their activities retarded by use of sufficient heat, cold, or certain chemicals.
2. Enzyme action causes ripening of foods and, if not checked, eventual spoilage and decay.
3. Unless subjected to extremely high temperatures, bacteria having spore-forming capabilities can live under unfavorable conditions for an indefinite period.
4. The volume is increased as a substance changes from a solid to a liquid or a liquid to a gas and decreased as it changes in the opposite direction. But water is an exception to this rule when changing from the liquid to the frozen state and vice versa.
5. Temperature is increased when steam is held under pressure.
6. The higher the temperature of a liquid, the faster it evaporates.
7. Substances of unlike densities tend to diffuse until they are of equal concentration.
8. Food must be changed to a liquid state before it can pass through the intestinal wall and be used by the body.
9. Proteins are coagulated by heat.
10. Pigments in foods are modified by heat, light and certain chemical environments.

10. Program Area: Food Preparation

Topic: The Effect of Acid and Sugar on the Thickness of Starch Mixtures.

Objective: Explain why larger proportions of thickener may be needed in mixtures which contain acid ingredients such as lemon juice, or which contain a high proportion of sugar.

Activity: Perform or arrange for students to perform the following experiment.

I. a. In a small saucepan, mix 1 Tbsp. of cornstarch and 2 Tbsps. of cold water to a smooth paste.

b. Add 3/4 c. cold water.

c. Bring to a boil, stirring constantly.

d. Continue to stir and cook over moderate heat for three minutes. Set aside.

II. Repeat I but use two tablespoons lemon juice instead of the two tablespoons of cold water.

III. a. In a small saucepan, mix one tbsp. cornstarch with one tbsp. of sugar.

b. Add 2 tbsps. of cold water and mix to a smooth paste.

c. Add 3/4 c. cold water and continue as in "I".

IV. Proceed as in III, but use 4 tbsps. of sugar instead of 1 tbsp.

-Guide a comparison of the results of each procedure in terms of thickness, appearance and texture.

-Explain, or have students use text materials to explain the results.

-Make an application of the results to food preparation. For example, to making lemon pie filling.

11. Program Area: Food Preparation

Topic: The Discoloration of Raw Fruits

Objective: Determine how to prevent the discoloration of raw fruit.

Activity

1. Prepare, or arrange for students to prepare the following demonstration:

   Cut an apple in six sections. It need not be pared. Place each section in a separate shallow dish and treat as follows:

   a. Leave untreated
   b. Cover with tap water.
   c. Cover with distilled water
   d. Dip in lemon juice for 5 seconds, then in the dish.
   e. Dip in pineapple juice for 5 seconds, then replace in the dish.
   f. Treat with the commerical substance, Fruit Fresh, according to the directions on the container.

2. Expose all dishes for one-half hour, or an hour, if possible.
3. Compare the appearance of the other slices to the untreated slice.
4. Conduct a discussion of the results, including an explanation of the effect of air (oxygen) on pigment in fruit and how this knowledge can be used in the preparation of food.

Note: This demonstration can be repeated using banana slices. Ascorbic acid tablets may also be dissolved in a little water and used as one of the treatments.

Some other ideas for demonstrations which can be set up in the same way as activities 10 and 11.

1. Objective:

   Determine the effect of browning on the thickening power of starch.

   Procedure:

   a. Place two tbsp. of flour in a small heavy skillet and heat until brown, stirring constantly. Cool. Slowly stir in one cup of cold water, and heat to boiling, stirring constantly.
   b. Compare the thickness and appearance of this mixture with a mixture of two tbsps. of un-browned flour placed in one cup of water and heated in the same way.

2. Objective:

   Determine the effect of different amounts of sugar when cooking different varieties of apples.

   Procedure:

   a. Pare an apple and cut into sixths
   b. Place two pieces in each of three small saucepans containing solutions as follows:
      1. 1/4 c. water
      2. 1/4 c. water + 1 tbsp. sugar
      3. 1/4 c. water + 3 tbsps. sugar
   c. Simmer gently until apple slices are tender.
   d. Note differences in shape, texture, translucency, flavor of the fruit and flavor of the juice.

   Repeat with different varieties of apples. (Jonothan, Winesap and Delicious are suggested.)

3. Objective:

Determine the effect of acid and alkaline media when cooking red cabbage.

Procedure:

a. Shred approximately 1 c. of red cabbage.

b. Place 1/2 c. with 1/4 c. of boiling water in one saucepan.

c. Place 1/2 c. in another saucepan adding 1 tsp. of vinegar to the 1/4 c. boiling water.

d. Boil until tender

e. Note differences in appearance and flavor

f. Investigate the chemical reactions which account for the results.

4. Objective:

Determine the optimum amount of mixing for muffins.

Procedure:

a. Prepare a standard muffin recipe up to the point where the wet and dry ingredients are just combined.

b. Take out batter for two muffins after mixing

1) 5 strokes

2) 10 strokes

3) 15 strokes

4) 25 strokes

5) 50 strokes

6) 100 strokes

c. Bake the muffins and turn out on to labeled paper towels or napkins. With a sharp knife, cut one of each pair in half.

d. Study the differences and decide which amount of mixing gave optimum results.

e. Determine the reason for the results.

5. Cook a green vegetable such as spinach
   a. for 3-5 minutes (no liquid added)
   b. for 20 minutes (with extra liquid, if necessary)
   c. with vinegar added during cooking
   d. with 1/2 tsp. baking soda added during cooking

6. Note the effect on the texture of a plain cake when hydrogenated shortening is
   a. melted
   b. cut into the flour
   c. creamed with the sugar in the recipe

7. Soak two pans which have held flour mixtures, one in cool and one in hot water. Note and explain the differences in ease of cleaning.

8. Bake cookies from the same batch in the same oven, part on a dark cookie sheet and part on a shiny cookie sheet. Note and explain differences in the degree of browning.

9. Make a comparison of eggs of different grades. "Fry", hard cook and poach an egg of each grade and note the differences.

10. Compare different brands of non-fat dry milk as to time needed for reconstitution, ease of reconstitution, amount of foam, flavor and cost. Experiment also to find the technique for reconstitution which gives the most satisfactory results. Compare the cost and flavor of the reconstituted product to liquid skim milk.

11. Compare flavor, texture, color and time needed to tenderize vegetables such as carrots or green beans when cooked in large or small amounts of water, in larger or smaller pieces and by simmering or rapid boiling.

12. Cut two small pieces of meat of the same weight from the same piece of steak. Pan-broil or oven-broil both, one at high temperature, and one at low.

After any of the above demonstrations are concluded, help students to explore

1. the explanation for the results observed
2. the way the knowledge gained can be applied to the preparation of foods of good quality.

12. Program Area: Food Preparation

Topic: Boiling Water

Objective: Describe the stages in boiling water and factors which influence changes in these stages.

Procedure:

1. Measure, or have students measure, one or two cups of tap water and place in a saucepan (glass, if possible)
2. Place the saucepan on a range unit and turn the unit on at the top setting.
3. Direct students to watch closely and make notes of their observations.
4. After the water boils, compare student observations and make a board listing of the stages. (A second observation may be required.)
5. Encourage students to formulate questions which the boiling process suggests, such as:

   What are the bubbles?

   Why do hot things steam?

   What is the steam?

   How hot is boiling water?

   Do you have to heat water to boil it?

   At what stage is water <u>really</u> boiling?
6. Provide materials to help students answer their questions.
7. Provide for further exploration and experimentation with boiling water in relation to food preparation. For example:
   a. determining the time it takes to bring one cup water to a full rolling boil at different burner settings, or in saucepans of different sizes and materials.
   b. determing how the amount of water in the pan and the depth

of the water will influence the time required to bring it to a boil.

c. Determine how added substances, such as sugar or salt, influence the time it takes water to boil and, if a thermometer is available, how the temperature of boiling water changes with these additions.

Notes:

Stages on the way to boiling

1. Water clear and quiet
2. "Current" lines visible
3. Tiny bubbles on bottom of pan
4. Some bubbles break loose and rise to surface of water where they disappear
5. Bubbles increase in size-some which rise move around just under the surface or cluster together before disappearing
6. Bubbles rise rapidly, break in the water. Some remain in water-form and break so as to appear to be dancing
7. Water rolls at surface in one or two spots
8. Water rolls over entire surface

Explanation of boiling

1. Water consists of molecules which are in a constant state of motion. As molecules strike the under surface of the top of the liquid, they may escape from this surface, or evaporate, accumulating as vapor in the air over the water.
2. Heat produces greater agitation of molecules. As greater pressure is built up within the water, evaporation is speeded up and finally visible clounds of vapor form (steam).

3. When the pressure within the fluid is equal to, or slightly greater than, the external atmospheric pressure acting on it, the water boils. Evaporation takes place at a maximum rate.
4. As liquid vaporizes, it increases in volume. External pressure will resist such volume expansion.

   Boiling cannot occur until the internal pressure in the fluid has been raised by an increse in temperature to a point at which it can overcome the external pressure.
5. As the external pressure acting upon a fluid is diminished, the boiling point is lowered. By reducing the pressure over it, water can be made to boil even at room temperature.

Another activity with boiling water:

1. Measure 1 cup of water.
2. Boil it vigorously in a saucepan for 5 minutes.
3. Allow the water to cool slightly, then measure it again.
4. Note the change in amount.

   If you kept on heating the water, how long would it take for all of it to disappear?

13. Program Area: Foods

Topic: Physiology of Taste

Objective: Name the four different tastes which your taste buds can detect and tell where the taste buds for each are located.

Activity

Students might be asked to do this as a home assignment or an individual activity in class.

1. Obtain a clean paint brush, and also some powdered sugar, lemon juice, salt and vanilla. The salt may be mixed with a little water if desired.
2. Dry your tongue with paper tissue or a handkerchief.
3. Use the brush to put a little powered sugar on the tip of your tongue. Note how quickly saliva forms. (The sugar reaches the taste buds and a message goes to the sides of the tongue where saliva glands are.)
4. Rinse your mouth with water. Now try each of the four substances above on different parts of your tongue. (Rinse your mouth between each trial).
5. Make a diagram of your tongue showing where you can taste each flavor.

Note: The taste buds for sweet and salt flavors are around the front part of the tongue. Those for bitter are at the back and sour at the sides.

14. Program Area: Foods

Topic: Taste and Smell

Objective: Explain the difference between tastes and smells, and why the smell of food is so important to the person eating.

Activity

(Students may also do this as a home activity or as an individual assignment in class).

1. Pare a small orange and slice it into a jar. Cover the jar.
2. Do the same with an apple and an onion placed in two separate jars.
3. Pour out a little spice, such as cinnamon or ginger, on a paper towel or napkin.
4. Hold your nose, and uncover one jar at a time.(You may need help to do this) Put a small piece of the food in your mouth and chew. Note the taste.
5. Rinse your mouth. Then chew another small piece of each food with your nose open. Note differences in taste.
6. Use the paint brush (See Activity 13) to try the spice on your tongue in the same way, first with your nose closed and then with it open.
7. Explain the following in terms of your results:
   a. When you have a head cold, food usually doesn't taste very good.
   b. Cutting an onion under water, will keep your eyes from tearing.
   c. Ground coffee is packed in an air-tight (vacuum) container.

Note: All flavors except sweet, sour, bitter, and salt, are smelled, not tasted. Smells come from a gas or vapor, and are released when tissues are cut. Some evaporate rapidly, others more slowly. The nerves of smell are not on the tongue but inside the nose (at the top near the bridge).

15. Program Area: Foods

Topic: Measurement

Objective: Explain why liquids are best measured in glass measuring cups with lips and solids in straight-edged metal or plastic cups.

Activity

1. Collect both types of measuring cups, flour, a spatula or straight edged knife and a teaspoon.
2. Direct a student to do the following:
   a. Fill the straight edged cup over the top with flour and level off with the straight edge.
   b. Fill the glass measuring cup with flour and smooth with the teaspoon to get as accurate a level cup as possible.
   c. Empty the flour from both cups.
   d. Fill the straight-edged cup to the top with water and carry it from one unit to another.
   e. Fill the glass measuring cup to the mark indicating 1 cup and carry it from one unit to the other.
3. Ask students the following questions;
   a. Which type of cup was easier to fill with flour?
   b. Which type of cup would give you a more exact measurement of flour?
   c. Which type of cup would be more practical for measuring liquids?
   d. Why should we have both types of measuring cups for use when cooking?

16. Program Area: Food Preparation

Topic: Measurement

Objective: Explain why brown sugar should be firmly packed when measuring

Activity

1. Collect brown sugar, a ½ c. metal or plastic measuring cup, a tablespoon or wooden spoon, a medium mesh strainer or a colander, an accurate scale and three paper towels. Label one towel "A", one "B" and one "C".
2. Direct a student, or students, to do the following:
   a. Spoon the brown sugar lightly into the half cup measure, and level off as much as possible without packing. Empty the sugar in the cup carefully on to the paper towel marked "A".
   b. Spoon brown sugar into the ½ cup measure again, but this time pack it firmly and level off the top to be as even as possible.
      Empty the sugar out on paper towel "B" (It should hold the shape of the cup.)
   c. Spoon brown sugar into the colander or strainer, and rub it through using the back of the tablespoon or a wooden spoon. Pile the strained sugar lightly into the measuring cup and level off the top without packing. Place this sugar on paper towel "C".
   d. Leave each of the brown sugar samples on its labeled paper towel, weigh each separately, and record the weights.
3. Ask students the following questions:
   a. Which of the samples is heaviest and which lightest?
   b. Is it easy to "sift" brown sugar?

c. Why do recipe directions specify that brown sugar should be "firmly packed" when measuring?

d. Why isn't it necessary to "pack" white sugar?

Note: Brown sugar has more moisture than white granulated sugar and more of a tendency to lump. Packing helps to standarize the amount to be used in a product. When measuring by tablespoon, brown sugar should also be pressed into the spoon with a knife or spatula. To prevent breaking of a measuring spoon, support the bowl with the fore finger of your left hand,

17. Program Area: Food Preparation

Topic: Measurement

Objective: Explain when accurate measurements are important and when they are not so important and why.

Activity

1. Collect flour, both white and whole wheat, a 1 c. metal or plastic measuring cup, a flour sifter and a plain sieve, measuring spoons, a small spatula and paper towels, and an accurate scale, if available. If using the scale, weigh the measuring cup and record the weight.
2. Direct a student, or students, to do the following;
   a. Spoon flour directly into the cup from the sack or canister and level off the top with the spatula.
   b. Weigh the cup with the flour and record the weight.
   c. Sift the flour from the cup on to a paper towel.
   d. Spoon the sifted flour back into the cup and level off as before.
   e. Weigh the cup with the sifted flour and record the weight.
   f. Using the measuring spoons, determine the amount of flour left over.
   g. Repeat steps"a"through "f" using the sieve instead of the flour sifter.
   h. Repeat steps "a" through "f" using whole wheat flour.
3. Ask students the following questions;
   a. What was the difference between the sifted and the unsifted flour in weight? In volume?
   b. Was there any difference when the sieve was used instead of the sifter?

c. What happened when the whole wheat flour was sifted?

d. If your recipe called for 2 cups of sifted flour, how much more would you be adding if you didn't sift it? Could this make a difference in a baked product?

e. Suppose you find an old cookbook and try to copy the recipes using modern accurate measurements. What is likely to happen? Why?

f. What is the advantage of recipes with standardized measurements? (Results will be more likely to be the same from one cook to another).

g. When are standard, accurate measurements very important for good results?

h. When are accurate measurements less important?

(Tossed salads,
cereal snack mixes
sweetened drinks (do to taste)
seasoning)

18. Program Area: Food Preparation

Topic: Formation of an Egg White Foam

Objective: Explain why there should be no fat involved when beating egg whites to a stiff foam. Other factors - acid, temperature.

Activity:

1. Collect 3 egg whites and 1 whole egg, 4 small mixing bowls, a custard cup, oil, butter or margarine and one or more rotary beaters.
2. Direct a student or students, to do the following;
   a. Put one egg white into a clean bowl and beat with rotary beater until it is stiff and snowy white. Record the time. Rinse egg beater.
   b. Grease the second bowl lightly with the butter or margarine. Put 1 egg white into it and beat for the same length of the time as you did in "a". Observe results. Then continue beating for the same amount of time. Remove beater, wash in hot, soapy water and dry carefully before using for "c".
   c. Put 1 egg white in the third bowl and add a drop or two or cooking oil; proceed as in "b", washing the beater at the end of the beating.
   d. Break the whole egg and separate the white and yolk, placing the white in the fourth bowl and the yolk in the custard cup. Put a drop or two of the egg yolk (break if necessary) into the bowl with the egg white and proceed as in "b" and "c".
3. Ask students the following questions
   a. What differences did you observe?
   b. What seemed to make the difference in the amount and

appearance of the foam?

c. Why do you suppose fat interferes with the foam formation? (Use references to check on this point).

d. What skill do you need to develop when separating eggs?

e. What foods require eggs to be separated? Why?

19. Program Area: Food Preparation

Topic: Enzymatic action on gelatin

Objective: Explain why fresh pineapple cannot be used in gelatin mixture.

Activity

1. Collect 1 pkg. of unflavored gelatin, sugar, apple or orange juice and lemon juice, a medium size bowl, tablespoon for mixing, measuring tablespoon, measuring cup, two molds or small bowls, small ripe banana, ripe pear, canned crushed pineapple and raw pineapple (may use thawed frozen pineapple)
2. Prepare a gelatin base as directed on the unflavored gelatin package. Divide into two equal parts in the molds or small bowls. Do this enough ahead of the class time so that the mixture will be partially set (syrupy).
3. At the beginning of class add, or have students add,
   a. to bowl #1
      ¼c. sliced banana
      ¼c. diced raw pear
      ¼c. shredded raw (or frozen thawed) pineapple
   b. to bowl #2
      ¼c. sliced banana
      ¼c. diced raw pear
      ¼c. crushed canned pineapple
4. Place bowls/molds in freezer compartment for faster chilling or allow to set in the refigerator until the next day.
5. Have students examine the content of the bowls/molds and ask them the following questions;

a. Are the mixtures equally stiff?

b. Which one is thinner?

c. What ingredient was different? How?

d. Why would cooking change pineapple when freezing does not?

6. Provide reference materials so that students can find out about enzymes and about the enzyme in pineapple which interferes with gel formation.

Note: The same results will be obtained if flavored gelatin dessert is used as a base.

20. Program Area: Food Preparation

Topic: Yeast

Objective: Explain the conditions necessary for the growth of yeast.

Activity

1. Collect 3 packages of compressed yeast and 3 packages of dry yeast, six glass measuring cups or custard cups of the same size, water and a small saucepan for heating water, ice or ice cubes, and a bowl containing water and extra measuring cup if using custard cups.
2. Set each cup on a paper towel or napkin and label C-I, C-L, C-B, D-I, D-L, and D-B.
3. Direct a student, or students to do the following:
   a. Crumble a cake of compressed yeast in each of the cups marked c and empty an envelope of the dry yeast in each of the cups marked D.
   b. Add ¼c. of the ice water to the two cups marked I. Record time.
   c. Heat water in the saucepan to luckwarm (test on wrist) and add ¼c. to the two cups marked L. Record time.
   d. Continue heating water in the saucepan until it boils. Then add ¼c. of the boiling water to the two cups marked B. Record time.
   e. Watch for the first signs of life or activity in each cup. At the end of 15 minutes, compare the height of the mixture in each cup.
4. Ask the following questions;
   a. Which cup showed activity sooner?
   b. Which cup showed activity last?

c. Was there any cup in which there was no activity?

d. What must you be careful about when you bake with yeast?

Note; Yeast is made up of tiny plants which use sugar (or starch which they turn to sugar) for food and produce gas as a result of their digestive process. Mixing or kneading a yeast dough distributes the gas throughout the flour framework. If the dough is left to rise at the correct temperature (about 85^{o} F), it will double in size in about one hour's time. Baking drives off the gas and hardens the dough framework.

Other Ideas for Learning Experiences to Help Students Relate Science Principles to Different Areas of Home Economics

1. Investigate the substances found in cosmestics, toothpaste etc. Tell the purpose of each ingredient and explain how it works. Report on possible harmful effects of different ingredients.
2. Look up the physiological processes which produce body odors. Find out how deodorants and anti-perspirants act on the body to reduce these odors. Find out the chemical difference between a deodorant and an anti-perspirant.
3. Make, or have a pharmacist make for you, an anti-perspirant (3 Tbsps of alum (aluminum/ammonium sulfate) in 1 pt. of water with rose water or some other type of material to perfume the mixture) of basic ingredients. Try out and compare to the results from a commerical preparation. This can also be done for such products as face cream, hand lotion and tooth paste. A reference with ideas is The Formula Book 3 by Edward High and Star Research Associates published by Sheed, Andrews and McMeel, Inc.
4. Explain the origin of color according to the principles of light absorption and reflection. Relate the texture and composition of surfaces to variation in the appearance of the color of these surfaces.
5. Describe the composition and manufacturing methods of various man-made and synthetic fibers. Explain how the properties of these fibers result from their composition and the processes used in their construction.
6. Investigate the chemical and the processes used to make fabrics stain-resistant, water repellent, shrink resistant or flame-retardant. Determine if any of these processes are thought to have harmful effects. Find out what government agencies supervise the construction and marketing of fabrics with these finishes, Survey products sold for use at home which are claimed to produce effects similar to those obtained by commerical treatment. Try some out.

7. Use reference materials to find the difference in the composition of soaps and detergents. Explain how each works in removing different types of soil from clothing. Set up an experiment to determine differences in use with the water in the community.
8. Use reference materials to find the difference in the composition of chlorine and oxygen type bleaches. Explain how each works to remove stains.
9. Practice removing stains with various types of treatments. Explain the origin of different stains in terms of the chemistry of the staining product and the fiber composition and construction of the fabric or other material which was stained.
10. Explain the rationale behind various directions on care labels in terms of the chemical composition of fibers, dyes, fabric finishes and cleansing agents.
11. Using tweezers or tongs and a lighted candle, burn small pieces of fabric composed of different fibers. Note variations in the way different fabrics burn. Then find the explanation for this in relation to fiber composition and yarn or fabric construction.
12. Test the effect of ironing at different settings on small pieces of fabric of different fiber content and construction. Try low, medium, hot and hottest settings. Explain results in terms of the characteristics of natural, man made, and synthetic fibers/filaments.
13. Find out what happens to the cutting edge when knives, scissors, etc. are sharpened and what practices cause edges to become dull.
14. Define electricity and find out how it is generated. Trace its path from the source to an appliance in your home. Explain practices to follow in order to eliminate the possibility of electrical shock in the home or on the job.

15. Some states have passed laws banning phosphates in detergents. Find out the reasoning behind these laws.
16. Static electricity is an annoying problem with many man-made fabrics. Find out what causes this phenomenon and what kind of treatment can be used to reduce it.
17. Explain the nature of the chemical solutions used in dry-cleaning and how the process works. Describe differences between coin operated dry cleaning and regular professional dry cleaning.
18. Identify the science principles which are a basis for the development of solar energy. Compare houses designed with active and passive solar heating construction. Make a simple heat collector such as a box or a jar of water and place it in the sun to illustrate how solar energy is produced.
19. Trace what happens to several different foods as they pass through the digestive tract of the body, describing the enzymes which act on each of them, and the end products which result.
20. Take two eggs from the same carton. Hard cook one by placing it in 2 cups of water in a small saucepan, heating the water and boiling vigorously for 10 minutes. Cook the other by taking the pan from the source of heat as soon as the water begins to boil, covering the pan and allowing it to stand for 20 minutes. Remove the shell from each egg and slice across the hard-cooked part. Compare the cooked whites by feeling and tasting. Explain in terms of the reaction of protein to heat.

    Note: This demonstration may also be done by poaching two eggs, one in water which is boiling vigorously and one in water which is merely simmering.
21. Collect statements about food and nutrition from newspapers or popular magazines. Using what you have learned about nutrition, classify the

statement as "Generally true", "Partially true" and "Not true/Misleading". Check your findings with your teacher.

22. Investigate what is meant by traits and genes in relation to human heredity. Distinguish between dominant and recessive genes. Learn how to draw a family pedigree to show inheritance of a trait caused by a dominant gene.
23. Explain how the x and y chromosomes determine the sex of a child. Draw a pedigree which shows the way a sex-linked trait is inherited.
24. Distinguish between a suspension and an emulsion. Illustrate each by preparing a French-type salad dressing and mayonnaise or a cooked salad dressing. Explain what happened in terms of chemical and physical change during preparation of the dressings.
25. List ten items in your home which are made of plastic. After consulting references, try to determine whether each is made from a thermoplastic or a thermosetting plastic. Explain the properties of the two types of plastics which make them suitable for specific uses. See if you can find disadvantages which plastic has.
26. Collect samples of fabrics, each 6 inches square. Use nylon, polyester, acrylic, cotton, wood and a cotton-polyester blend. Label each sample (A,B,C,D,E,F) with a laundry marker and place each in a baby food jar. Then do the following:
    1. Fill the first jar with water. Allow the fabric to soak for 3 minutes. Remove the fabric and smooth it out on a paper towel. Dry with a hair dryer and record how long drying takes.
    2. Repeat with the other 5 samples.
    3. Wad each sample into a ball, and hold it in your hand for 1 minute. Open the fabric out and record appearance.
    4. Try to remove a thread from the side of each sample and record how hard this is to do.

5. Try to tear each sample and record your results.
6. Cut a 2 inch square from each sample and place in the baby food jars again. Pour out the water and cover the fabric with chlorine bleach. Let the jars stand overnight.
7. The next day, rinse each of the samples well in clear water and record any changes from the bleach.

Summarize the results of your tests.

a. What differences were evident between the synthetic and the natural fibers?

b. What do you think might be some advantages of blended fibers over pure fibers?

27. Explain why water needs to be purified for drinking and cooking. Find out how the water treatment system works in your community. Investigate home filters/ purifiers which are attached to faucets or built into the water line serving a house and tell how they work. Describe the process of distilling water and give examples of times when distilled water might be wanted in a household or in the work place.
28. Try making your own soap. Perhaps there is someone in your community who does this as a hobby or to save money.
29. Tell how hard water is different from soft water. Explain what happens when hard water is boiled or combined with soap, and also how hard water is softened chemically either at a community water treatment plant or in a home water softener. Tell the main disadvantage of softened water.
30. Explain the principle of the thermometer and the thermostat and the techniques necessary to get accurate readings on thermometers. Investigate the various kinds of thermometers which may be purchased for used by a person who cooks.
31. Define calorie. Explain the use of a calorimeter to determine the caloric value of foods.
32. Define the three ways in which heat is transferred from one place or object to another: conduction, convection and radiation. Check in your home to find

places or situations where each form of heat transfer is used.

33. Define insulation and name three different kinds used in homes, relating the use of each to the form of heat transfer which it prevents. Locate places in the home where insulation is used, from the small items, such as a vacuum bottle, to the large space, such as an attic.
34. Explain the different ways in which a house can be heated and find out which is most used in your community. Also explain the different ways in which a house can be cooled.
35. Explain how a refrigerator or a freezer works, and why some form of refrigeration is necessary in homes today.

Other Ideas for Learning Experiences to Help Students Relate Mathematics Principles to Different Areas of Home Economics

Many students have difficulty with mathematics. Moreover, test results indicate that even those who do well in computation have trouble with "story problems". Deciding which process to use and carrying out that process when one does not have a neat column of numbers already given, is difficult for many. Problems which require two or three steps for solution may not even be attempted. Yet in real life, this is the way questions related to figures usually present themselves. Modern pocket calculators may do the computations quickly but they do not tell which process to use to answer a certain question or in which order to perform the steps.

Most areas of home economics require the use of mathematical concepts. Some skills which we might expect students to practice include:

*reading, writing and counting numbers or objects

*reading and writing whole numbers, fractions, decimals and money values

*adding, subtracting, multiplying and dividing whole numbers, fractions, decimals and money values

*ordering or ranking whole numbers, fractions, decimals and money values

*reading numbers or symbols from time, weight, distance and volume measuring scales

*using appropriate equipment to measure time, temperature, distance, volume/capacity and mass/weight

*determining the information needed to solve a problem which involves mathematics

*choosing appropriate processes and solving problems involving time, money or numbers

*converting one measure to another when necessary and also increasing or decreasing measures

*predicting or estimating the result of a mathematical procedure

*solving real-life problems involving percentage, change making and comparison shopping

*reading and interpreting graphs, tables, schedules, and maps

The following suggestions will give some ideas for applying mathematical concepts and practicing mathematical operations related to the various subject areas in home economics.

Activities Related to Math

Part I

Some Activities Already Described in the Guide Which Use Mathematical Concepts.

a. Measurement equivalents (metric and standard)	A-31 p. 127
b. Comparison shopping (foods)	A-154 p. 484 A-155 p. 486
c. Cost and efficiency of small equipment	A-159 p. 492
d. Cost of different forms of a basic food product	A-171 p. 515
e. Cost of nutrients in different foods	A-172 p. 516
f. Low and high cost foods	A-173 p. 517 A-174 p. 518
g. Economics of food coupons	A-176 p. 520
h. Comparison of food forms and prices	A-178 p. 523-525
i. Recipe conversions	A-186 p.535
j. Comparative costs of window coverings	A-193 p. 559

From FHA-HERO activities
Costs of ways of preserving food #5 p. 466

Part II

Other Activities Related to Mathematical Concepts and Operations

1. Measure and mark off a 1 inch square in several different fabric swatches. Using a magnifying glass if necessary, count the threads in each directions. Compare the characteristics and appearance of fabrics with different thread counts.
2. Mark a 3 inch square in a piece of fabric by basting colored thread along the grain lines. Then wash the fabric several times in a regular wash cycle (A student may volunteer to do this at home, if there is no washer available at school. Iron the piece carefully, straightening out the thread markings. Then measure, and compute the amount of shrinkage. Multiply by 12 to estimate the amount of shrinkage per yard of this fabric. Determine the percent of shrinkage.
3. Measure the height of each student in the class. Record the heights and plot them on a line graph and a bar graph. Make statements of conclusions which can be drawn by studying the graphs.
4. Translate your body measurements into metric units. Or do this for other objects in the classroom.
5. Use a tape measure to take and record the body measurements of one or more persons in the class.
6. Obtain various pieces of fabric and estimate the length of each. Write down your estimate. Then measure the exact length and record that. Practice this until your estimates are very close to the actual measurements.
7. Play a game with a classmate. Draw a line on a piece of paper. Have your partner estimate the length of the line and write down the estimate. Then you estimate the length of a line which your partner draws. Measure both lines. Subtract to find whose estimate came closest.

This person is the winner of the round. Play eleven rounds to find the winner of the game.

You might also play this game with metric measures or with objects in the classroom. Another variation, if you have a scale, is to estimate weights of small objects.

8. Make a seam gauge out of a piece of cardboard such as that found in packages of bias tape. Mark distances of 5/8", 1", 1½", 2" or any desired by cutting out triangular spaces as shown. Label and use for marking seam allowances and hems. It costs nothing and is easier to use than a tape measure or foot ruler.

9. Using yard or meter sticks and tape measures, determine accurate measurements of floors, walls or windows in the classroom. Then use mail order catalogs to determine the different kinds of windows, wall and floor coverings available. Calculate the amount needed and make price comparisons.
10. Respond to incomplete problems, by determining what other information is needed to solve the problem

Examples:

A. Bill has $200 in his savings account. About how much interest will he receive this year, given the current rate on passbook accounts?

B. Al had to make a down payment of 15% on a bicycle he was buying. How much was his down payment?

C. Janet paid a 6% sales tax on a radio. About how much was the tax?

D. Three hundred students attended the FHA-HERO Leadership conference. What percent of the state membetship was there?

E. John bought a coat on sale. The sale announcement said, "Twenty per off on all coats and suits!" About how much did John have to pay for his coat?

F. Sue read 50% of her Adult Living assignment. How many pages were in the assignment?

After identifying the missing information, supply it and solve the problems.

Make up similar problems for other students to solve.

You may want to select teams and set up this activity in the form of a game or contest.

11. Make a list of garments to be added to a wardrobe. Find a price for each garment and determine the total cost of the new clothing.
12. Given the cost of fabric, pattern and notions, find the cost of a home-constructed garment. Estimate the time it would take to construct the garment. Determine the cost if a minimum wage were paid to the maker.
13. Select a particular type of clothing, such as jeans or a sweater, determine the range of prices at which this kind of garment may be purchased locally and figure the difference in cost between the lowest and highest price garment.
14. Given the cost of a garment and the interest rate for purchases made on a credit card, determine the interest cost of the garment if bought on credit. Cumpute the difference in cost between the cash and the credit purchase.
15. Given the regular price and the sale price of the same garment, determine the cash savings if it is bought on sale.
16. Use the information on a pattern envelope to determine the number of yards of fabric needed to make the garment in each of the different sizes available. Use the price per yard of a given fabric and compute the cost of the fabric for each of the sizes.

17. Try out the accuracy of your visual judgment. Without measuring, divide a space or a line into five equal segments. Then check to see how close you came. Or try folding a sheet or a strip of paper in thirds, in fifths, or in tenths. Explain why it is easier to divide in fourths, eighths and sixteenths.
18. Practice making change, with play money, if desired. Work with a partner and take turns deciding on the amount of the bill and the amount of money tendered, and calculating the change. Make an estimate first and write it down.
19. Learn three different ways to estimate percent

    Problem: What is 8% of 1295?

    Method I Meaning of Percent

    a. 8% means 8 for every 100

    b. 1295 is almost 13 100's (1300)

    c. 8% is 8 x 13 or $104 (estimated)

    Method II One Percent Method

    a. The total (100%) is about 1300

    b. 1% of 1300 is 13

    c. 8% is 8 x 13 or $104 (estimated)

    Method III Fraction Method

    a. 8% is 8/100 or approximately 1/12

    b. $1295 is almost $1300

    c. 1/12 of $1300 is about $108 (estimated)

    Use one of the methods to find

    a. a 10% tip if your bill at a restaurant is $5.89.

    b. a 12% down payment on a new stereo which costs $399.

    c. the amount you would save on a color TV which usually

cost $395.95, but is on sale this month for 15% off.

d. the amount to put in the bank if you save 75% of the $79 you earned in July.

e. the amount of interest you would have to pay on a loan of $500 if the loan company charges 3% interest a month

1) if you pay the loan back within a month?

2) if you take 4 months to pay back the loan?

Choose a partner and take turns making problems like these and solving them. Check your work by multiplying to get the exact figure. Explain the advantage of being able to make such estimates.

* Adapted from-Mathematics in Vocational Education from The Division of Vocational Ed-Oregon Department of Education (available from Curriculum Center at Sangamon State in Springfield, Illinois).

20. Find the classified ad section in a newspaper and locate the section which tells the cost of an ad. Select several different advertisements and calculate the cost of running each for 3 days.

21. Using calorie charts from books or bulletins, plan single meals or meals for a day which stay within certain calorie counts assigned by your teacher. Then use nutrient charts and add up the amounts of selected nutrients in the meals. Be careful to base your figures on appropriate serving sizes and to watch the units in which the nutrients are measured.

22. Using the Fat and Calorie "Life-Saver" Guide put out by the Center for Science in The Public Interest, 1755 S. St. N.W., Washington, DC 20009 ($3), determine the percent of fat in ten foods you eat regularly. Divide the foods into two groups, those with less than 25% of their caloric value from fat and those with more than 25% of their caloric value from fat.

23. Using the above chart and other charts and booklets or nutrition labels as needed, try to determine how many of the calories you consumed in one day came from fat. Remember to watch serving sizes. If you use nutrition labels, multiply the number of grams of fat per serving as listed on the label by 9 (There are 9 calories in 1 gram of fat).

24. Compare food costs per unit of sale. Select several items which are sold in different size packages and containers. Examples: tea bags, bread, cooking oil, paper tissues, raisins (Class members should choose a variety of items). Use shelf labeling if available, otherwise compute the cost per unit (tea-bag, tissue, ounce) Is the largest size of an item always the least costly per unit?

25. Choose an item which is sold in several different stores with several nationally advertised brands as well as house brands. Example: canned fruit, such as peaches or apple sauce, pork and beans, dry milk, instant coffee. Each student should agree to check prices in one store. Agree beforehand on the size, weight or quantity to check. Record the prices by brand names, stores and weights. Figure the cost per unit (as in activity #24) but also arrange your figures on a chart or graph showing the range from the least expensive to the most expensive. Figure the percent of increase of the highest price over the lowest price.

    You may want to discuss <u>why</u> people pay a higher price for products which are available at lower prices.

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

Entrepreneurship Transparency Masters and Teacher Materials

Prepared by
Charlotte Carr
Illinois State University

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

ENTREPRENEURSHIP - HOME ECONOMICS OCCUPATIONS

The School Code of Illinois, 10-23.3a, was amended in 1971 to make it possible for vocational education classes "...to independently operate or cooperate wit existing companies in the operation of a business or businesses for the sole purpose of providing training for students in vocational education programs. Any proceeds from the operation shall be applied towards the costs of establishing and maintaining these businesses. Should the proceeds ever exceed the establishment and maintenance costs, then that excess shall only be directed toward expanding business-operation training in vocational education programs.

Organizing a class as a business operation will enhance the opportunities for the students to develop business and communication skills, develop improved standards of work, experience feelings of pride and satisfaction from customers and benefit from the supplementary budget resulting from the sale of products and services. Accurate recordkeeping is essential and also a related learning experience. Integrating FHA-HERO activities will facilitate the learning opportunities and the operation of the class as a non-profit business. The FHA-HERO class officers often assume the roles of business officers. Some of the activities related to this method of class operation might be:

- Child care laboratory classes charging a fee to cover the cost of expendables,
- Foodservice classes selling tickets for meals or selling products produced,
- In Home Economics Cooperative Education classes students can gain skills in consumer interest surveys, advertising, customer sales techniques, acccounting management, etc., through chapter entrepreneurship projects.

Program for Acquiring Competence in Entrepreneurship

1. Understanding the Nature of Small Business
    a. Define a "small business."
    b. Identify the different types of small businesses.
    c. Describe how small businesses contribute to the American way of life.
    d. Describe what role small businesses play in the American economic system.
    e. Identify the major factors contributing to the success of a small business

2. Determining Your Potential as an Entrepreneur
    a. Define entrepreneurship.
    b. Recognize the personal qualities and skills needed to be a successful entrepreneur.
    c. Compare the advantages of owning a business with the advantages of working for someone else.
    d. Assess your own ability to be a successful entrepreneur.

3. Developing the Business Plan
    a. Identify the reasons for planning for entrepreneurship.
    b. Identify the components of a business plan.
    c. Complete a business plan worksheet.

4. Obtaining Technical Assistance
    a. Discuss how technical assistance can help the entrepreneur.
    b. Identify the types of technical assistance needed by the entrepreneur.
    c. Know where to find technical assistance.

5. Choosing the Type of Ownership
    a. Describe sole proprietorships, partnerships. corporations, cooperatives, and franchises.
    b. Identify examples from your own community of each of the types of business ownership.
    c. Describe the advantages and disadvantages of proprietorships, partnerships, corporations, franchises, and cooperatives.

6. Planning the Market Strategy
    a. Discuss the economic concepts that influence marketing decisions.
    b. Identify important marketing activities.
    c. Explain how marketing aids business people and consumers.

d. Define the terms "target market" and "marketing mix."

7. Locating the Business

   a. Explain the importance of selecting the right business site.

   b. Identify factors to be considered when selecting a business site.

   c. Determine advantages and disadvantages of different types of business locations (isolated, central business district, neighborhood, shopping center, etc.)

   d. Describe terms of occupancy contracts for a business.

8. Financing the Business

   a. Explain the importance of financing in the success of a new business.

   b. List the different types of costs that must be considered when starting a new business.

   c. Explain the two major methods of financing a new business.

   d. Identify the various sources for obtaining financing for a new business.

   e. List the financial statement that should be included in a business plan.

9. Dealing with Legal Issues

   a. Describe why a basic understanding of legal issues is important to the small business owner/manager.

   b. Define the term "contract".

   c. Identify the conditions that call for a written contract.

   d. Name and describe the five essential components of a contract.

10. Complying With Government Regulations

   a Summarize the importance of government rules and regulations to the individual entrepreneur.

   b. Classify legislation according to whom it is designed to protect.

   c. Explain at least three types of federal, state, and local taxes affecting small business.

11. Managing the Business

   a. Explain the role of management in operating a business.

   b. List the steps involved in the decision-making process.

   c. Define and explain the functions of management.

   d. Identify rewards and problems of the management role.

12. Managing Human Resources

   a. Define human resource management.

   b. Explain the importance of human resource management as it relates to the success of a business.

c. Identify the various responsibilities that make up human resources management.

13. Promoting the Business

a. Define the concept of promotion.

b. Compare the major methods of promotion used by small businesses.

c. Describe the relationship between promotion and other business decisions.

d. List the decisions that must be made when completing a promotional plan.

14. Managing Sales Efforts

a. Discuss the role of selling in different types of small business.

b. Define selling as stated by the American Marketing Association.

c. Describe what salespeople need to know about their customers to be successful at selling.

d. Describe what salespeople need to know about themselves to be successful at selling.

15. Keeping the Business Records

a. Identify the reasons for keeping business records.

b. Identify the elements of a sound recordkeeping system.

c. Describe the difference between a single-entry recordkeeping system and the double-entry system.

d. Describe the uses of the checkbook in recordkeeping.

e. Identify suitable recording forms for accounts receivable.

f. Reconcile a bank statement.

g. Develop a simple recordkeeping system for payroll records.

16. Managing the Finances

a. Explain the importance of financial management.

b. Describe the components of a balance sheet.

c. Differentiate between current and fixed assets- current and fixed liabilities.

d. Describe the components of a profit and loss statement.

e. Identify sources of financial ratio data.

f. Identify methods for calculating selected financial ratio.

g. Identify the activities associated with electronic data processing and financial analysis.

17. Managing Customer Credit and Collection

a. Identify reasons for offering credit.

b. Consider basic policies to use for credit and collections.

c. Determine your own rules for deciding about people who apply for

credit (3 "C's" of Credit).

d. Identify features of credit card plans.

e. Identify basic types of direct credit plans.

f. Determine how you can use a cost/benefit analysis for direct credit and credit card plans.

18. Protecting the Business

a. List the most common types of business crime.

b. List other types of risk faced by entrepreneurs.

c. Explain the need for protection against such risks.

d. Discuss what entrepreneurs can do to protect themselves against risks and the losses they may cause.

To receive complete teaching materials for the outline above, order Sets by Levels from the National Center for Research in Vocational Education, National Center Publications, Box P, 1960 Kenny Road, Columbus, Ohio 43210.

Selected Bibliography
on
Entrepreneurship

The following materials may be borrowed from:

East Central Network/Illinois
Vocational Curriculum Center
Sangamon State University
E-22
Springfield, IL 62708
(217) 786-6375

(A 38 page bibliography is available from the above address.)

Business Management and Ownership. Barbara Jean Lyon. Oklahoma State Department of Vocational and Technical Education, 1515 W. 6th Avenue, Stillwater, OK 74074. 1982. 658.002 LYON 1982-1.
Seven sections include principles of economics and management, personnel management, layout and security, fundamentals of merchandising, credit service, and small business ownership.

Business Management and Ownership Skills. John T. Rooke, Project Director, Norwich Regional Vocational Technical School, 590 New London Turnpike, Norwich, CT 06360. 1980. 24pp. 658.022 ROOK 1980-1
Provides a broad knowledge and understanding of how business functions and the desirable attitudes necessary to succeed on the job.

Business Plan for Retailers. U.S. Small Business Administration, Office of Management ssistance, Education Division, Washington, DC 20416. 1979. 658.022 EDUC 1979-1.
Helps the owner-manager of a small business draw up a business plan with the combination of text and workspace.

Checklist for Developing a Training Program. Leonard J. Smith. Small Business Administration, 1441 L St., N.W., Washington, DC 20416. 1979. 7pp. (Management Aids No. 186). 658.022 SMIT 1979-1.
Questions in this aid are designed to provide a step-by-step approach to the task of organizing and conducting a successful program of employee training.

Delegating Work and Responsibility. Stanley Wantola. Small Business Administration, 1441 L St., N.W., Washington, DC 20416. 1979, 5pp. Management Aids No. 191. 658.022 WANT 1979-1.
Discusses those who carry responsibility and authority, emphasizing the importance of allowing competent assistants to perform in their own style.

Designing A Marketing Plan for Small Business Management. Robert Link, et al. Vocational Instructional Materials Lab, 154 W. 12th Ave., Student Service Bldg., Ohio State University, Columbux, OH 43210. 1982. 23pp. 658.022 LINK 1982-3.
Describes how to formulate basic and supporting marketing strategies, design a plan of action which implements these strategies and also how to prepare control systems for marketing plans.

Developing Jobs and Neighborhoods Through Small Business Growth: Recommendations for Actions. Michael S. Holzman. Trust, INC., Chicago, IL 60600. 1980. 72pp. 658.022 HOLZ 1980-1.
Contains recommendations specially addressed at Chicago and Illinois manpower and economic development programs, which present essential policy and administrative changes that are applicable to other states and municipalities.

Education for Enterpreneurship and Entrepreneurial Development Activities in Illinois
George J. Nolfi, et al. Advisory Council on Adult, Vocational and Technical Education (SACVE), 100 North 1st st., Springfield, IL 62708. 1980. 178pp. 658.42 NOLF 1980-1.
Provides an appraisal of all activities underway in Illinois to encourage individuals to become enterpreneurs or to improve their capabilities as entrepreneu

Entrepreneurship Basic Recordkeeping. Thomas Fisher, et al. Instructional Materials Lab, 154 W. 12th Ave., Student Services Bldg., Ohio State University, Columbus, OH 43210. 1982. 69pp. $5.00 657.2 FISH 1982-1.
Identifies individual business needs for use with recordkeeping and how to maintain a system approach to recordkeeping.

Entrepreneurship: A Bibliography. Western Curriculum Coordination Center Project, College of Education, University of Hawaii, 1866 University Ave. Wist 216, Honolulu, HI 96822. 1983. 10pp. RO16.658022 WEST 1983-1.
Lists materials on entrepreneurship available on loan from the WCCC.

Entrepreneurship Education. Thomas J. Scanlan, et al. Illinois State Board of Education, DAVTE, 100 North 1st St., Springfield, IL 62777. 1980.
Includes Learning the Skills, Applying the Skills, and Supplementary Readings 658.022 SCAN 1980-1-3.
Emphasizes entrepreneurship as an integration of skills, Skills include inner control, innovation, decision making and human relations.

Entrepreneurship for Women: An Unfulfilled Agenda. Carol Eliason. National Center for Research in Vocational Education, 1960 Kenny Rd., Columbus, OH 43210, 198
Outlines the characteristics and needs of the small business owner, and discusses recent developments in entrepreneurship education with a focus on program for women.

Entrepreneurship in Voc Ed: A Guide for Program Planning. Edward L. Davis and Margaret A. Zelinko. National Center for Research in Vocational Education, 1960 Kenny Rd., Columbus, OH 43210 1982. 77pp. (Leadership & Development Series No. 62). $6.50. 658.42 DAVI 1982-1.
Assists program planners and curriculum developers in selecting entrepreneurship materials that are appropriate for the populations served by their educational agencies.

Establishing Your Business: A Handbook for Women. Donna Maurillo Martin, Managing ditor. Resources for Women, Inc., 104 Walnut Ave., Suite 212, Santa Cruz, CA 95060. 1980. 87pp. 658.022 MART 1980-1.
A business handbook for women that discusses marketing, financing, legal structure, regulations, accounting, insurance, etc. for small businesses.

Estimating Sales and Profits by Class or Department. Robert Link, et al. Instructional Materials Lab, 154 W. 12th St., Student Service Bldg. Ohio State University. Columbus, OH 43210. 1982. 20pp. 658.022 LINK 1982-2
Describes how to set the profit objective, make a sales forecast, and estimate both gross profit and operating profits.

Going Into Business for Yourself. Gary L. Kuebbeler. Ohio Distributive Educational Material Lab, Ohio State University, Room 254, Fyffe Rd., Columbus, OH 43210.
Manual includes lesson plans for each topic, overheads/handouts for the lesson plan based on entrepreneurship.

A handbook on Utilization of the Entrepreneurship Training Components for Vocational Education. American Institutes for Research, P.O. Box 1113, 1791 Arastradero Road, Palo Alto, CA 94302. 1981. 49pp. (Getting Down to Business). 658.022 AMER 1981-3.
Part of project to create entrepreneurship training components for use in vocational instruction programs at the secondary level.

Home Business. Judith Eichler Weber. Small Business Administration, Washington, DC 20466. 1977. 7pp. (Small Business Bibliography No. 2). R 016.658022 WEBE 1977-1.
Assists prospective and current owners of home business to plan, organize, direct, coordinate and control their business.

How to Develop A Successful Business Plan. Entrepreneur Magazine. Chase Revel. Inc., Los Angeles, CA. 1980. 66pp. $16.95. 658.15 ENTRE 1980-1.
Designed to help entrepreneurs define their ideas a little more closely about how to write or prepare and use a business plan for their unique business.

How to Start and Run A Successful Home Typing Business. Peggy Glenn. Pigi Publishing, 924 Main St., Huntington Beach, CA 93648. 1980. 105pp. $14.95. 658.8096523 GLEN 1980-1.
Contains the information necessary to develop a satisfying and profitable typing business at home.

JA Company Manual. W. K. Kellogg Foundation, Junior Achievement, Battle Creek, MI 1979. 77pp. 658.022 UUNI 1979-1.
Shows students how to run their own business from capitalization to liquidation.

Job Creation: Creative Materials Activities and Strategies for the Classroom. Joan Smutny. Illinois State Board of Education, 100 North 1st St., Springfield, IL 62777. 1982. Includes 1 cassette, 37 min., book with 6 modules. CA 371.46 SMUT 1982-1.
Encourages individuals to think about their own talents, skills, interests, and capacities for productive involvement as persons participating in work.

Learn and Earn: Marketing Management Education Project. Pepsi-Cola Co. 1982. Includes color filmdytip, vsddryyr, dvtipy snf ptojrvy nook. GD 658.8 PEPS 1982-1.
Project involves the actual sale or simulation of sale of products or services. Designed to present basics about marketing and management.

LEARN Marketing and Management Basics and EARN Money for Your Treasury. Pepsi-Cola Co., Inc. 1982. Includes final report. 658 PEPS 1982-1-2 A Project that involves the actual sale of simulation of a sale of products or services. Designed to present basics about marketing and management on a small scale.

Maid Service. American Entrepreneurs Association, 2311 Pontius Ave., Los Angeles, CA 90064. 1979. 67pp. (AEA Business Manual No. 160). 648 Amer 1979-1.
Provides start-up information needed to begin a main service.

More Than A Dream. American Management Association, In-House Development and Training, 135 W. 50th St., New York, NY 10020. 1982. 3 color reels 3¾in.:
1. Being Your Own Boss, 27 min. 2. Raising the Money, 28 min. 3. Running Your Own Business, 28 min. Boxed separately and can be checked out individually.
VT 658.42 AMER 1982-1-3 Part 1 explores the world of the self-employed, the second reel focuses on different means of acquiring money to get a small business started and the third reel discusses the managerial and operational aspects of making a small business successful.

Operating Your Own Business. Instructional Material Laboratory, 10 Industrial Education Building, University of Missouri, Columbus, MO 65201. 1980 253pp. 658.0043 INST 1980-2.
Upon completion of this unit, the student should be able to develop a plan to start and successfully operate a business establishment.

Preparing for Entrepreneurship. Kenneth L. Rowe and Roger W. Hutt. Arizona State University, College of Business Administration, Tempe, AZ 85281. 1979. 307pp. 658.002 ROWE 1979-1.
Designed to assist students in assessing interests and abilities with respect to self employment.

Principles of Small Business Management. William N. Macfarlane. McGraw-Hill Book Company, 1221 Avenue of the Americas, New York, NY 10020. 1977. 534pp. $15.95. 658.022 MACF 1977-1.
This text uses a question and answer format to provide an overview of the major problems a business owner will face.

Raising Money. Entrepreneur Magazine. Chase Revel, Inc., Los Angeles, CA. 1979. 78pp. $16.65. 658.15 ENTR 1979-1.
First part deals with start-up situations, personal loans and things of that nature. Second part deals with how to obtain financing for an existing business.

Restaurants and Food Services. Bank of America, P.O. Box 3700, San Francisco, CA 94137. 1977 32pp. (Small Business Reporter.) 658.022BANK 1977-4.
Discusses the investment requirements and operational format of this business and points up both hazards and opportunities.

Selling Ideas. Chase Revel and Don Kracke. American Entrepreneurs Association, 2311 Pontius Ave., Los Angeles, CA 90064. 1980. 92pp. $16.95. 658.85REVE 1980-1.
Discusses the necessary preparation, the best prospects, packaging, pricing, cuts, approaching the prospects, closing the deal, and monitoring the progress.

Small Business Management and Ownership. Nancy Holt, Jo Scuchat, and Mary Lewis Regal. CRC Education and Human Development, INC., 26 Brighton St., Belmont, MA 02178. 1979. Includes 4 volumes, 658.002 HOLT 1979-1 Vol. 1-4.
These introductory and advanced curriculum materials are suitable for both secondary and post-secondary students. The volumes include Minding Your Own Small Business: An Introductory Curriculum for Small Business Management; Something Ventured, Something Gained; An Advanced Curriculum for Small Business Management; Location Decision: A Simulation; and Mini-Problems in Entrepreneurshi

Small Time Operator: How to Start Your Own Small Business, Keep Your Books, Pay Your Taxes, and Stay Out of Trouble. Bernard Kamoroff. Bell Springs Publishing, P.O. Box 322, Laytonville, CA 95454. 1980. 190pp. $7.95. 658.022 KAMO 1980-1.
Discusses common types of laws and regulations affecting small business.

Starting and Operating A Playgroup for Profit. Susan Chidakel. Pilot Books, 347 Fifth Avenue, New York, NY 10016. 1976. 47pp. $2.95. 649 CHID 1976-1.
This guide covers how to organize a playgroup, licensing, recordkeeping, advertising, and dealing with parents.

Techniques of Time Management. Kent H. Baker. U.S. Small Business Administration, 1441 L Street, N.W. Washington, DC 20416. 1979. 7pp. (management Aids No. 239.) 658.022 BAKE 1979-1.
Stresses the importance of effective use of time in achieving a business's full potential.

A Woman's Guide to Starting A Small Business. Mary Lester. Pilot Books, 347 5th Ave., New York, NY 10016, 1981 32pp. $2.50 658.042 LSDT 1981-1.
Discusses low-overhead service businesses, creating and marketing a product, evaluating your potential, and finding business management assistance.

Women and the U.S. Small Business Administration. Vernon A. Weaver. Small Business Administration, 1441 L St., N.W., Washington, DC 20316. 1979. 5pp. 658.022 WEAV 1979-1.
Explains the services that the small business administration offers and gives other sources that can be of aid.

The Women Entrepreneurs Project (Final Report). Barbara S. McCaslin, et al. Superintendent of Documents, Government Printing Office, Washington, DC 20402. 1978. 168pp. MF $.83, HC $8.69 658.3042 MACC 1978-1.
Final report for project which sets forth a procedure for expanding vocational education programs to adult women who want to have instruction in entrepreneurship.

RESOURCE PEOPLE TO CONTACT

CURRICULUM CONSORTIUM WITHIN VOCATIONAL EDUCATION:
Charles Schickner
Illinois Board of Education
100 N. First St., E426
Springfield, IL 62777
217/782-0717

MINORITY BUSINESS DEVELOPMENT AGENCY
Stanley Tate
Regional Director
Minority Business Development Agency
U.S. Dept. of Commerce
55 E. Monroe St
Suite 1440
Chicago, IL 60603
312/353-0182

U.S. SMALL BUSINESS ADMINISTRATION
Richard D. Durkin
838 E.M. Dirksen Federal Building
Chicago, IL 60604
312/353-0355

SMALL BUSINESS INSTITUTE
Carbondale- Southern Illinois University
Champaign- University of Illinois
Charleston- Eastern Illinois University
Chicago- Chicago State University
DePaul University
Illinois Institute of Technology
Roosevelt University
University of Illinois-Chicago Circle
Decatur- Milikin University
DeKalb- Northern Illinois University
Edwardsville- Southern Illinois University-Edwardsville
Elmhurst- Elmhurst College
Evanston- Northwestern University
Jacksonville- MacMurray College
Lebanon- McKendree College
Lockport- Lewis University
Macomb- Western Illinois University
Normal- Illinois State University
Palos Heights- Trinity Christian College
Peoria- Bradley University
Quincy- Quincy College
Springfield- Sangamon State University

ALSO CONSIDER
Chamber of Commerce

Any individual who is in business for him/herself. (Invite them as guest speakers or visit their establishments, have students interview them and share ideas with the class.)

RESOURCE MATERIAL TO ORDER

The following booklets are available from:
Superintendent of Documents
Government Printing Office
Washington D.C. 30402

	Stock No.	Pages	Price
Cost Accounting for Small Manufacturers (assists managers of small manufacturing firms establish accounting procedures that help control production and business costs.)	045-000-00162-B	180	$4.25
Guides for Profit Planning (Guides for computing and using the break even point, the level of gross profit, and rate of return on investment)	045-000-00137-7	53	$2.50
Financial Record Keeping for Small Stores (Written primarily for the small store or prospective owner whose business does not justify hiring a full-time bookkeeper.)	045-000-00142-3	135	$4.00
Managing for Profits (Ten chapters on various aspects of small business management, for example marketing, production, and credit.)	045-000-00005-2	155	$2.75
Marketing Strategy	045-000-00187-3	48	$3.50
Inventory Management-Wholesale/Retail	045-000-00177-6	40	$2.50
Inventory and Scheduling Techniques	045-000-00185-7	60	$3.50
Job Analysis, Job Specifications, and Job Descriptions	045-000-00185-7	40	$2.25
Recruiting and Selecting Employees	045-000-00186-5	40	$2.25
Employee Relations and Personnel Policies	045-000-00196-2	36	$2.25

To receive complete teaching materials for the outline above order:

Sets by Learning Levels
Instructor Guide, 18 Modules, and Resource Guide

Set of Student Modules
One each of the 18 modules in a level

Order from: The National Center for Research
in Vocational Education
National Center Publications, Box P
1960 Kenny Road
Columbus, Ohio 43210

ME?
an
ENTREPRENEUR

1.

WHO is an ENTREPRENEUR ?

2.

AN ENTREPRENEUR

is a person who ORGANIZES, MANAGES and ASSUMES the RISKS of a BUSINESS or ENTERPRISE[1]

[1]Webster's Ninth New Collegiate Dictionary (1983)

HOW COULD I BECOME AN ENTREPRENEUR ?

4.

WHAT SKILLS HAVE I LEARNED IN THIS CLASS and OTHERS

that would enable me to become an

ENTREPRENEUR

?

PLANNING AN ENTREPRENEURIAL VENTURE

BRAINSTORM new business ideas

↓

DEFINE the business concept

↓

ANALYZE the market for the new business

↓

DETERMINE goals and strategies

↓

MARKET the plan for the new business

↓

DEFINE the products and/or services to be offered

↓

Determine budget, cost of operation, break even costs

↓

DESIGN control systems for the total business operation

↓

PLAN for implementation

Adapted from: Gillingham and Loucks (1982)

6.

CHARACTERISTICS of an ENTREPRENEUR

Risk taking
Optimistic
Hard driving
Committed
Independent
Exercise sound judgement
Recognize opportunity
Tireless worker
Pleasantly aggressive
Careful planner
Goal oriented
Competitive
Decision maker
Persistant
Desire to achieve
Manager of time, money, people

7.

ENTREPRENEURS CONTRIBUTE ...

to economic growth through expanding business activities by creating jobs for themselves and others.

30 million people are self employed

56% of the workforce is employed in small business.

50% of all small business owners begin with a high school education.

87% of new jobs are created in small business.

44% of the GNP is attributed to small business.

97% of all business in America are small.

If you use your TALENT to:

prepare and sell food products
or
care for the elderly
or
maintain another's home
or
any other jobs that might become your entrepreneural enterprise

What agencies must be contacted for:

- standards to be met?
- licensing, if required or recommended?
- a business loan, if needed?
- a place to locate the business?
- advertising the business?
- hiring help, if needed?
- establishing records for IRS, state and federal tax withholdings and social security benefits?

Addendum to 1982 Illinois Vocational
Home Economics Curriculum Guide

Fashion/Fabric Coordinator
Program (20.0306)

Prepared by
Charlene Callison
Western Illinois University
Betty J. Church
Bradley University

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

Orientation

20.0306 FASHION/FABRIC COORDINATOR PROGRAM

The Fashion/Fabric Coordinator program offers a sequence of planned learning experiences that combine courses and laboratory work to provide the student with the opportunities to develop the competencies needed for employment in a variety of fashion/fabric coordinator merchandising areas. The sequence includes experiences needed for each student to gain the knowledge, understanding, and method of communicating.

-- fashion design, trends, styles and merchandising;
-- garment construction fit and quality;
-- fiber content to judge use, care, and durability;
-- figure types as they relate to selecting current fashion;
-- customer fitting techniques;
-- fashion show planning and presentation;
-- ordering, receiving, and displaying fabric and/or fashion.

The sequence includes an orientation to the clothing and textile field, introduction to the world of work as related to this area, experiences in the application of the basic knowledge, skills, and opportunities to develop fashion/fabric coordinator techniques to be marketable determined by community employment needs. Typically, the skill development courses are individualized with students developing marketable skills for a variety of fashion/fabric coordinator jobs according to the job market and the student's level of ability.

JOB TITLES:

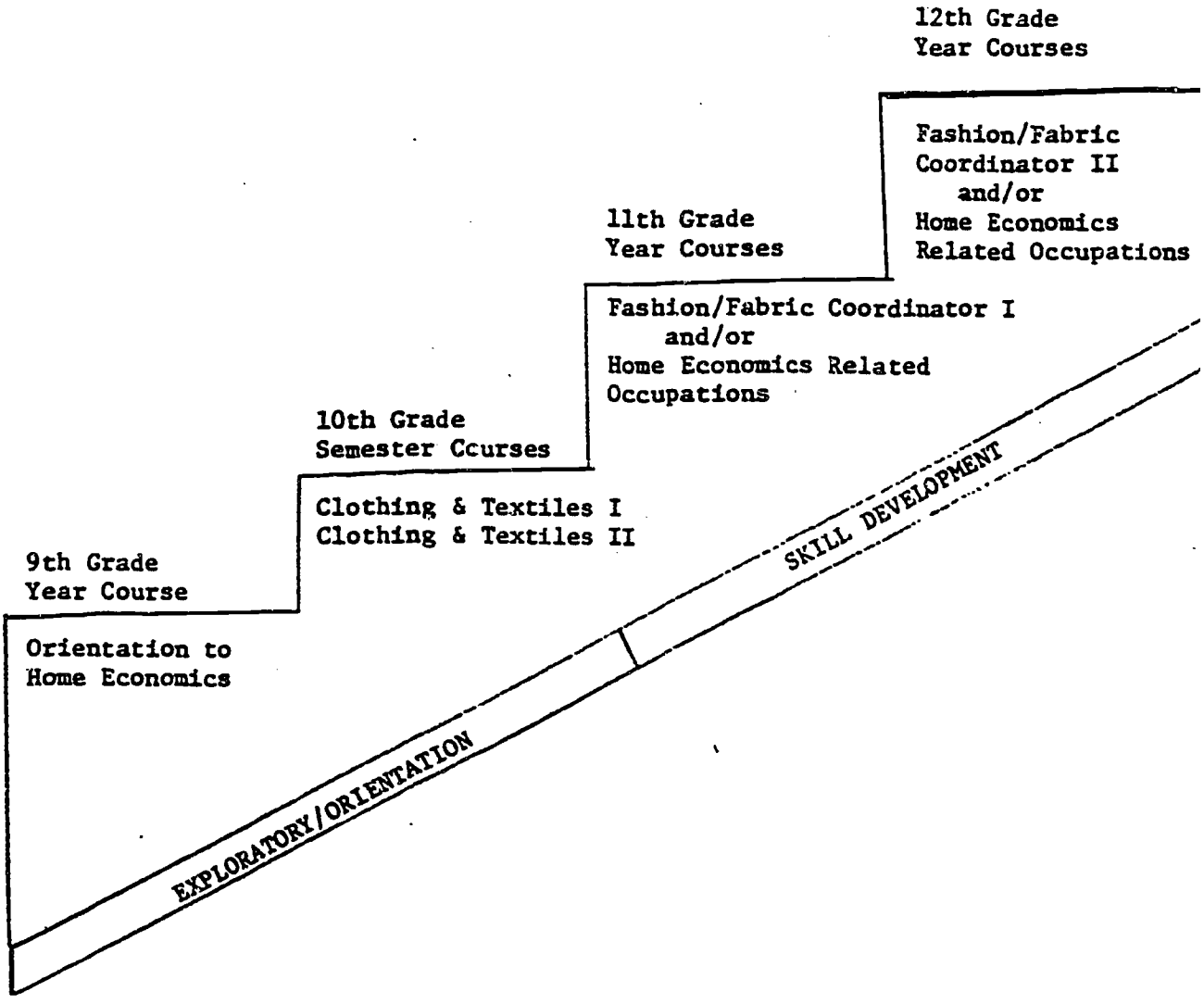
Fashion Coordinator Trainee
Fabric Coordinator Trainee
Merchandise Manager Trainee
Buyer Trainee
Copywriter Assistant
Advertising Manager Trainee
Alterationist
Bridal Consultant Trainee (Assistant)
Model
Fashion Salesperson
Fabric Salesperson
Fashion Display Person
Fabric Display Person
Window Display Person

Entry Level

Stock Person
Receiving Person
Marker
Packer or Wrapper
Mail Order Person
Office Person
Sales Person
Cashier
Pattern Sales Person
Yard Goods Sales Person
Notions Sales Person

Places of Employment:

Ready to Wear Stores or Shops
Specialty Shops for Men and/or Women
Department Stores
Alteration Business
Fabric Stores
Boutiques
Clothing Rental Shops
Dry Cleaners


12th Grade
Year Courses
Fashion/Fabric
Coordinator II
and/or
Home Economics
Related Occupations
11th Grade
Year Courses
Fashion/Fabric Coordinator I
and/or
Home Economics Related
Occupations
10th Grade
Semester Ccurses
Clothing & Textiles I
Clothing & Textiles II
9th Grade
Year Course
Orientation to
Home Economics
SKILL DEVELOPMENT
EXPLORATORY/ORIENTATION

Broad Areas of Emphasis

Career Opportunities Related to Fashion/Fabric Coordinator

Fashion Knowledge needed by persons employed in fashion/fabric related occupations

Salesmanship/Merchandising knowledge and techniques needed in fashion/fabric related occupations

Display/Merchandising knowledge and techniques needed in fashion/fabric related occupations

Store Maintenance standards and procedures

Customer Services

Employer-Employee Responsibilities

I. Career Opportunities in the Fashion and Fabric Coordination Fields

Careers in fashion and fabric coordination

Fashion Coordinator

Fit an existing garment to a specific body type or figure type (p. A16)

Knowledge of fabric fiber content and how to determine care and quality of garment

Knowledge of consumer construction preferences - comparison shopper or judging workmanship in garments

Knowledge of fashion trends

Ability to display fashions

Knowledge of how to merchandise fashions in order to sell them

Conduct fashion shows using garments in the store

Perform duties of stock person in a fashion department

Ability to sell fashion garments

1. Fitting and style characteristics
2. Sales ability
3. Mathematics to price and reprice items, inventory, closing and opening procedures, money, banking

Ability to order, receive and display garments on the floor and in the stockroom

Fabric Coordinator

Fitting an existing pattern (flat pattern techniques could be used)

Alteration of pattern/fitting

Sales of Fabric

1. Fabric characteristics - fiber content, finish and performance
2. Sewing skill - knowledge of patterns and notions
3. Measure fabric, count money, transfer size and measurements (p. A1
4. Pattern layout

Knowledge of trends and styles in fabrics

Knowledge of how to merchandise fabric in order to sell it

Conduct Fashion Shows using fabric garments made from fabrics and different notions

Ability to create and display craft items in fabric stores and for notion, needlepoint, etc., departments

Ability to order, receive and display fabric, crafts, notions and find other items in a fabric store

Stock merchandise in a fabric store

Identify trends in the fashion and fabric coordination field

Identify skills needed by workers in the fashion and fabric coordination field

Explore and describe job responsibilities, education and training requirements of persons in the field

Describe the personal qualifications/characteristics/qualities which contribute to employability

Identify the career ladder with emphasis in entry level for the fashion industry

Clothing selection based on career choice

Ability to select clothing based on customer's intended use

Identify clothing needs for employee of an office, sales person, stock person, in a fashion office

Evaluate clothing in terms of meeting the target market and the different customer's figure type and age

II. Fashion Knowledge

Identification of fashion trends

Determine current local and regional fashions by studying periodicals and visiting stores in the area

Determine national and international trends by reading magazines and newspapers across the U.S. and Europe

Determine at what point in time these fashions will appeal to the customer or the target group with which the sales person might be working by talking to customers in a target area

Identification of sales trends

Collect data from newspapers, magazines, TV

Check sales records and use data computers where applicable

Observe clothing style and fabric type that is being work

Determine what fits into the customer's lifestyle

Use of Women's Wear Daily or newspapers, TV. periodicals or consumer shopping in different stores to be able to identify for a given season the most fashionable.

- silhouette
- detail
- texture
- color

Anticipation of fashion trends to identify trend setters

- current events
- appearance of prophetic styles (interesting new styles in introductory states)
- current taste and utility
- determine the extent to which trend setters and customers have common characteristics:
  - age
  - income group
  - groups with different interests
  - groups in different areas

Clothing selection and style

- Identify relationship between clothing and the customer's makeup, hairstyle, accessories and posture
- Identify characteristics of clothing that make a statement about the person's authority, income level, education, age, status and occupation
- Analyze the use of color and texture to convey messages about the selection of clothing for different personalities
- Know how color in our enviroment can influence clothing selection
- Identify colors of skin tones and explain how they relate to clothing selection
- Identify and analyze different figures, body sizes and shapes
- Identify different figure problems and use color, line and design and fabrics to change proportions in selecting clothing
- Identify the different styles of dresses, sleeves, collars, bodices, pants, etc., in order to select different clothing designs for different figure types and personalities
- Develop a list of classifications when referring to style, i.e., casual/sporty, masculine, conservative/classic, striking, dramatic, sexy, feminine, ethnic, arty, one-of-a-kind, elegant, sophisticated, understated, trend setter, practical, theatrical
- Develop a clothing style for a professional image, i.e., for a company, for a department, gives a personal message, an interesting person, looks coordinated, seems appropriate or functions for the job, demonstrates an awareness of current fashions, too sexy, too loud,

III. SALESMANSHIP AND MERCHANDISING

Fiber and Fabric Content and Maintenance

Identify fibers and their properties in order to interpret care instructions of the fabric or garment to the customer

Identify fibers and their properties in order to select appropriate sewing notions or accessories with different garments

Identify fibers and their properties in order to describe and sell a specific item, i.e., a piece of fabric, a craft kit, a garment as to its appropriate use in the wardrobe or as a home furnishings item

Clothing Selection for the Customer

Identify different body types and problem figure characteristics

Describe illusions created by different lines in clothing and fabrics

Describe the effects of color on each different body figure in relation to clothing and fabrics

Describe illusions created by different lines in clothing and fabrics

Find examples of clothing and fabrics that make the figure appear taller, shorter, heavier and more slender by use of line, color and design

Analyze and clarify garments as being of good or poor design according to different body figures

Identify different people's careers and the appropriate dress, suit or garment to be worn by different body types, personalities and ages.

Opening, Making and Closing a Sale (p. A21)

Utilize a variety of ways to approach a customer

Give examples of a good sales approach when giving the characteristics of a piece of merchandise to the customer

Explain how to make multiple sales (i.e., a sale of more than one item)

Demonstrate an awareness of the needs of the customer from the employee by helping the customer throughout the sale (i.e., on the floor, in the fitting room and finalizing the sale)

Define the procedures to close a sale

Communicating with the Customer

Explain the importance of verbal and nonverbal communication

Illustrate appropriate ways for an employee to greet a customer

Identify acceptable ways to communicate with customers, management and co-workers via telephone and written message

Illustrate acceptable techniques for selling by mail, phone or in person, i.e., personal notes, calling a special customer or talking personally to each customer calling them by name

Ordering and Receiving Fabric and Merchandise: Determination of Inventory Needs

Ability to collect various forms of data to determine inventory needs

Identify and analyze customer demands by spending time on the selling floor to become aware of customer's preferences

Gain information about customer demands from other sales people

Give examples of comparison shopping

Study past records of a fabric store or department in a store

Conduct a consumer survey

Review national advertising

Consult and review trade publications in the area of fashion and fabrics like WWD and Home Sewing Trade News

Review the entertainment media and resource information for new ideas on the customer demand in the area of fabrics, notions, and fashions

Ability to communicate inventory needs to personnel in charge

Procedures for Receiving Merchandise and Fabric (p. A23)

Identify duties of person receiving merchandise

Know appropriate procedures to follow when merchandise is delivered and received from a vendor

Learn the Terms of Sale and Invoice Dating, i.e., Discounts (Trade, Cash, Quantity) Dating; terms, Net and COD and Regular; E.O.M. terms; Extra terms; Freight FOB terms; Prepaid terms

Identify appropriate bookkeeping tasks

Know how to conduct Physical Inventory; Book Inventory; Return of Goods to Manufacturer or Charge Back; Markdowns; Shrinkage -- losses through theft or breakage; Goods on Loan; Transfers to Other Departments (p. A26)

Inventory Shrinkage and Shoplifting

Identify potential problem areas in a store for shoplifting i.e., fitting rooms, open mall doors, back doors, stockroom

Identify ways that an employee and a customer can steal from the company

Give examples of how the sales person can reduce shrinkage in the department

Become familiar with the laws and procedures that deal with shoplifting for different companies and in different situations

IV. DISPLAY AND MERCHANDISING

Productions - Fashion and Fabric Store

Determine ways to make merchandise visible

Ability to plan and present a fashion show as a merchandising technique

Determine different types of fashion shows

Give the sales person an opportunity to coordinate the clothing accessories and merchandise props for a fashion show, i.e., work back stage dressing models, hanging up clothes, organizing numbers, straightening up merchandise, taping shoes, writing commentary, picking up and delivering clothes to the production site

Locate and select merchandise, garments and accessories for the show

Organize the fittings, layout, floor plan and rehearsals

Choose the models and rehearse them

Develop an instrument to evaluate the production

Select art, music and lighting for the show

Create advertising and publicity as well as type and edit programs and collect fees at the registration site

Develop promotional tie-ins and create public relation activities

Visual Merchandising

Define the term "display" and explain why it is important to the customer and employee. (E.g., It is a source of fashion information; it shows what the store has to sell, it shows customers a new look and how to accessorize it; it enables customers to view a great number of alternatives available in a small space.)

Explain how visual merchandising makes a fashion statement which creates a store image
- developing the personality of the store
- showing what is new in the fashion and fabric fields
- the projection of peak trends

Identify criteria for judging window and interior displays (p. A28)

Determine principles to be used to achieve the desired effect in a window display

Create a display that combines merchandise from many different departments

Analyze different visual displays in relationship to:

- seasonal and fashion changes
- color story or direction
- fabrication -- keeping like fabrics together
- layout of each department
- classification of merchandise in each department, i.e., skirts, blouses or juniors or misses

Know names of and uses of all merchandising fixtures

Fabric/Craft Samples as a Display Tool -- New Craft and Fabric Construction Techniques

Develop skills in using new construction techniques

Develop skills in using new construction techniques, new fabrics and new sewing products to make display samples for the fabric store

Sewing for the craft section

Construct needlepoint, latch rug kits, cross-stitched items, etc.

Sewing for the home

Construct home furnishing items such as pillows, wall hangings, tablecloth (round), afghans, and table accessories, picture frames

Sewing for special occasions

Construction of Christmas items like tree skirts, stockings, decorations, ornaments
Halloween items such as costumes, trick-or-treat bags, stuffed display items and decorations
Baby nursery items such as wall coverings, bibs, blankets and quilts, pillows, layette items

Sewing for display only

Identify ways to use special notions, fabrics and patterns for display in the fabric store

V. STORE MAINTENANCE

Attitudes and Skills Related to Store Maintenance

Ability to determine maintenance needs (e.g., vacuuming; dusting; cleaning glass fixtures, mirrors, formica surfaces, display fixtures, chrome, wood, fabric walls, wall coverings, lavatory; wash and wax floor; wash light fixtures)

Ability to perform or instruct others to perform maintenance tasks

Identify efficient ways to organize and arrange a stock room, bulletin board, message center, employees' lounge, desk area, register and checkout center, fitting rooms

Identify procedures to follow when opening and closing a store in relationship to maintenance of the store, i.e., glass doors cleaned, lights turned off or security lights on, fixtures and signs arranged according to company policy

Identify criteria and guidelines for organizing merchandise in the stock room (e.g., color, style, season, fabric, classification, or by fixture layout)

Illustrate a well-organized stock room

VI. CUSTOMER SERVICE

Alterations, Repair and Fitting (Fitting Garments or Customers)

Determine standards for a proper fit

- identify appropriate fit in clothing
- practice fitting techniques for other persons, i.e., on an older large woman; on a baby or toddler; on a middle-aged man

Identify clothing alterations to improve fit and appearance of garments for ready-to-wear clothing for men, women and children

Establish guidelines for accepting customer requests to repair and remodel clothing

- decide when to repair, remodel or discard a garment
- use appropriate techniques and material to remodel a piece of clothing according to new seasonal fashion trends to extend its useful life as a trend setter
- use appropriate techniques and material to remodel a piece of clothing to extend its useful life -- hems, lining, buttonholes, buttons, darts, waistline taking up or letting out seams, lapel narrowing

Ability to determine tasks prerequisite to establishing an alteration business as an entrepreneur

- set up a schedule of prices to be charged for various alterations and repair
- identify ways to earn money through sewing either in the alterations department or on your own
- develop skills in the area of hems, linings, buttonholes, buttons, dart relocation, waistline positioning and seams

Wrapping Packages

Identify and practice ways to wrap packages for special occasions or for mailing, i.e., gift wrap, bows, decorations

Learn ways to figure mailing charges for packages and correspondence

Handling Complaints, Paying Bills, Charge Accounts and Layaway

Identify steps in handling complaints and grievances of a customer, i.e., clear up simple complaints before they become big ones; explain changes; learn to listen; express appreciation of comments by the customer; give clear instructions; do not be belligerent; use good judgment; do not fabricate excuses; do not promise what you cannot deliver or have the authority to recommend

Identify procedures required when customers pay utility bills, make layaway purchases and charge account bills, i.e., neatness, thorough, businesslike, attention to detail, mathematics, handling money, making correct change, counting back money, calling for an identification number or checking on credit cards verification, courtesy.

VII. EMPLOYEE/EMPLOYER RESPONSIBILITIES

Communication Skills (p. A31)

Identify personal traits that enable one to become a successful employee (e.g., a desire to learn, knowledge of procedures and operations, shows initiative, has a flare of showmanship, able to communicate, ability to use mathematics, adaptable, flexible, ambitious, attentive to details, cheerful, friendly, confident, courteous, curious, businesslike, professional, enthusiastic, helpful, honest, imaginative, industrious, loyal, observant, poised/confident, resourceful, tactful, able to take and use constructive criticism)

Identify and develop communication skills , use of correct grammar, clear enunciation, correct pronunciation

Discuss communication effectiveness with employees, i.e., do not talk down to people be sincere sell yourself and your ideas encourage expression; allow new ideas and opinions and, above all, listen; avoid vague messages or answers, smart-alecky and sharp words or actions, biases; do not offend or refer to individual groups, educational background, color, creed or race

Appropriate Dress for the Store

Identify appropriate dress code for store personnel based on work performed (e.g., selling floor, in the stock room, in the display department)

List different style of clothing for men and women and discuss what would be appropriate dress for a store or type of job

Labor Laws and Hour and Wage Laws

Know the legal restrictions affecting hour and wages, i.e., EEOC Regulations

Know the legal restrictions affecting price freedom, i.e., Fair Trade Acts and Unfair Sales Practices Acts

Topic: Fit of a Garment

Objective: Analyze the fit of a garment.
Make recommendations to the wearer to improve the fit of the garment.

Activity:

1. Read the information sheet.
2. Have the model stand in front of class. Use the Checklist.
    a. Check yes or no to identify fit of the garment on the model.
    b. Write suggestions as one would make if one were a sales person selling the garment to the model.
3. Evaluate written suggestions.

INFORMATION SHEET

"WHAT CONSTITUES A GOOD FIT?"

A well-fitted garment:

-adjusts naturally to the movements of the wearer

-is comfortable

-presents a pleasing appearance in harmony with the figure

-contributes to the wearer's sense of will-being

There are five concepts to good or poor fit: grain, line, set, balance, and ease.

GRAIN

This term refers to the lengthwise or crosswise yarns woven in a fabric. The lengthwise yarns should be perpendicular to the floor and the crosswise yarns should be parallel to the floor. A twisting seam, uneven design or stripe are some indications of poor grain.

LINE

In the case of fit, line refers to the construction lines and edges of the garment. Basic seamlines shoulders and sides should follow the general silhouette of the body. The shoulder seam should be at the top of the shoulder. The side seam should appear continuous from tip of ear to the ankle.

SET

Set refers to how the garment appears on the wearer. The garment should set smoothly on the body without undesirable wrinkles.

BALANCE

Balance refers to the symmetry of the garment on the figure. It should hang at equal distances from the body front to back and right and left. The neckline should fit snugly at all points.

EASE

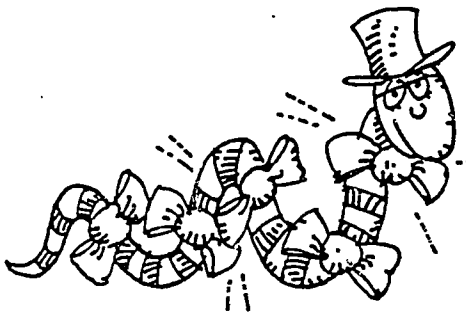
Ease refers to the difference in the actual measurements of the garment and those of the wearer. It is the looseness in a garment for comfort and appearance. There should be enough ease for comfort, but not so much that drooping and sagging occur.

CHECKLIST FOR GARMENT FIT

Directions:

1. Have a student model a garment, assuming that the student is a customer and is interested in buying the garment.
2. Use the checklist below to evaluate the garment.
3. Write suggestions to evaluate the appearance of the garment as a salesperson would do in a store
4. Discuss written suggestions with other classmates.

	YES	NO
1. Do the lengthwise threads appear perpendicular to the floor?		
2. Do the crosswise threads appear parallel to the floor?		
3. Is the shoulder seam at the top of the shoulder?		
4. Do the side seams appear continuous from ear to ankle?		
5. Does the garment set smoothly without wrinkle?		
6. Does the garment appear to hang at equal distance from: front to back? left to right?		
7. Is there any drooping or sagging as a result of too much ease?		
8. Suggestions you would make if you were the salesperson selling the garment to the model.		



Look sharp.

Developed by: Deb Wilson
Western H.S.
Buda, Il.
Summer 1984

Topic: Measuring Fabric and Determining the Cost

Objective: Determine total fabric needed and the cost involved.

Activity:
1. Read the problem posed by the customer in the case study below.
2. Determine amounts of fabric and other materials needed, fill answers in the blanks.

Case Study Working with Customers in a Fabric Store

The customer was making costumes for a school play. The pattern called for 4 2/3 yards for a size 6 pattern and 4 7/8 yards for a size 8. The customer was making three size 6 costumes and two size 7 costumes.

1. The total yardage needed for the five costumes was _____.

The pattern called for ¼ yard of interfacing for each costume.

2. The total yardage needed for the interfacing was _____.

The pattern envelope called for 8 1/3 yards of ribbon for each costume. The customer decided to use red ribbon on three costumes and blue ribbon on the other two.

3. The total red ribbon needed was _____.

4. The total blue ribbon needed was _____.

The repairman was working on the register, therefore the sales clerk had to determine the cost of the purchases and determine the sales tax rather than using the register.

5. Total yardage of fabric _____ x $3.50 per yard = _____

6. Total yardage of interfacing _____ x 1.10 per yard = _____

7. Total yardage or ribbon _____ x .60 per yard = _____

8. Two patterns at $3.25 each _____

9. Thread, two spools at $.79 each _____

10. Total _____

11. 6% tax on total _____

12. Total cost for fabric, notions and tax _____

by: Charlotte Carr
Fall 1984

ANSWERS TO ACCOMPANY
p. 5

1. Three size 6 costumes

   3 x 4 2/3 = 14 yards

   Two size 7 costumes

   2 x 4 7/8 yards = 9 3/4 yards

   Total yardage for 5 costumes = 23 3/4 yards

2. ¼ yard x 5 costumes = 1¼ yards

3. Red ribbon 8 1/3 x 3 = 25 yards

4. Blue ribbon 8 1/3 x 2 = 16 2/3 yards

5. 23 3/4 yards x 3.50 = $83.13

6. 1¼ yards x $1.10 = $1.38

7. 41 2/3 yards x .60 = $25.00

8. $3.25 x 2 = $6.50

9. 2 x .79 = $1.58

10. Total $117.59

    6% tax 7.06

    Total $124.65

Topic: Making a Sale

Objective: Demonstrate techniques for closing a sale.

Directions:

1. Present a five minute demonstration incorporating the techniques for closing a sale.
2. Use the Point of sale performance checklist to evaluate the demonstration, on back of this sheet.

Student's Name _____

Fashion Item _____

POINT OF SALE PERFORMANCE CHECKLIST

	Good	Fair	Poor
1. Help customers to define and otherwise understand their needs, wants and problems			
2. Assist customer in locating the best possible fashion item to meet need by selecting suitable items and showing them willingly, and by explaining just how and why the goods will yield the desired satisfactions.			
3. Demonstrate knowledge of the ways to show or display merchandise to create interest and desire in customers.			
4. Encourage customer to handle or try on merchandise.			
5. Answer customer's questions and objections honestly.			
6. Serve in an educational capacity by acquainting customers with new merchandise developments and by passing on the necessary facts about the proper use and care of the item.			
7. Familiarity with the specific items currently being featured in store's advertising and displays.			
8. Convinced the prospective buyer (you) of a need for immediate satisfaction to prompt action now (buy).			

Developed by: Ann Marie Heneghan, Riverside-Brookfield H.S., Summer 1984

Topic: Preparing New Merchandise for Sale

Objective: Compute price per item
Compute selling price

Activity: Sample

To compute the price per item, divide the total price by the quantity.

Sample Invoice

Item No.	Quantity	Color	Total Price
60785	12	red	$192.00

192 ÷ 12 = $16.00 per item

To complete the selling price multiply the selling price by 2.

16 x 2 = $32.00

Determining the Selling Price

Directions to students: Figure the selling price for lines A through J. Write selling price for each item on answer sheet.

	Item Number	Quantity	Color No.	Total Price
A	612	4	6	$ 20.00
B	735	11	2	140.00
C	389	10	1	200.00
D.	412	6	10	56.00
E	602	12	8	144.00
F	145	36	4	392.00
G	779	8	00	110.00
H	901	24	3	215.00
I	708	3	12	48.00
J	888	9	2	98.00

ANSWER SHEET

A _____

B _____

C _____

D _____

E _____

F _____

G _____

H _____

I _____

J _____

Developed by: Sherri Musick
Southeastern H.S.
Augusta, Il.
Summer 1984

Answers to Accompany

p. 9

	Total Price	Selling Price
A.	$ 20.00	$10.00
B.	$140.00	$25.45
C.	$200.00	$40.00
D.	$ 56.00	$18.67
E.	$144.00	$24.00
F.	$392.00	$21.78
G.	$110.00	$27.50
H.	$215.00	$17.91
I.	$ 48.00	$32.00
J.	$ 98.00	$21.78

Topic: Markdowns

Objectives: Determine markdown on a variety of items.

Activity: Situation: You are working in a store and you have been given instructions to markdown a variety of items.

1. The following are to be marked down 20%. List the markdown price by the original figure. (Round the cents to the nearest whole.)

_____ $79.99	_____ $22.93
_____ $60.49	_____ $12.89
_____ $32.42	_____ $ 9.99

2. The following are to be marked down 30%. List the markdown price by the original figure.

_____ $64.99	_____ $24.68
_____ $51.98	_____ $21.10
_____ $38.98	_____ $ 9.80

3. The following are to be marked down 40% with an additional $10. taken off at the register. List the markdown price including the $10. that would be taken off at the register.

_____ $198.99	_____ $168.98
_____ $184.99	_____ $152.98
_____ $178.98	_____ $130.97

4. List reasons why markdowns are important to the seller and the buyer.

_____

_____

By: Charlotte Carr
Illinois State University
Fall 1984

Answers to Accompany
p. 10

1. 20% markdown

	Original price
$63.99	$79.99
$48.39	$60.49
$25.94	$32.42
$18.34	$22.93
$10.31	$12.89
$ 7.99	$ 9.99

2. 30% markdown

$45.49	$64.99
$36.39	$51.98
$27.29	$38.98
$17.28	$24.68
$14.77	$21.10
$ 6.86	$ 9.80

3. 40% markdown minus $10.

$109.39	$198.99
$100.99	$184.99
$ 97.39	$178.98
$ 91.39	$168.98
$ 81.79	$152.98
$ 68.58	$130.97

4. Possible answers

Important for the Seller

a. encourages customers to buy more because they feel they are getting a bargain

b. encourages more sales, thus increasing profit

c. help sell the merchandise, to allow space for new merchandise which makes a greater profit

Important for the Buyer

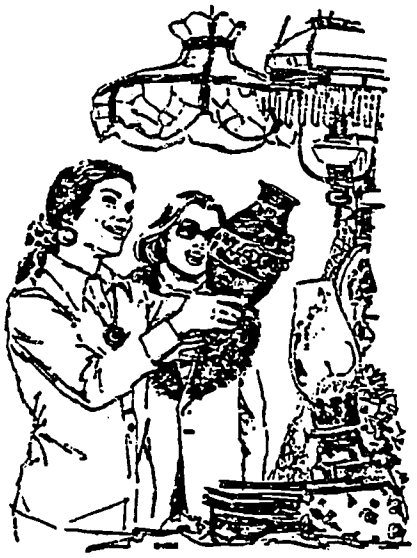
a. allows the consumer to save money.

Topic — Planning and Arranging a Window or Interior Display.

Objectives: Gather materials for a visual display in a window or interior of a store.
Assemble the display
Evaluate the display.

Activity:

1. Draw a sketch of the display
2. Confir with the teacher to plan display. See attached sheet.
3. Use the attached checklist to plan the display.
4. After completing the display, use the checklist to evaluate display.



WINDOW DISPLAY
PERFORMANCE CHECKLIST
(Accessories)

ACTIVITY	POINTS POSSIBLE	STUDENT RATING	TEACHER RATING
The Display:			
1. Attracted attention of others.	3		
2. Included accessories that are current and suitable.	2		
3. Was designed around a theme or purpose.	2		
4. Exhibited principles of design: a. Balance	2		
b. Harmony	2		
c. Proportion	2		
d. Rhythmn	2		
e. Center of Interest	2		
5. Left display area clean and neat; supplies stored.	3		
TOTAL POINTS POSSIBLE	20	TOTAL _____	TOTAL _____

Date Completed: _____

_____

Student Signature

_____

Teacher Signature

Display Planning Sheet

Draw a sketch of the display showing placement of items. Label items.

Materials needed (complete only those needed)

Props:

Merchandise:

Accessories:

Met with student on _____ to go over completed assignment.
Date

Acceptable	Unacceptable

_____
Student Signature

_____
Teacher Signature

Developed by: Shirley Shafer
Kewanee H.S.
Summer 1984

Topic: Communication Skills

Objectives: Analyse Communication Skills
Practice Communication Skills
Identify problems and determine solutions

Directions:
1. Read each of the situations below
2. Role play each situation
3. Answer the questions after role playing each situations

Situation I.

Customer: "I demand my money back. I washed these pants once. Look how the seams have frayed. They are not wearable. I want my cash back."

Salesperson: "Let's look at the care label. It says, 'wash by hand'. Did you wash these by hand?"

Customer: "I always wash everything by machine, who ever heard of washing pants by hand."

Salesperson: "I am sorry, we cannot be responsible for a garment that has not been cared for properly, if this were the manufacturer's fault, I would be happy to refund your money."

Customer: "You are being totally unfair. (Grabs the pants off the counter) Since you won't give my money back, I'll never come back to your store."

Questions

1. Was the salesperson correct in <u>not</u> offering to return the money to the customer? Explain your answer.

2. How would the customer make you feel and how would you have handled the customer?

3. What do you think the real problem in this situation actually was?

Situation II.

Salesperson: (Remains behind the counter ignoring the customer entering the store.)

Customer: "Do you have that top displayed in the window in red?"

Salesperson: "I don't know, look on the rack over there," pointing to the wall, barely looking up from paperwork on the counter.

Customer: "Thank you" and leaves the store.

Questions

1. Describe the kind of communication messages given by the salesperson.

2. If you were the salesperson's boss observing this situation, what kind of discussion would you carry on with this employee?

3. Rewrite a better way for the salesperson to handle the customer.

Situation III.

Boss: "Why did you leave all those boxes in the middle of the floor last night? You know you are to throw away all empty boxes. You are not to leave at the end of the day until your work area is picked up.

Worker: "I'm sorry. Marge called in sick and I spent the entire evening selling. We were so busy, I never got back to the boxes."

Boss: "Just see that this doesn't happen again." (Walks away from the worker)

Questions

1. What would you identify as the problem(s) in this case?

2. Write some better ways that the boss might have communicated with the worker.

3. How might the worker have communicated with the boss to have avoided the situation?

Situation IV.

Salesperson: "Welcome to our store. We have a new line of jeans. I would like to show you."

Customer: "I'm just looking."

Salesperson: "These jeans are so nice. They fit well and have a two year guarantee."

Customer: "I'm just looking."

Salesperson: "See the extra pockets on these jeans, aren't they nice? They are on sale this week only."

Customer: "I'm just looking." (Walks out of the store)

Questions

1. How would you have communicated with the customer if you would have been the salesperson in this situation?

2. If a customer is just looking, what are some other ways that might be communicated to the salesperson?

By: Charlotte Carr
Illinois State University
Fall 1984

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

High Touch in a High Tech Society

Prepared by
Charlotte Carr
Department of Home Economics
Illinois State University

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

Table of Contents

HIGH TOUCH IN A HIGH TECH SOCIETY

Introduction

How this unit fits into the Home Economics Curriculum

The content in this unit can be taught as a separate unit at the middle/junior/senior level or it can be incorporated into existing areas of the curriculum. For example:

DEFINING what high touch means to individuals and families in a high tech society could be used in:

- child care or understanding older people when teaching social development and relationships.

TECHNOLOGY'S contribution to the quality of life for individuals and families may be used

- as an introduction to any unit in child and family, housing and home furnishings, foods and nutrition, clothing and textiles and consumer management.

AWARENESS of and coping with constant changes in a technological society could be included in a unit on understanding oneself on:

- leadership development
- personal relationships on the job.

ANTICIPATING the unknown future could be used in any

- careers unit
- family and child unit.

HIGH TOUCH TECHNIQUES for individuals and families to use to cope with a changing technological society could be used

- when discussing communication skills in any content area.

STRESSES caused from technology on the individual family could be used

- in a foods class when talking about diet, exercise and emotions related to eating patterns.
- when discussing the influence one's values has on an individual in an adult living or parenting class.

PREPARING individuals to work in a technological society could be used in any

- unit on careers within any content area
- HERO class.

HIGH TOUCH IN A HIGH TECH SOCIETY

The learning experiences in this area are designed to help students deal with a constantly changing society as it affects the individual in the home and in the workplace. "Technology and our human potential are the two great challenges and adventures facing human kind today." (Naisbitt, J. Megatrends, New York: Warner Books, Inc. 1982, p. 4.) The individual's background, knowledge, skills, flexibility, and creativity will enable him/her to cope with an unknown future that all of us must be prepared to face. This unknown future that all of us must be prepared to face. This unknown future is being created for us today by humans combined with technology. The individual has the choice of being "run over" by technology, or working with technology and working with other human beings to improve the quality of life.

These are statements of direction that suggest content as well as learning experiences as well as ways to check student performance and achievement.

BROAD AREAS OF EMPHASIS

CLARIFICATION of what high touch means to individuals and families in a high tech society

DEFINITION of term "high tech" (technology)

TECHNOLOGY'S contributions to the quality of life for individuals and families

AWARENESS of and coping with constant changes in a technological society

ANTICIPATING of the unknown future

HIGH TOUCH TECHNIQUES for individuals and families to use to cope with a changing technological society

STRESSES caused by technology on the infidivual and family

PREPARING individuals to work and live in a technological society

I. CLARIFICATION OF WHAT HIGH TOUCH MEANS TO INDIVIDUALS AND FAMILIES IN A HIGH TECH SOCIETY

High tech has crested a need for high touch or a personal value system to compensate for the impersonal nature of technology.

*Examine examples of ways in which high tech contrasts with high touch (teaching activity page 6).

TV has intruded our home life (high tech). Self-help groups were created for more personal relationships (high touch).

High technologies of heart transplants and brain scanners have lead to new interest in family doctors and neighborhood clinics.

Word processors (high technology) in the office have lead to the revival of handwritten notes.

High technology in the medical field, eg. heart transplants and reattachment of severed limbs, has possibly lead to less surgery, more home care for the ill, more births at home and increased primary nursing where a nurse has the responsibility for the total care of a few patients.

*Determine ways in which people respond to high tech

-Tendency to aggregate because people want to be with other people at the movies, at the rock concert or in the shopping mall.

-People may want to work at the place of business rather than at home.

-People tend to use their hands and bodies in leisure and home activities to compensate for brain work used on the job.

-High tech robots in the work place may lead to the organization of quality circles. Quality circles is a system where workers get together to discuss work related problems and solutions.

HIGH TOUCH IS NEEDED IN THE SCHOOLS TO COMPENSATE FOR HIGH TECH IN THE WORLD.

*Determine why decision-making is important in the curriculum

*Determine why it is important to discuss values in relation to work and family life skills

EXAMPLES OF HIGH TOUCH IN THE HOME

*Identify reasons why folk art and country decorating may be ways to humanize a computerized society

*Debate (resolve) the idea that country music has risen in popularity as a response to electronic rock

*Discuss why buying designer labels may indicate a lack of confidence in one's own ability

PEOPLE'S RESPONSES TO HIGH TECHNOLOGY

Liberation can be expected; for example, the invention of a pill to be able to eat fattening food without gaining weight.

Individuals will want to be liberated from personal discipline and responsibility; however, humans will always be responsible for their own actions.

We must study our potential as human beings. One of the greatest high tech challenges that has ever faced mankind is the threat of annihiliation by nuclear warfare.

(This section was summarized from Chapter 2 of Megatrends, by Naisbitt.)

II. DEFINITION OF TERM "HIGH TECH" (technology)

High tech is primarily associated with computer technology. It usually implies industries with high growth, high levels of research and development spending, and a high ratio of scientists and engineers in the work force. It is also the application of new scientific principles to business and industry.

Some examples of high tech products include: robots, computers, electronic games, microwave ovens, single low dose x-rays to examine never-before-seen details about bones and organs, computer programs that are so realistic that they can determine how products, such as cars, will work before the prototypes are built, and a defibrillator, a microcomputer device which senses when a heart is about to stop and sends out commands for small electrical charges to shock it back into activity.

III. TECHNOLOGY'S CONTRIBUTION TO THE QUALITY OF LIFE FOR INDIVIDUALS AND FAMILIES

-improved health care

-increased ability to harness and use energy

-a longer life span

-replacement of manual labor by machines

- advances in mass audio-video and satellite communications

-progress in transportation and methods of travel on land, sea, and in the air

-improved access to knowledge and a generally better educated population

-the ability to manage complex physical and social systems

-increased per capita income

SELECTED TECHNOLOGICAL ADVANCES IN THE CHILD AND FAMILY AREA

*Identify ways in which the elimination of many childhood diseases improves the quality and longevity of life.

*Explain how contraceptive technology has enabled;

-women to have better mental and physical health

-babies to be healthier

-couples to determine the number and spacing of children

-improved psychological health for parents and children

-individuals to pursue careers and combine careers with child rearing

*Identify ways in which improved diagnosis, hospital care, surgical imprvement and nonsurgical methods of working with diseases improve the quality of life.

SELECTED TECHNOLOGICAL ADVANCES IN THE HOUSING AND HOME FURNISHINGS AREA

*Describe ways in which insulation materials and techniques make the equipment or home more efficient and less costly to operate.

*Describe how fabric finishes and synthetic fabrics have made home maintenance easier.

*Identify how the mass production of housing and home furnishings products have made products more available and affordable for the consumer.

SELECTED TECHNOLOGICAL ADVANCES IN THE FOODS AND NUTRITION AREA

*Determine whether foods are safer for human consumption because of the use of additives to prevent spoiling and processes that do not require foods to be refrigerated.

*Compare the amount of time saved and the prevention of waste when using microwave cooking instead of conventional methods.

*Determine whether the fast food industry has enabled more individuals to include breakfast in their daily diet and save time in food preparation.

*Analyze the relationship between the increased availability of information about the nutritional composition of food, improved diets, health, and longevity.

SELECTED TECHNOLOGICAL ADVANCES IN THE CLOTHING AND TEXTILE AREA

*Determine how lives may be saved through the use of flame retardant sleepwear.

*Determine whether time, energy, and money are saved in laundry because of finishes which prevent:

wrinkling

staining

shrinking and stretching

fading and "color running"

*Determine how the mass production of clothing enables consumers to have access to a wide variety of reasonably priced fashionable clothing.

SELECTED TECHNOLOGICAL ADVANCES IN THE CONSUMER AND MANAGEMENT AREA

*Explain ways in which time and energy may be saved in the home and on the job because of:

telephone answering services

easy to care for fabrics

cleaning equipment and small appliances

computers

*Examine how mass communication improves knowledge of products and services

IV. AWARENESS OF AND COPING WITH CONSTANT CHANGE IN A TECHNOLOGICAL SOCIETY (Activity P.

*Identify and analyze changes that have taken place throughout life

*Discuss the statement that change is synonymous with growth, development and learning

*Identify situations that support the following statements:

Changes will occur and will be brought about by

(1) one's perception of the situation

(2) other individual's behaviors and perceptions

(3) new discoveries (technology) making more products and services available

(4) additions and deletions of local, state, and federal laws

*Determine how individuals are more likely to accept change if the individual

feels some involvement in the decision making that is to bring about the change

agrees the change will improve the situation or oneself

believes the change to be within one's value system

feels the proposed change is open to revision during the implementation process

*Examine ways change is brought about

rational (cognitive) approach; if individuals understand why the change is needed, they are likely to change

power-legislative (behavioral); exerting pressures through strikes, freedom marches, rioting or vandalism

re-educative (affective); requires people to clarify and adjust their attitudes and values

*Examine characteristics needed to cope with change

Knowledge- identifying and understanding information

Skills- planning, diagnosing problems, interpersonal relationships, the ability to create climate for growth

Attitudes- openness, willingness commitment. The courage to be different/to take a stand

Honesty- about personal behavior, beliefs

Recognition- accepting the fact that a change is needed

Effort- accepting responsibility, working hard

Time- Change takes time to accomplish

*Interpret a plan of action to bring about change

a. identify goals and objectives

b. identify resources

c. identify potential support and opposition

d. plan action strategies

e. implement the plan

f. evaluate the results

*Examine how change is brought about within the individual as it relates to a technological society

a. first, there is a dissatisfaction with oneself, a feeling of need or that something is missing or needs changing

b. second, a decision is made to change, to fill that feeling of need

c. third, a conscious dedication to bringing about the change, actually doing something about it

V. ANTICIPATING THE UNKNOWN FUTURE

*Explain ways that historical and current trends will help master the future

*Explain why events that happened in the past will not be repeated in exactly the same manner

*Describe how one's attitude will influence how one anticipates the future (Activity p. 18)

*Explain how the following will enable the individual to cope with the future:

ability to revise personal goals when necessary

interest in being a continuing learner

ability to accept change when it is necessary rather than resisting (Activity p. 19)

VI. HIGH TOUCH TECHNIQUES FOR INDIVIDUALS AND FAMILIES TO USE TO COPE WITH A CHANGING TECHNOLOGICAL SOCIETY

High touch is:

taking a personal interest in another person

caring for and about another individual

sharing both positive and negative outcomes with others

listening to one another

making another person feel good about himself/herself (Activity p. 21)

*Explain how the following personal charactersitics lend themselves to increase other individual's feeing of self-worth and productivity on the job:

ability to share information with others

knowledge of how a product works, an understanding of the person and problems involved in the work situation

a continuous desire to learn new ways of dealing with the situation and/or the person

ability to trust others ability to set goals and work toward them

need for vision, courage, and creativity

ability to delegate properly

ability to make sound decisions

(teaching activity, p. 21)

*Examine coping techniques that can be learned and shared with others (teaching activity p. 22)

VII. STRESSES CAUSED FROM TECHNOLOGY ON THE INDIVIDUAL AND FAMILY

*Determine how technology can cause stress in relation to an individual's goals, values, decision making skills, roles at home and on the job, and ability to communicate (teaching activity, p. 26)

*Explain how these potential outcomes of stress can influence one's behavior and productivity at home and on the job (Activity p. 27)

anxiety
tension
headaches
fatigue
irritability
insomnia

*Explain how stress can relate to the individuals mental and physical health

Acute stress (occurs when there is an immediate threat to life, for example: reacting quickly when the car goes into a skid on an icy road. The body produces adrenaline and noradrenaline which decreases reaction time and sharpens the senses.)

Chronic stress (prolonged stress without any rest or recuperation time for the body. The body's reaction is to produce the biochemical, corticoids. While adrenaline and noradrenaline are broken down by the body and eliminated through the kidneys, coricoids remain in the body. They are capable of the likelihood of cardiovascular disease by facilitating the adhering of fats in arteries and veins.)

*Determine how the individual's perceptions of the following can influence stress

-feelings of alienation by institutions
-rejections of heirarchies
-greater desire to understand the irrational
-greater need to control the environment
-"anxiety" about future shock
-increased desire to understand oneself and others
-greater consumer skepticism
-concern about privacy
-growing personal autonomy
-decline of materialism
-more varied lifestyles
-data explosion (more information available)
-demand for participation and self enlightenment
-concern about intrusion and manipulation

*Explain how both positive and negative life experiences can produce stressful reactions and symptoms.

*Develop suggestions for dealing with common stress reactions that relate to the individual's responses to technology

-tolerance, put up with the situation
-diversion, involving the mind and/or body in other activities to achieve a mental or physical break
-withdrawal, removing oneself physically and mentally from the stressful situation; example, running away, getting drunk, or over sleeping
-denial, pretending the situation does not exist
-"going crazy" bizarre behavior in action to the stressful situation
-develop an illness, the corticoids actually wear down reserves of energy and make one susceptible to a wide range of illness (Activity, p.27)

*Practice methods of dealing with stress
(Activity, p. 29)

VIII. PREPARING INDIVIDUALS TO WORK AND LIVE IN A TECHNOLOGICAL SOCIETY

High technology leads to the need for very qualified workers

*Explain why more skillful workers will be needed to maintain and design high tech equipment

*Identify why more brain power will be needed rather than physical labor in the future labor force

Rapid changes brought about by technology increases the need for individuals to be retrained several times in one's lifetime to remain an active member of the work force.

*Determine how and why attitudes toward work and actual work experiences will change during an individual's lifetime

One's contribution to the work force and the satisfactions gained from working depend upon a variety of interrelated skills and behaviors.

*Analyze how the following interrelate and how each contributes to satisfactions both on the job and in the home.

The ability to:

solve problems
adapt to changing conditions
evaluate a problem or situation
communicate with people, both in person and by electronic media
work with technology-new methods, machines and materials
look toward the future without dwelling on the past that will never return
accept change as a challenge rather than as a defect
be self-confident enough to risk and to be spontaneous

Topic: Awareness of and coping with constant change in a technological society

Objectives: "Feel" some of the stresses in a family caused by changing technology
identify suggested methods of handling the problems presented in the skit

Directions:
1. Share the background information
2. Act out the skit by assigning the parts of Mr. George, Mrs. George, Suzy and Bill and present the skit to the class.
3. Divide the class into three groups, one representing fathers, mothers, and children.
4. Have the father, mother, and children groups identify the problems each face and possible solutions presented in the skit.
5. Conclude discussion using the discussion questions following the skit.

SKIT

Background about the George family members

Mr. George has just been promoted in his company. He is now working with very sophisticated equipment and robots to produce products in the factory. He rarely sees other individuals during the day because the robots produce the products. His major problem is boredom of watching the robots. His major challenges occur when a mechanical failure occurs and the robot does not perform properly.

Mrs. George works in the billing department of the hospital. Most of her day is spent working with computers to feed and retrieve information. She is also in charge of dealing with complaints patients have about their bills.

Bill is in the third grade. He rides the bus to and from school. He arrives home one hour before his parents. He lets himself in the house, calls his mother and watches TV until his parents come home.

Suzy is three. Most of her time is spent in day care. Mrs. George drops her off on her way to work and Mr. George picks her up as he comes home earlier than his wife.

SKIT

Mrs. George: (Arriving home from work) Hi. I'm home. I have had a terrible day! I'm beat. The traffic was terrible.

Mr. George: (Shouting) Why are you a half hour late? What's for dinner? The kinds and I are starving.

Mrs. George: I'm late because Mrs. Jones came in just as I was closing. She thought she has more than a $10 over charge on her hospital bill. She insisted that I go over every item on her computer printout, and explain what each meant. It took forever, then she wanted me to write her a check for $10.00 we had over charged. She just couldn't understand that I do not write checks. Checks are electronically printed and mailed. I only prepare the bills.

Bill: (All the time his mom is talking he is trying to get her attention, he constantly interrupts to show his mom the computer assignment he has completed). See the computer program I did today.

Suzy: (Crying constantly because she is tired, hungry and feels ignored).

Mr. George: (Expressed with frustration) If you think your day was bad, wait until you hear about mine. The machine broke down. I could not get the line started again. I tried all day to call New York. No one was in the main office, all I got was a recorded message to leave a message. Then Cleveland called requesting eight new orders. I can't possibly fill ones I have on order now. Just because we have robots, everyone thinks we can produce ten times as much. If only I had someone to talk with.

Mrs. George: I'll send Mrs. Jones over, she loves to talk. Let's heat up the leftover casserole in the microwave. These kids need to be fed. At least we can talk to each other but I don't think we can solve our work problems completely at home.

Discussion Questions

1. Several technologies were affecting the George family. List the ones mentioned in the skit.

2. Were these technologies affecting the family positively or negatively?

3. Do you feel this family was handling the stresses caused at work positively or negatively?

4. What is the function of the family in a technological society?

5. As you think about the future, what technologies do you see that will affect your career and your family life.

Answers to the Discussion Questions

(Technologies identified in the skit)
TV, cars
Computers for
- billings (itemized printouts provided)
- education
- programming the robots
- telephone answering recording devices
- robots
- microwave oven

Topic: Anticipating the unknown future

Objectives: Identify considerations for one's future

Discuss planning for the future

Determine the relationships between one's current and one's future life

Directions:
1. Give each student a copy of the magic window.
2. Have them complete the window by following the directions on the page.

Activity:
1. Analyze the answers the students have written or drawn by discussing the following:
   a. How does your current life style today affect each of the items you have listed?
   b. How will you bring about your future?
   c. Examine what you have written, are these activities that you will do alone or with groups of people?
   d. In what ways do you see technology improving or hindering your future?
2. Have students compare their answers and draw conclusions
   a. How did the answers differ?
   b. Will other individuals influence the achievement of the items stated?

THIS IS MY MAGIC WINDOW

It Allows Me To Look Into My Future

Directions: Draw or write in each of the spaces what you plan to have achieved in each category over the following periods of time:

one year from now

ten years from now

twenty-five years from now

Label responses, 1 for one year, 10 for ten years and 25 for twenty-five years from now

	My Career		My Family
	My Hobbies		My Physical & Mental Health
	My Income		My House

Topic: Anticipating the unknown future

Objective: Explore the relationship between the past and the unknown future.
Explain why happening of the past will not be repeated in the same manner.
Determine how one's attitude will influence how one anticipates the future.

Directions: Read the following situations, write or discuss how each could help the individual anticipate the future.

Situation:

1. Think back to a situation that happened to you in grade school. How did that situation influence you while in high school? Project how you feel these two situations may influence your future.

2. Assume the following. You are a pre-schooler. Your mom has told you what you were to do with the money you received as a birthday gift.

   a. Why will this situation never occur exactly in the same manner in your future?

   b. How would your attitude as a pre-schooler influence your present behavior? In what ways might this attitude continue into adulthood?

3. The following are attitudes expressed by some individuals.

   a. I will do it my way. I don't care what the boss says.

   b. It really doesn't matter, the bureaucrats make all the decisions. I don't count.

   c. I will try anything once.

   d. We did it this way for the last three years; it is good enough for me.

   Explain how individuals with the above attitudes

   a. might view changes in their family and job situations in the future.

   b. are influenced by past experiences and how these will affect their ability to cope in the future.

   c. will help or hinder the individual when anticipating the future.

Topic: Coping techniques that can be learned and shared with others.

Objectives: Analyze and write personal techniques used to handle a variety of situations.

Write or role play coping techniques that might be substituted.

Directions: In the space by each situation, list immediate reactions to the situation and in the other column list methods for improvement, using high touch methods.

Situation	Immediate reaction	Coping skills I could put into practice
1. You are the discussion leader in a class, the class becomes very loud, one individual becomes particularly obnoxious. That individual is taking control of the class. You should...		
2. You just arrived at work. Everything seems to have gone wrong before you arrived. Your boss begins shouting at you. You should...		
3. Your best friend informs you that his/her best friend has been killed in an accident. You should...		
4. Your best friend shared an excellent term paper with you, and asked you to help him/her improve it. You should...		
5. You are in charge of the arrangements for an all school assembly program. The date has been set for one month from today. You should...		

Situation	Immediate reaction	Coping skills I could put into practice
6. You met your friends immediately after the last game of the season. Your friend just blew the team's chance for winning the tournament because he/she missed scoring in the final seconds of the game. You should...		
7. You thought you were successful on the job for three years. Your boss calls you in and informs you that you are no longer needed. You should...		
8. Your parent has worked for the same company for twenty years. The company will close its operation and move it to South America. Your parent will not have a job if he/she is not willing to move. You should...		

Topic: Personal characteristics that lend themselves to increase an individual's feelings of self worth and productivity on the job.

Objectives: Explain how personal characteristics influence others.

Practice using coping techniques with classmaters.

Directions:

1. Cut the characteristics apart and draw one.
2. Explain how you think that characteristic could improve on individual's feeling of self worth and productivity on the job.
3. Share how you would put this characteristic into practice in a family or work situation by role playing.
4. After sharing, have the class determine additional high touch approaches that might be used.

Characteristics

ability to share information with others	knowledge of how a product works an understanding of the person and problems involved in the situation
a continuous desire to learn new ways of dealing with the situation and/or the person	the ability to trust others
need for vision, courage, and creativity	ability to set goals and work toward them
ability to delegate properly	ability to make sound decisions

Topic: High touch for the individual and family to use to cope in a changing technological society.

Objectives: Identify strategies to use to strengthen the family

Practice strategies to strengthen the family

Directions:

1. Read the characteristics of strong families that have been confirmed by research.
2. Complete the "I can" sheet that follows.
3. Select a partner in class. Practice one or more goals by role playing the goal with him/her.
4. Have that individual share how he/she plan to accomplish the same goal.

Six Characteristics of Strong Families

MUTUAL APPRECIATION- These people express a great deal of concern for each other

TIME SPENT TOGETHER- These people find time to work and play together. They enjoy each other's company.

GOOD COMMUNICATION- These people listen. They talk a lot to each other. They bring conflict out in the open.

COMMITMENT- These people invest much time and energy with other family members. They promote one another's happiness and welfare.

RELIGIOUS ORIENTATION- These people share a spiritual lifestyle. They have an awareness of a higher power to help them be more patient, more forgiving and quicker to get over anger.

ABILITY TO DEAL WITH CRISIS- These people manage to see something positive and focus on that positive in the darkest situation.

"I CAN SHEET"

I believe in myself. I can cope as an individual and within a family structure. (In this case family structure means those people you associate with on a daily basis). I belive I can always improve, therefore, I will set the following goals. I will practice them now and will continue to use them in the future.

Directions: beisde each characteristic list five or more specific ways you can put the characteristic to use in your life at home and/or on the job.

Characteristic	My Goals to Accomplish the Characteristic
Mutual Appreciation	
Time Appreciation	
Good Communication	
Commitment	
Religious Orientation	
Ability to Deal with a Crisis	

Topic: Stresses than can be caused from technology

Objectives: Analyze personal feelings related to perceptions individuals have when coping with technology

Determine possible results of individual behaviors caused by technology

Directions: Read each situation
Answer the questions below

Situation I

Computers are taking over the world. The bank, the credit bureau, IRS, Social Security and every major credit card company can have a separate data bank about me. Do they have a right to all that information?

A. Why does each of the insitutions need a data bank on each individual?

B. List technological advances that have made it possible for these institutions to collect and store data about each individual.

C. Explain why you think individuals may or may not have the following feelings:

1. Anxiety about the institutions knowing too much about the individual.

2. A desire to understand "the system".

3. Concern about being manipulated by the institution.

Situation II

It seems like our family is never together anymore. The kids have sports, scouts and music lessons every night after school. When they are home all they want to do is play video games or watch TV. My spouse travels all over the world on business. When at home he/she has a mountain of report writing and reading to do. I can't remember the last time all of us had dinner together and sat around the table to visit with one another like we did when I was growing up.

A. List the technological changes that have made this family differnt from the one the individual remembers as a child.

B. Explain why you think individuals may or may not have the following feelings in this situation.

1. Increased desire to understand oneself and others.

2. A demand for participation and enlightenment.

3. A varied lifestyle.

Topic: Stresses that may be caused by technology influencing the individual and family

Objective: Determine how TV (technology) influences

goals
values
decision-making skills
roles at home and on the job
communication abilities

Identify the types of stress that can result from the "messages" one receives from continuous TV viewing.

Directions: Answer the following questions

1. My favorite TV show is _____.

   a. Explain how each of the following are portrayed in that show.

      Goals

      Values

      Decision-making skills

      Role at home, on the job, and in the family

      Communication skills

   b. Examine what you have written.

      Are your answers consistent with what you believe to be true in your home, school and community?

      If there are differences, identify the types of stress that might result when TV shows one thing and you believe another.

2. TV is considered one of the greatest technological advances in our history.

   a. Explain what you think are the positive and negative effects it has had upon individuals and families.

   b. Explain how TV can create wants in individuals. Explain whether you think these wants can create stress in individuals and families.

Topic: Stresses caused from technology

Objective: Identify positive and negative methods of handling stress.

Evaluate the end results of stressful situations on the individuals.

Directions: 1. Read the situation

2. Read the individual's reactions to the situation

3. Answer the questions

Situation: New computers were being installed in the office. Jake, Sue, Barb, Zack, Vern, and Lil were selected to make the computer system operational for the total division. All had experiences in computer programming but none had been responsible for re-designing a new division within the company. The president had given them two months to get everything ready to go. None of them had worked together before and all of them felt two months was an unrealistic time line to do all the work expected. The following are the individual's reactions to the situation after one month of working 70-80 hour weeks.

Jake has been coming in drunk every morning for the past week. It is often noon before he is ready to work and then he is too fatigues to be cooperative.

Sue has begun doing crazy things. She often can't remember what she has done an hour earlier. Sometimes she sits and laughs and then cries.

Barb is spending more and more time reading ramance novels. She reads herself to sleep at night and keeps a novel hidden in the restroom and finds herself excusing herself to go to the rest room more and more frequently.

Zack has developed migraine headaches that he had never had before. The headaches are so severe that he missed three days of work last week.

Vern does not think a problem exists. He sings as he works, plugging along on some minute detail while the other members nearly go crazy with his singing and his inability to see the problem at hand.

Lil seems more accepting of the situation. She puts up with the computer even when the program doesn't seem to run properly. She keep this is the situation...let's work within it.

QUESTIONS

1. Examine each individual's behavior. What are the positive and negative methods each is using in dealing with the stressful situation?

2. If these individuals continued in their present job, what do you think will happen to each of them?

3. Did you think the computers (technology) caused the stress or were the causes rooted in the individual's perception, or the president's demand that the job be completed in two months? Explain your answer.

4. Of the people described, which behavior would you likely take on if you were in this situation or others like it? Explain your answer.

Topic: Preparing individuals to work in a technological society

Objective: Identify choices the individual has in a changing world

Identify positive and negative approaches the individual may select when coping with the present that influences the future.

Directions: The following short stories describe the coping behaviors of some individuals.

1. Read each short story and place the number of the persen in the box that best describes the persons behavior.

2. Describe why you placed the person in each box.

3. Writewhat you think will happen to that person in the future if the present behavior continues.

4. Write the answer to the questions.

(This activity like life has several possible answers of alternatives. Some alternatives are better than others. In this activity you are expected to explain why you answered as you did.)

SHORT STORIES

Person 1. This person has become a secretary. His/her teacher said he/she had the ability to become a secretary. On the job he/she does everything he/she is told to do. He/she lives at home and his/her mom helps select what to wear to work and is helping him/her buy a car.

Person 2. This person has not decided on a career goal. He/she has tried courses in computer science, nursing, art, and history. All seem fund and interesting. He/she has decided to take whatever job comes along upon graduation.

Person 3. This person has always wanted to become a buyer for the toy store he/she has worked at since high school. He/she has decided to take courses at the local community college upon graduation. He/she has been talking with other workers in the mall to see how their store operates.

ACTIVITY SHEET

Someone once said, there are three kinds of people,
those that let it happen,
those that make it happen,
those that wonder what happened.

THOSE THAT LET IT HAPPEN

Person number ____
Describe why you think this person let things happen.

What do you think will happen to this person next year, 5 years from now, and 10 years from now if this behavior continues?

THOSE THAT MAKE IT HAPPEN

Person number ____
Describe why you think this person makes things happen.

What do you think will happen to this person next year, 5 years from now, and 10 years from now if this behavior continues?

THOSE THAT WONDER WHAT HAPPENED

Person number ____
Describe why you think this person wonders what happens

What do you think will happen to this person next year, 5 years from now, 10 years from now if this behavior continues?

QUESTIONS TO ANSWER

1. Of the three people, describe who would you classify as most successful? Why?
2. Which person do you think would be most happy throughout life? Why?
3. If you were selecting a marriage partner, which individual would you consider? Why?
4. What relationships do you see between personal life, job life, and the future?

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

Quality Indicators

Prepared by
Mildred B. Griggs
University of Illinois

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University Tina Escobar, Graduate Assistant, University of Illinois
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

Introduction

Home Economics has long been an important part in the instructional program of Illinois schools. In order for it to remain vital, it is necessary to assess the conditions associated with home economics programs to determine if they are conducive to meeting the needs of students enrolled in the programs.

The quality indicators in this booklet were derived mainly from the Standards For Vocational Home Economics Education, U.S. Department of Education, Office of Vocational and Adult Education, 1981. They were designed to be used to assess the following program components: instructional staff; curriculum; instructional program; program philosophy; advisory council, administrative/supervisory staff; and funding.

The evaluative statements under each component are suggested criteria by which to assess programs.

Prepared by: Mildred B. Griggs
University of Illinois

Project Co-directors:
Mildred B. Griggs
Division of Home Economics
Department of Vocational & Technical Education
University of Illinois
Urbana-Champaign, Illinois

Charlotte Carr
Department of Home Economics
Illinois State University
Normal, Illinois

Illinois State Board of Education
Home Economics Consultants:
Susan P. Burge
Catherine A. Carter

Consultants: Betty J. Church
Bradley University

Betty J. Church
Southern Illinois University

Barbara Owens
Eastern Illinois University

Marian Swisher
Western Illinois University

Tina Escobar
Graduate Assistant
University of Illinois

QUALITY INDICATOR TOPIC 1

INSTRUCTIONAL STAFF

The statements contained within this topic relate to the people who constitute the vocational home economics program instructional staff. This topic is concerned with the staff's qualifications, skills, abilities, practices and professional behavior.

QUALITY FEATURE STATEMENT
The instructional staff has sufficient education, experiences and professional commitment to provide high quality educational experiences to all learners.

1. Qualifications
The instructional staff meets the minimum qualifications listed in The Illinois Program for Evaluation, Supervision, and Recognition of Schools, State Board of Education, Document 1, 1980, p. 33.

1.1 The instructors have a minimum of a bachelors degree. ∇ 0 Δ

1.2 The instructors hold a valid teaching certificate for the teaching assignment. ∇ 0 Δ

1.3 The instructor has adequate college preparation in the area being taught. The instructor has a minimum of 2000 hours work experience in the occupational area being taught. ∇ 0 Δ

1.4 Teachers' educational background are sufficient to enable them to do the following:

1.41 Use teaching and classroom management techniques which assist in creating a positive learning environment. ∇ 0 Δ

1.42 Teach heterogenous groups of diverse students, such as those with varying abilities, the disadvantaged, those with handicapping conditions, those from economically depressed areas or areas of high unemployment and cultural differences. ∇ 0 Δ

1.43 Work with parents and guardians to meet students needs and improve curriculum. ∇ 0 Δ

1.44 Interpret and influence local, state and national legislation and policies that affect vocational home economics. ∇ 0 Δ

Needs Improvement ∇ Satisfactory 0 Excellent Δ

1.45 Supervise student teachers. ∇ O Δ

1.46 When outreach offerings are part of the program: assessing community needs; organizing, managing and evaluating program offerings. ∇ O Δ

1.47 Understand the history and philosophy of vocational education and home economics education. ∇ O Δ

1.48 Integrate FHA/HERO into the program of the secondary level and professional home economics education student organizations into post-secondary programs. ∇ O Δ

1.49 Eliminate sex and culture bias and stereotyping. ∇ O Δ

1.50 Address current and future societal concerns. ∇ O Δ

1.51 Assist students in planning and conducting extended learning experiences beyond the classroom. ∇ O Δ

1.52 Promote the program through public relations. ∇ O Δ

1.53 Form and use advisory councils. ∇ O Δ

1.54 Teach basic skills (reading, writing, computation) in content area. ∇ O Δ

1.55 Evaluate learners, courses, programs and instruction ∇ O Δ

1.56 Use technological innovations (e.g. computers). ∇ O Δ

2. Instructional Management

2.1 The staff organizes and uses an advisory council. ∇ O Δ

2.2 The staff maintains a file of departmental records. ∇ O Δ

2.3 The staff meets deadlines when completing and filing reports. ∇ O Δ

2.4 The staff prepared a statement of philosophy that serves as a guide for subsequent decisions. ∇ O Δ

2.5 The staff makes prioritized yearly recommendations for the purchase of equipment, terials and supplies. ∇ O Δ

2.6 The staff maintains a cur[illegible] inventory of instructional supplies, material and equipment. ∇ O Δ

2.7 The staff has policies regarding student behavior and uses discipline techniques conducive to student learning and safety. ∇ O Δ

2.8 When necessary, the staff maintains files for present and former students and conducts follow-up studies. ∇ O Δ

2.9 When appropriate, the staff can provide instruction in cooperation with other school personnel or community agencies for learners of various age, ability and grade levels. ∇ O Δ

3. Public Relations

3.1 The staff interprets the vocational home economics education program to persons in various educational business/industry, community, policy making positions using a variety of techniques. ∇ O Δ

4. Continuing Education

4.1 Instructional staff regularly participates in at least one college course, in-service activity workshop, or other educational activity related to home economics education or education at level of staff position. ∇ O Δ

4.2 Staff joins professional associations, attends meetings, and reads professional literature. ∇ O Δ

4.3 Staff takes college courses relating to consumer and homemaking education, vocational education, teacher education or specific home economics related occupations during each three year period of employment to update professional and technical knowledge. ∇ O Δ

5. Professional Conduct

5.1 The instructional staff:

5.11 Adheres to local, state and national codes of ethics for vocational home economics educators and the education profession. ∇ O Δ

5.12 Communicates and cooperates with persons in the community (parents, business people, etc., as well as with persons in the school and school district. ∇ O Δ

5.13 Participates in school and community activities additional to those related to the teaching assignment directly. ∇ O Δ

5.14 Follows established lines of authority in expressing needs or concerns. ∇ O Δ

5.15 Maintains annual membership in at least one professional home economics organization. ∇ O Δ

5.16 Attends meetings of at least one such organization every three years. ▽ 0 △

5.17 Participates actively in professional organizations. ▽ 0 △

6. 6.1 The instructional staff:

6.11 Assists in developing and revising local curriculum based on state and national guidelines. ▽ 0 △

6.12 Uses local curriculum guides and policies. ▽ 0 △

6.13 Adapts instruction to meet needs of all students. ▽ 0 △

6.14 Organizes and/or advises FHA/HERO chapter or vocational home economics education student organization chapter as an integral part of the instructional program. ▽ 0 △

6.15 Initiates and makes parent/guardian contacts. ▽ 0 △

6.16 ssists students in planning and conducting extended learning beyond classroom. ▽ 0 △

6.17 Promotes articulation of vocational home economics education program offerings. ▽ 0 △

6.18 Serves on committee and participates in meetings or conferences in which students with special needs are reviewed for admission and dismissal from each program offering in order to facilitate their learning, (eg. IEP conferences). ▽ 0 △

6.19 Initiates and makes business and industry contacts for occupational programs. ▽ 0 △

6.20 Assumes responsibility for planning, organizing, and conducting instruction.

QUALITY INDICATOR TOPIC 2
CURRICULUM

The statements contained within this topic relate to the curriculum for consumer and homemaking and occupational home economics programs. These statements focus upon the bases for curriculum decisions and the aspects of the education process: objectives, content and techniques for teaching and evaluation.

QUALITY FEATURE STATEMENT
Written curriculum exists for each course that is taught in the home economics program.

1. Curriculum Content

1.1	The curriculum includes the following:	∇ O Δ
1.11	Concepts and generalization appropriate for the level of the course and needs of the students.	∇ O Δ
1.12	Cognitive, affective and psychomotor objectives at the appropriate levels.	∇ O Δ
1.13	Objectives that state learner outcomes.	∇ O Δ
1.14	A variety of teaching techniques.	∇ O Δ
1.15	Techniques that help students acquire skills in thinking and acquiring and evaluating information.	∇ O Δ
1.16	Techniques that help students acquire life skills and attitudes needed to succeed in contemporary society.	∇ O Δ
1.17	A plan for continuous student evaluation.	∇ O Δ
1.18	FHA/HERO activities at the secondary level and other vocational home economics student organization activities at the post secondary level as an integral part of the course.	∇ O Δ
1.19	Learning experiences that extend beyond the classroom and school.	∇ O Δ
1.20	Content that prepares male and female students for the occupation of homemaking, for a home economics related occupation and/or post secondary education in a related area.	∇ O Δ
1.21	Content on occupational health and safety.	∇ O Δ
1.22	Experiences which make students aware of or help them develop employability skills.	∇ O Δ

Needs Improvement ∇ Satisfactory O Excellent Δ

1.23 Objectives, content and learning experiences that are free of sex and culture bias and stereotyping. ∇ O Δ

2. Curriculum Modification and Adaptation

2.1 Whenever appropriate, the curriculum is modified to accommodate the unique needs of students such as:

2.11 Students with various ability levels. ∇ O Δ

2.12 Students with handicapping conditions. ∇ O Δ

2.13 Students identified as being from economically depressed areas or areas with high rates of unemployment. ∇ O Δ

2.14 Students identified as disadvantaged. ∇ O Δ

2.15 Students from various cultures ∇ O Δ

3. Curriculum Implementation

3.1 A variety of teaching techniques are used, including group and individual instruction. ∇ O Δ

3.2 Techniques and resources used are free of culture and sex bias and stereotyping. ∇ O Δ

3.3 Curriculum is implemented through FHA/HERO chapter or vocational home economics education student organization chapter activities and projects. ∇ O Δ

3.4 When outreach programs exist, the curriculum is implemented such that learning opportunities are extended into the community when need for such a program has been established. ∇ O Δ

3.5 A variety of audio-visual and commuter resources are used. ∇ O Δ

3.6 A variety of printed resources are used. ∇ O Δ

3.7 Textbooks and aides are provided at a variety of reading levels. ∇ O Δ

3.8 A variety of community resources, such as guest speakers, field trips, appropriate representatives from business/ industry are used. ∇ O Δ

4. Curriculum Evaluation

4.1 There is frequent, indepth evaluation of curriculum and course offerings. ∇ 0 Δ

4.2 Evaluation data serve as a basis for continuing, revising or eliminating courses and curricula. ∇ 0 Δ

4.3 Evaluation data be sought from a variety of sources, eg. students, parents, advisory committee, representatives from business and industry. ∇ 0 Δ

QUALITY INDICATOR TOPIC 3

INSTRUCTIONAL PROGRAM

The instructional program is defined as Consumer and Homemaking Education or Occupational Home Economics Education. They prepare students for the occupation of homemaking and for employment in occupations using home economics concepts and skills. Sequential programs are planned to prepare males and females for entering the work of the home, combining the roles of homemaker and wage earner, and developing skills for occupations utilizing competencies related to one or more of the subject matter areas of home economics. The subject matter areas are:

Clothing and Textiles

Consumer Education/Resource Management

Foods and Nutrition

Housing, Home Furnishings and Equipment

Human Development, Interpersonal and Family Relationships

Courses at the orientation level introduce students to all areas of home economics and serve as a background for all vocational home economics programs. An orientation course is offered when students enter the ninth grade without a background in home economics. This course is typically a year in length. In Local Education Agencies (LEA) where students have this type of course before entering secondary school, subject matter courses are offered. All programs include learning experiences designed to prepare individuals with life skills as well as occupational skills and/or for related continued education. Sequential programs in the various clusters have been identified and defined as follows:

Secondary Programs

(20.0101) Occupation of Homemaking
(20.0201) Child Care and Guidance Management Services
(20.0301) Clothing, Apparel, and Textiles Management, Production, and Services
(20.0401) Food Production, Management, and Services
(20.0501) Home Furnishings and Equipment Management, Production, and Services
(20.0601) Institutional, Home Management, and Supporting Services
(20.0602) Companion to the Aged
(20.0306) Fashion/Fabric Coordination

Interdisciplinary - Home Economics and Marketing

(08.0101) Apparel and Accessories Marketing
(08.0801) Home Furnishings Marketing
(08.0901) Hospitality Marketing

Local districts may offer one or more of the preceding programs.

Future Homemakers of America (FHA-HERO Chapters) is the official vocational student organization for all secondary home economics programs. The objective of the

organization is to assist students in developing personal leadership, citizenship, and occupational knowledge and skills for personal, family and community living and employment through vocational home economics education programs. Activities focus on individual growth, preparation for family life, development of occupational skills and careers, and participation of students in today's society and are an integral part of the program. Post secondary students are expected to join professional organizations such as the American Home Economics Association.

These programs are planned to meet the intent of the Vocational Education Act of 1963 as amended by Title II of the Education Amendments of 1976, Public Law 94-482 and the Illinois State Board of Education "Rules and Regulations for the Administration of Vocational Education Programs."

QUALITY FEATURE STATEMENT
The instructional program is designed to meet the needs of students, the labor market, and to repond to federal legislation.

1. Course Offerings

   1.1 Courses are offered at all approrpiate grade and educational levels: elementary, middle school/junior high, high school, postsecondary and adult. ∇ O Δ

   1.2 Sufficient instructional time is allocated to insure students mastery of the content. ∇ O Δ

   1.3 Courses meet frequently enough to ensure continuity, integration and transfer of content. ∇ O Δ

2. Staff

   2.1 Sufficient number of qualified teachers are employed to meet student needs and maintain course offerings in each program. ∇ O Δ

   2.2 A person is designated program administrator and charged with the responsibility for coordinating the instructional activites and maintaining records, budget and other managerial tasks. ∇ O Δ

   2.3 Time is allocated for staff to fulfill their assigned responsibilities: management, supervision, instructional planning. ∇ O Δ

3. Population Served

   3.1 Program is accessible to all who meet the prerequisites established by local and state education agencies including:

      3.11 Males and females. ∇ O Δ

      3.12 Students of various abilities and cultures. ∇ O Δ

      3.13 Those with handicapping conditions who qualify and will benefit from offerings. ∇ O Δ

Needs Improvement ∇ Satisfactory O Excellent Δ

3.14 Those identified as disadvantaged ∇ O Δ

3.15 Those identified as coming from economically depressed areas, or areas with high unemployment ∇ O Δ

3.16 School age parents (all levels) ∇ O Δ

3.2 Adult programs are also accessible to persons in correctional institutions, those referred by the courts, aged persons, and persons served by programs connected with the health care delivery system.

4. Class Size

4.1 Class Size is appropriate for each teaching/learning situation. ∇ O Δ

4.2 The number of students does not exceed number for which setting is designed and equipped. ∇ O Δ

4.3 The number of students does not exceed number for which instructional supplies and materials are provided. ∇ O Δ

4.4 The number of students in each offering does not exceed number the teacher can effectively instruct and safely supervise. ∇ O Δ

5. Program Evaluation

5.1 Program evaluated at least every three years. ∇ O Δ

5.2 Program is evaluated by the vocational home economics education staff and the advisory council. ∇ O Δ

5.3 Local and State plans for vocational education are used as basis for the evaluation. ∇ O Δ

5.4 Local, State and National Standards for vocational home economics education programs are used in evaluation. ∇ O Δ

5.5 Program revisions are made when the need is indicated by evaluation results. ∇ O Δ

6. Program Development

6.1 The program development is based on data and input from a variety of sources including: ∇ O Δ

5.11 Local, state, and national occupational home economics education or consumer and homemaking education curriculum materials. ∇ O Δ

5.12 The advisory council. ∇ O Δ

5.13	The perceived needs, interests, and abilities of students.	∇ O Δ
5.14	The current and future needs of society.	∇ O Δ
5.15	Students, former students, and parents/ gardians of students.	∇ O Δ
5.16	Follow-up data from students and employers.	∇ O Δ
5.17	Data from student progress evaluations.	∇ O Δ
5.18	Teachers, counselors, and administrator/ supervisors.	∇ O Δ
5.19	Information about current and projected employment opportunities.	∇ O Δ
5.20	Task analyses.	∇ O Δ

QUALITY INDICATOR TOPIC 4

PROGRAM PHILOSOPHY

The statements contained within this topic relate to the home economics program philosophy. They address the consumer and homemaker and the occupational home economics programs. A philosophy is a written statement which contains the fundamental beliefs of a profession and reflects a value system of that profession. It serves as a foundation and farmework for all instructional and related aspects of the program. It should be available upon request to all who are interested and specifically distributed to school staff, school boards and members of the advisory committee.

QUALITY FEATURE STATEMENT
A current, comprehensive written philosophical statement is available and there is evidence that it influences program and staffing discissions.

1. Development

   A philosophical statement about the role and purpose of home economics in the school exists.

   1.1 The statement was developed by program staff (teachers administrators and supervisors) with suggestions from the advisory committee. ∇ O Δ

   1.2 The statement is reviewed every three years by staff and advisory committee. ∇ O Δ

   1.3 The statement is revised by the staff whenever it is needed. ∇ O Δ

2. The philosophy statement:

   2.1 Includes the program purpose/rationale. ∇ O Δ

   2.2 Reflects current focus of the field. ∇ O Δ

   2.3 Reflects current legislative intent. ∇ O Δ

   2.4 Is consistent with other philosophies of education that affect the program. ∇ O Δ

   2.5 Reflects needs of students, and current societal conditions. ∇ O Δ

3. Use of philosophy statement

   3.1 The statement is used:

      3.11 To determine program purpose and goals. ∇ O Δ

      3.12 As a basis for curriculum plans, implementation, ∇ O Δ

      3.13 To develop job descriptions for instructional, administrative and supervisory staff. ∇ O Δ

QUALITY INDICATOR TOPIC 5
ADVISORY COUNCIL

The statements contained within this topic are related to the advisory council. An advisory council is an organized group of persons, usually outside the education setting, chosen to provide advice and other forms of assistance to the vocational home economics education staff.

It is composed of a minimum of five male and female community and staff representatives. Staff representatives generally serve as ex-officio members. Its members are selected or recommended by vocational home economics education staff, and approved and invited to serve by an appropriate administrator.

QUALITY FEATURE STATEMENT
An advisory council is available and there is evidence that it plays an active role in advising the program staff, administrators, school board and others about student and community needs and how they can best be met.

1. Council Responsibilities

   1.2 The council makes recommendations to the home economics staff concerning:

      1.21 Education and employment needs of the community ∇ O Δ

      1.22 Instructional program ∇ O Δ

      1.23 Budgetary matters ∇ O Δ

      1.24 Selection and maintenance of equipment ∇ O Δ

      1.25 Training stations and employment opportunities for students enrolled in programs. ∇ O Δ

2. Public Relations Activities

   2.1 The advisory council provides assistance in the following:

      2.11 Interpreting program to other vocational groups and education personnel. ∇ O Δ

      2.12 Interpreting program to persons within the community and to policy makers. ∇ O Δ

      2.13 Publicizing the vocational home economics education program. ∇ O Δ

3. Council Operating Procedure

   3.1 The council meets at least twice a year. ∇ O Δ

3.2 The council elects its own officers including a chairperson and a secretary. ∇ O Δ

3.3 An agenda is prepared, distributed in advance, and followed at each meeting. ∇ O Δ

3.4 Minutes are taken at each meeting and available to the members. ∇ O Δ

3.5 An open file of minutes and other documents are kept in the school. ∇ O Δ

QUALITY INDICATOR TOPIC 6
ADMINISTRATIVE AND SUPERVISORY STAFF

The primary job of the administrative and supervisory staff is to administer and supervise the instructional program and staff, coordinate school/community services and related activities, and provide general program leadership and staff development.

QUALITY FEATURE STATEMENT
There is a person(s) designated as administrator or supervisor of the vocational home economics program. This person's role and channel of communication are clearly defined.

1. Qualifications of Administrator/Supervisor

1.1 Minimum qualifications for a program administrator are:

1.11 A masters degree in administration, vocational education, or home economics. ∇ O Δ

1.12 General supervisory endorsement. ∇ O Δ

1.13 Three years teaching experience. ∇ O Δ

1.14 Experience advising FHA-HERO or some other student organization. ∇ O Δ

1.2 Academic preparation for and ability to:

1.21 Develop and administer instructional programs that are free of culture and sex bias and stereotyping that meet diverse student needs. ∇ O Δ

1.22 Initiate and direct programs which address current and future societal needs. ∇ O Δ

1.23 Manage the financial aspects of a program. ∇ O Δ

1.24 Provide leadership for promoting vocational home economics education through public relations activities. ∇ O Δ

1.25 Direct the formulation and use of advisory councils. ∇ O Δ

1.26 Interpret legislation and policy relevant to programs. ∇ O Δ

1.27 Plan, conduct and evaluate appropriate staff in-service programs. ∇ O Δ

1.28 Plan, develop, implement and evaluate vocational home economics education curriculum. ∇ O Δ

1.29 Supervise personnel. ∇ O Δ

1.30 Plan and design facilities and select equipment. ∇ O Δ

2. Responsibilities of Administrator/Supervisor

2.1 Coordinates the organization and use of advisory council and FHA/HERO or other vocational home economics education student organization at post secondary level. ∇ O Δ

2.2 Facilitates the development of program philosophy and the articulation of instructional programs among the educational levels and program offerings. ∇ O Δ

2.3 Directs the development and implementation of curriculum based on student needs and state guidelines and policy. ∇ O Δ

2.4 Manages the financial aspects of program and the planning, implementation, evaluation of staff in-service. ∇ O Δ

2.5 Develops and implements reporting procedures. ∇ O Δ

2.6 Verifies the accuracy and completeness of reports, and maintains files of program records and reports. ∇ O Δ

2.7 Meets deadlines for completing and filing of reports. ∇ O Δ

2.8 Assists in planning facilities.
Recommends equipment purchase; staff employment, annual and five year program plans. ∇ O Δ

2.9 Establishes a public relations program directed at educators, policymakers and community people. ∇ O Δ

3. Professional Conduct of Administrator/Supervisor

3.1 Adheres to formal code of ethics for educators and the profession. ∇ O Δ

3.2 Communicates and cooperates with those in the education system and the community. ∇ O Δ

3.3 Follows established lines of authority. ∇ O Δ

3.4 Updates professional and technical knowledge in vocational home economics education or administration by attending at least one college course, in-service, workshop, seminar, etc. yearly. ∇ O Δ

3.5 Reads professional literature. ∇ O Δ

3.6 Attends meetings of at least one vocational education professional organization each year. ∇ O Δ
Maintains membership in and participates actively in professional organizations related to home economics, and administration/supervision by attending meetings or serving in some capacity. ∇ O Δ

QUALITY INDICATOR TOPIC 7

FUNDING

Funding refers to the financial support provided by local, state and/or federal sources to conduct the vocational home economics programs.

QUALITY FEATURE STATEMENT
Funding is sufficient to support the instructional program, to provide adequate equipment and facilities and to support staff salaries and in-service education for staff.

1. Funds for Salaries

   1.1 Money adequate to pay necessary number of instructional, administrative and supervisory staff. ∇ O Δ

   1.2 Payment for staff time beyond regular school hours or academic year when duties require extended hours. ∇ O Δ

   1.3 Compensatory time, or released time with pay for authorized continuing education activities. ∇ O Δ

   1.4 Salaries of substitute instructional staff which allows instructors to participate in authorized continuing education activities. ∇ O Δ

   1.5 Money for the employment of teacher aides/paraprofessionals when number or nature of students dictates. ∇ O Δ

2. Funds for Instructional upport Activities

   2.1 Staff Travel (including transportation and per diem according to state and local guidelines). ∇ O Δ

      2.11 Travel associated with specific course offerings (such as supervising students and selecting materials). ∇ O Δ

      2.12 Supervision of FHA/HERO or vocational home economics student organization chapters at local, district/area, state and national levels. ∇ O Δ

      2.13 Transportation of staff to workshops, seminars, training programs on local, regional, state, or national level. ∇ O Δ

      2.14 Travel of administrative/supervisory staff in order to assist and supervise staff. ∇ O Δ

   2.2 Transportation of students to activities which contribute to instructional objectives.

      2.21 Appropriate field trips. ∇ O Δ

2.22 FHA/HERO activities, and/or vocational home economics student organization chapters when accompanied by authorized staff. ∇ O Δ

3. Facilities, equipment, supplies, and other resources.

3.1 Classrooms to accommodate class size assigned to offerings. ∇ O Δ

3.2 Laboratories which accommodate class size assigned. ∇ O Δ

3.3 Facilities which insure safety. ∇ O Δ

3.4 Provision of office and work space for teachers, administrators and supervisory staff. ∇ O Δ

3.5 Storage space in department or classroom for instructional equipment. ∇ O Δ

3.6 Buildings and structures that are accessibile to handicapped students and staff. ∇ O Δ

3.7 Budget for materials, supplies, printing, telephone, and postage which contribute to teaching/learning. ∇ O Δ

3.8 Textbooks, film, records, tapes, microcomputer software and other instructional material. ∇ O Δ

3.9 Equipment and supplies to use in direct instruction. ∇ O Δ

Addendum to 1982 Illinois Vocational
Home Economics Curriculum Guide

RECOMMENDATIONS OF THE STATE SUPERINTENDENT

STATE BOARD OF EDUCATION POLICY ON THE DEFINITION OF SCHOOLING and THE STATE'S EXPECTATIONS FOR STUDENT LEARNING

RECOMMENDATIONS OF THE STATE SUPERINTENDENT

STATE BOARD OF EDUCATION POLICY ON
THE DEFINITION OF SCHOOLING
and
THE STATE'S EXPECTATIONS FOR STUDENT LEARNING

The State Board of Education should adopt the following policy regarding the definition of schooling and the state's expectations for student learning:

As a demonstration of its concern for developing individual self-sufficiency in its citizens and also inculcating the habits of thought and action necessary for its youth to effectively participate in a modern democratic society with global concerns and responsibilities, the State of Illinois should adopt and place in law the following points.

I. The state, as the level of government having the responsibility of defining requirements for elementary and secondary education, hereby establishes that the primary purpose of schooling is the transmission of knowledge and culture through which children learn in areas necessary to their continuing development. Such areas include the language arts, mathematics, the biological and physical sciences, the social sciences, the fine arts, and physical development and health.

II. Each local school district will be required to establish learning objectives for its students which are consistent with general learning statements prescribed in state law; develop appropriate testing and other assessment systems for determining the degree to which such objectives are being achieved; and report to its community and to the state the results of such assessments, indicating what appropriate alterations in programming are occurring in the event that suitable results are not being achieved.

III. The state hereby establishes the following learning outcomes in each primary area as those to be addressed by local school districts in establishing instructional objectives and assessment systems. In pursuing knowledge in these fundamental areas, students must develop an understanding of the interrelationships of knowledge; develop skills in the use of electronic and other applicable technology; and develop their ability to gather, evaluate and synthesize information from a variety of sources.

LANGUAGE ARTS

The skills and knowledge of the language arts are essential for student success in virtually all areas of the curriculum. They are also a central requirement for the development of clear expression and critical thinking. The language arts include the study of literature and the development of skills in reading, writing, speaking, and listening.

As a result of their schooling, students will be able to:

-- read, comprehend, interpret, evaluate and use written material;

-- listen critically and analytically;

-- write standard English in a grammatical, well-organized and coherent manner for a variety of purposes;

-- use spoken language effectively in formal and informal situations to communicate ideas and information and to ask and answer questions;

-- understand the various forms of significant literature representative of different cultures, eras and ideas;

-- understand how and why language functions and evolves.

MATHEMATICS

Mathematics provides essential problem solving tools applicable to a range of scientific disciplines, business, and everyday situations. Mathematics is the language of quantification and logic; its elements are symbols, structures, and shapes. It enables people to understand and use facts, definitions, and symbols in a coherent and systematic way in order to reason deductively and to solve problems.

As a result of their schooling, students will be able to:

-- perform the computations of addition, subtraction, multiplication, and division using whole numbers, integers, fractions and decimals;

-- understand and use ratios and percentages;

-- make and use measurements, including those of area and volume;

-- identify, analyze and solve problems using algebraic equations, inequalities, functions and their graphs;

-- understand and apply geometric concepts and relations in a variety of forms;

-- understand and use methods of data collection and analysis, including tables, charts and comparisons;

-- use mathematical skills to estimate, approximate and predict outcomes and to judge reasonableness of results.

BIOLOGICAL AND PHYSICAL SCIENCES

Science is the quest for objective truth. It provides a conceptual framework for the understanding of natural phenomena and their causes and effects. The purposes of the study of science are to develop students who are scientifically literate, recognize that science is not value-free, are capable of making ethical judgments regarding science and social issues, and understand that technological growth is an outcome of the scientific enterprise.

As a result of their schooling, students will have a working knowledge of:

-- the concepts and basic vocabulary of biological, physical and environmental sciences and their application to life and work in contemporary technological society;

-- the social and environmental implications and limitations of technological development;

-- the principles of scientific research and their application in simple research projects;

-- the processes, techniques, methods, equipment and available technology of science.

SOCIAL SCIENCES

Social sciences provide students with an understanding of themselves and of society, prepare them for citizenship in a democracy, and give them the basics for understanding the complexity of the world community. Study of the humanities, of which social sciences are a part, is necessary in order to preserve the values of human dignity, justice, and representative processes. Social sciences include anthropology, economics, geography, government, history, philosophy, political science, psychology and sociology.

As a result of their schooling, students will be able to:

-- understand and analyze comparative political and economic systems, with an emphasis on the political and economic systems of the United States;

-- understand and analyze events, trends, personalities, and movements shaping the history of the world, the United States and Illinois;

-- demonstrate a knowledge of the basic concepts of the social sciences and how these help to interpret human behavior;

-- demonstrate a knowledge of world geography with emphasis on that of the United States;

-- apply the skills and knowledge gained in the social sciences to decision-making in life situations.

FINE ARTS

The fine arts give students the means to express themselves creatively and to respond to the artistic expression of others. As a record of human experience, the fine arts provide distinctive ways of understanding society, history and nature. The study of fine arts includes visual art, music, theatre and dance.

As a result of their schooling, students will be able to:

-- describe the unique characteristics of each of the arts;

-- understand the principal sensory, formal, technical and expressive qualities of each of the arts;

-- identify significant works in the arts from major historical periods and how they reflect societies, cultures and civilizations, past and present;

-- identify processes and tools required to produce visual art, music, theatre and dance;

-- demonstrate the basic skills necessary to participate in the creation and/or performance of one of the arts.

PHYSICAL DEVELOPMENT AND HEALTH

Effective human functioning depends upon optimum physical development and health. Education for physical development and health provides students with the knowledge and attitudes to achieve healthful living throughout their lives and to acquire physical fitness, coordination and leisure skills.

As a result of their schooling, students will be able to:

-- understand the physical development, structure and functions of the human body;

-- understand principles of nutrition, exercise, efficient management of emotional stress, positive self-concept development, drug use and abuse, and the prevention and treatment of illness;

-- understand consumer health and safety, including environmental health;

-- demonstrate basic skills and physical fitness necessary to participate in a variety of conditioning exercises or leisure activities such as sports and dance;

-- plan a personal physical fitness and health program;

-- perform a variety of complex motor activities;

-- demonstrate a variety of basic life-saving activities.

IV. By these actions, the state repeals all current statutory references to required subjects and time allotments for such subjects, while retaining the authority of the State Board of Education to publish in regulation topical areas of knowledge to be offered by all schools as part of their instructional program and to alter such topics as conditions require.

V. Upon passage of necessary legislation, the State Board of Education shall submit to the General Assembly a three-year implementation plan indicating the activities which will be conducted to:

A. develop necessary criteria and regulations for the approval of local district objectives and assessment systems;

B. assist local school districts in establishing objectives consistent with the law;

C. assist local school districts in developing testing and assessment systems consistent with the law;

D. develop data collection, analysis and reporting systems for use by the General Assembly, Governor and State Board of Education for evaluating the status of educational achievement in the State of Illinois;

E. encourage and assist local school districts in their pursuit of excellence in education.

VI. In establishing these areas of primary responsibility for the schools, the state recognizes that schools contribute significantly to many other facets of the students' development, including their social and emotional growth, their acquisition of attitudes and behaviors, and their preparation for future responsibilities such as employment, citizenship and parenthood. However, these and other similar functions of the schools are necessarily shared with the students' families, communities and other social institutions.

VII. The state also recognizes that many additional areas of learning, such as foreign language study, and levels of complexity within areas of learning, such as advanced mathematics, represent highly desirable areas of activity for schools and therefore urges local school districts to not restrict themselves to defining their goals solely in terms of basic state requirements. Although these statements of student learning represent what the state deems essential, and are therefore required for all, the state remains committed to assisting local districts in the pursuit of excellence.

VIII. Finally, in establishing the areas of primary responsibility for its schools, the state recognizes that vocational and special education present necessary delivery systems for providing special learning environments and teaching techniques designed to assist individual students in their educational development.

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

Understanding of and Employment with the Elderly (20.0602) Companion to the Aged Program

Prepared by
Joyce Crouse
Eastern Illinois University
Charlotte Carr
Illinois State University

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

UNDERSTANDING OF AND EMPLOYMENT WITH THE ELDERLY

CONTENT OUTLINE

GRADE 12

YEAR COURSE

This course continues the learning begun in Interacting with the Elderly, either as an in school course or in an older persons service program through a cooperative education agreement. Emphasis is placed on career opportunities in gerontology, communication skills, human relations and service needs of elder persons. Consider working with home occupation teacher to provide patient with training.

Broad Areas of Emphasis

Career opportunities in the field of Gerontology.
What older people are like.
Communication skills.
Human relations skills.
Skills needed for specific jobs.

1. Opportunities and information about jobs and education for a career in Gerontology.

   Job titles-
   - Activity Aide
   - Activity Director
   - Recreation Director
   - Outreach Worker
   - Rehabilitation Aide
   - Information & Referral Aide
   - Homemaker
   - Home Health Aide
   - Chore Service Worker
   - Travel and Tour Guide
   - Senior Nutrition Program Aide
   - Senior Nutrition Site Manager
   - Companion to an Older Person
   - Senior Day Care Aide
   - Respite Care Aide
   - Transportation Driver
   - Nursing Home Aide (Not nurse aide)

2. Identify employers in Gerontology services.
   - Senior Nutrition Programs
   - Retirement Centers
   - Nursing Homes
   - Housing Complexes
   - Religious and Fraternal Organizations
   - City Park and Recreation Districts
   - Travel & Tour Agencies
   - Senior Day Care Center

Respite Care Centers
Senior Citizens Centers
Community Colleges
Area Agencies on Aging
Community Action Programs
Hospital & Health Care Agencies
Private Profit Vendors of In-House Care
Self-Employed Service

3. Identify jobs available with further training.

4. Identify places to obtain further training.

5. Identify professional organizations and their role in the "Aging Network."

6. Prepare a resume, letter of application and a sample of a application form.

7. What older people are like:
   Older people are individuals.
   Impact of loss of independence due to illness or injury.

8. Human relations skills needed in working in the field of gerontology.
   a. Attitudes toward older people.
   b. Empathy versus sympathy for older people who have disabilities.
   c. Interaction skills when the person is older than you.
   d. Working with volunteers.

9. Communication skills -
   with older client -- terms of address and hearing problems
   client's family and friends
   other agency and resource personnel
   medical personnel
   employer/supervisor/employee

10. Characteristics of a good employee.
    Responsible for self-supervision.
    trust
    honesty
    integrity

11. General job skills.
    a. Maintaining service unit records.
    b. Handling emergencies.
    c. Working with volunteers.
    d. Liability and legal concerns. (Note to teacher: Get legal advice from school legal counsel.)

12. Specific job skills.
    a. Homemaker
       1. Helping clients with routine personal care tasks such as teeth brushing, grooming, and eating.
       2. Basic light housekeeping tasks.
          a. Making beds.
          b. Dusting, vacuuming, and home care.
          c. Kitchen care.
       3. Meal preparation.
          a. normal diets
          b. Special diet information
       4. Laundry skills.

b. Activity aide, activity director or recreation aide.
   1. Educational Activities
      a. Health related
      b. General knowledge
      c. Specific skill or knowledge centered
   2. Recreation Activities - planning and organizing for:
      a. Physical development and maintenance including fitness, exercise, dancing, and a range of motions.
      b. Craft activities.
      c. Use of community recreation resources.
      d. Reading, drama, and music activity.

c. Chore services worker
   1. Household care tasks such as washing windows, mopping floors, and other heavy cleaning tasks.
   2. Minor home repairs
   3. Yard care.
   4. Snow removal.

d. Day care or respite care aide.

e. Senior nutrition site or site supervisor.
   1. Reservation procedures.
   2. Daily receipts procedures.
   3. Preparating and serving of food.
   4. Using volunteers as resources.
   5. Basic kitchen sanitation.
   6. Community public relations.

f. Outreach worker and information and referral.

g. Rehabilitation aide.

h. Home health aid/hursing home aide.

i. Travel and tour guide assistant.

j. Companion to an older personl

k. Transportation aide.

13. Self directed plan and organization for work
    a. In a group setting
    b. Determination of work to be done, when and how

14. Regulations and requirements
    a. Safety
    b. Sanitation

15. Evaluation of client progress.

16. Evaluation of work.

FHA ACTIVITIES

1. Adopt a grandparent.

2. Collect newspaper and magazine articles about older people and older people service groups.

3. Invite 3 or 4 older people for the local senior center to talk about how they feel about growing older, what they like to do, and their skills and activities.

4. Have each student do an oral history tape on interaction with a grandparent, other older relative, or an older friend.

5. Develop a senior services chore day in cooperation with a local senior services program.

6. Invite a group of older people to teach a craft skill to the group.

Topic: Feelings About Older People

Objectives: Identify and Clarify Feelings About Older People

Activity: HOW DO I FEEL

Check the colum which most nearly expresses your feelings about the statement.

	STRONGLY AGREE	AGREE	NO FEELING	DISAGREE	STRONGLY DISAGREE
1. People start getting old somewhere between 40 and 55 years of age.					
2. Parents don't really understand what its like to be a high school aged person.					
3. Grandparents are usually a bore.					
4. When I'm middle-aged, I want my parents to live with me.					
5. Old people talk too much about the "good old days."					
6. Homes for the elderly are depressing.					
7. I'd rather die before I get old.					
8. Middle-aged people should support their parents financially if it is needed.					
9. Old people need to be treated like children sometimes.					
10. Elderly men are very often "dirty old men."					
11. Women past the menopause should have no interest in sex.					
12. Old people have old-fashioned ideas.					
13. Old people would rather live with other old people than with younger people.					
14. Old people can't learn new things.					
15. I would rather live with people my own age than w/older people.					
16. Older people belong in nursing homes.					
17. I don't like to think about becoming old.					
18. Old people are forgetful.					
19. The elderly are not useful to our society.					
20. If people start saving their money when they're young, they won't need help from their families or the government when they are old.					

	STRONGLY AGREE	AGREE	NO FEELING	DISAGREE	STRONGLY DISAGREE
21. I don't like the thought of paying taxes which help support old people.					
22. Old people with physical problems are repulsive.					
23. I don't like having to do the same thing every day.					
24. Old people like to do the same thing every day.					
25. Old people are too religious in their views.					
26. Families, not the government, should take care of their older members.					
27. Older people should live in their own house or apartment, if possible, as long as they can.					
28. Older people like to babysit with their grandchildren all the time.					
29. Dating is ridiculous if you are over 65.					
30. People over age 70 should not be allowed to drive a car.					

Topic: Understanding how older people feel

Objective: Recognize that older people have feelings as do people at all other stages in the life cycle.

Activiity: LISTENING FOR FEELINGS OF OLDER PEOPLE

Teacher's Instructions

Students may work individually or in small groups to identify the possible feeling that an older person might be experiencing in the given situation. After studetns have completed their papers, give the class an opportunity to share their responses, and why they selected their particular response. Additional information on the use of this teaching can be found in the book, Parent Effectiveness Training, by Dr. Thomas Gordon. This bood is available in most bood stores.

LISTENING FOR FEELINGS OF OLDER PEOPLE

Read the situation listed in the left hand column. In the right hand column, write down the way that you think the people in the situation are feeling.

SITUATION	PERSON IS FEELING
1. Grandmother is talking on the phone to her granddaughter. She says, "Why don't you come to see me anymore? It's only a few miles and you haven't been here for a week."	
2. Mr. Jones is in the hospital and is gravely ill. Mrs. Jones is talking to the nurse, "But he needs me here. You don't take care of him right."	
3. Mother is talking to her married daughter on the phone. The daughter has just asked her to babysit. "No, I'm sorry--I can't keep Mellissa tomorrow. I have to meet with the Major's Council on Aging."	
4. Fred, a retired person is at the board meeting of the county senior citizens group. At the last meeting the group voted to develop and implement a new program. Fred was not asked to be on the committee. Fred said, "But I don't like this	

SITUATION	PERSON IS FEELING
4. continued idea. You all never do anything right. You should have . . ."	
5. Ben is almost completely deaf. He has always liked to hear the news on the radio, but can no longer hear it. His wife is trying to write the news down as they listen. She is unable to write fast enough. Ben picks up the radio and throws it at her and yells, "Why can't you keep up? What's the matter with you?"	
6. Helen planned to go to Europe for an extended trip even before she retired three years ago. Two weeks before she was scheduled to leave, she broke her ankle. She tells her friend, "Well, I just told the doctor to patch me up so I can go. I might not have this opportunity again." Her friend says, "You're crazy."	
7. A year ago Mary was widowed after 47 years of marriage. Her friend has just invited Mary to play bridge with her, her husband and a male friend of her husband's. Mary says, "Oh, no, I can't. Why, I haven't done anything like that in years!"	
8. Tom and Virginia have been active in the Senior Citizen's Center programs. Both are widowed and have been seeing quite a lot of each other. They have decided to get married and Tom has just told his son of his decision. The son indicated he is opposed to the idea and tells Tom, "You are too old to think about things like that." Tom turns away in silence.	
9. Ms. Brown, a widow who had lived in her house alone had a stroke four weeks ago. She is in the hospital. The doctor has just told her that she can't go live along any more. Her children live in another state and she doesn't have very much money.	

SITUATION	PERSON IS FEELING
10. Ms. Brown (see 9. on the page before) is used to making her own decisions about what she will have for dinner, when she goes to bed, and how she spends her time. She has to make some decisions about where she will live now that she can no longer live alone. a. How do you think she will feel if she goes to live with her children? b. How do you think she will feel if she chooses to live in a nursing home? c. How do you think she will feel if she goes back to her home with a person living with her who is paid to care for her? d. How do you think her children feel?	

Topic: ATTITUDES AND FEELINGS ABOUT OTHER PEOPLE

Objective: IDENTIFY AND CLARIFY ATTITUDES AND FEELINGS ABOUT OLDER PEOPLE

Activity: OPEN-END STATEMENTS

The following open-end statements may be used to stimulate class discussion or may serve as pre/post evaluation instrument to determine attitude change of students after completing this unit.

WHAT DO I THINK

Complete the following statements:

1. What I like most about being young is
2. What bothers me most about getting old is
3. Old age begins at _____ because
4. The good things about getting old are
5. What bothers me most about older people is
6. I think a way to prepare for old age includes
7. When I retire from a job, I'll
8. When I'm a grandparent, I'll be different than my grandparents because
9. Home for the elderly is
10. What I don't like about helping sick people is

Topic: Behavior Expectations For Older People

Objective: Understanding and Clarifying Stereotyped Concepts Related to Age and Appropriate Behaviors.

Activity: AGE-RELATED BEHAVIOR

Teacher's Instruction

Have the students complete the following "fill in the blank" statements using a specific age or an age-range that each feels would best complete the sentence. Use these as a basis for class discussion asking students what their answers are and why they feel as they do about the particular behavior they think is appropriate at the age specified.

HOW OLD IS THE RIGHT AGE

Complete each statement by filling in the blank with the age (or age-range) you feel is appropriate for the suggested behavior.

Example:
The age at which a person should develop an interest in a hobby they want to do when they are old is _____.

1. The best age for a man to marry is _____.
2. The best age for a woman to marry is _____.
3. The age at which a woman looks her best is _____.
4. The "prime of life" for a man is _____.
5. A person would be ready to retire from work at age _____.
6. The best age for a woman to have her last child is _____.
7. A man should settle on a career or job by age _____.
8. The best age for people to become grandparents is _____.
9. An "old" person is one who is about _____.
10. The best age for people to take up quiet hobbies is _____.

Topic: Understanding the Handicapped Older Person

Objective: Identify problems that older handicapped persons experience as they go about their daily life activities.

Activity: SIMULATION

The following activities can provide an opportunity for students to develop some understanding of the problems experienced by older persons with handicaps. Students can work in pairs or small groups.

1. Blindness or Partial Blindness--Use a gauze or double layer of cheese cloth blindfold to simulate vision impairment. Students should try to accomplish normally simple tasks such as
   a. Threading a needle.
   b. Reading the newspaper.
   c. Writing on unlined paper.
   d. Putting on lipstick.
   e. Feeding oneself some food such as apple sauce, cottage cheese, pudding, or cream soup.
   f. Holding a piece of raw meat or poultry.
   g. Using a screwdriver to put a screw into a soft block of wood.

2. Arthritis--Have the student wear tight rubber gloves and then wrap elastic bandages around the wrists and hands to simulate this crippling disease. The student will feel the loss of tactile ability, and after a short time, the aching of joints simulating arthritis is noticable. Have the student attempt some common activities such as
   a. Threading a needle.
   b. Picking up small items from a table top.
   c. Grasping something fairly heavy for a long period of time.
   d. Laying out a piece of a pattern on fabric.
   e. Cutting with scissors.
   f. Feeding oneslef some food such as applesauce, cottage cheese, pudding, or cream soup.
   g. Using a screwdriver to put a screw into a soft block of wood.

   This activity should not be continued for a long period of time due to circulation cutoff created by the elastic bandages.

   NOTE: This activity slows circulation and should only involve healthy students. Anyone with known circulatory problems, such as diabetes, should not be permitted to participate.

3. Stroke--To simulate immobility of a stroke patient, require students to sit completely still for a period of time such as three minutes. During this period of time, the student is not permitted perform the slightest body movement. An alternate situation would be to place the stroke victim in a wheel chair and instruct him that one entire side of his body is paralyzed, and he is to fuction using the "good" side of his body to accomplish specific tasks such as
   a. Moving from one place to another in the wheelchair.
   b. Washing face.
   c. Putting on a sweater or jacket.

   Use one large or two smaller magazines as a splint. Use elastic bandages to wrap around the arm and hand. (If a student is right handed, splint the right arm and hand; if left handed, splint the left arm and hand.) Then have them attempt activities such as

a. Washing their faces.
b. Going to the bathroom.
c. Feeding themselves.
d. Putting on a jacket or sweater.
e. Hammering a nail in a small block of wood.
f. Combing their hair.
g. Putting on make-up.
h. Using a curling iron on their hair.

4. Wheelchair Patient-- Have students use a wheelchair and pretend that they can not walk as they try to accomplish typical daily activities necessary to care for oneslef at home such as
   a. Going to the bathroon.
   b. Setting the table.
   c. Washing dishes.
   d. Getting from the wheelchair into bed, or to another chair or a couch.

5. Broken Leg--Using crutches, have students use only one leg and attempt the following routine daily activities.
   a. Go to the bathroon.
   b. Set the table.
   c. Wash dishes.
   d. Empty wastebasket.
   e. Dust furniture.
   f. Going through a closed door with out help from anyone.

6. Bedridden Patient--Have students take turns giving and receiving nursing care as the bed patient and the geriatric worker. Have them attend to one another's personal grooming needs such as
   a. Tooth brushing
   b. Bed bath
   c. Combing hair
   d. Feeding.

   Point out the patient's loss of privacy and his compulsory dependence on others to perform simple, routine grooming tasks. A resource person such as a registered nurse, licensed practical nurse, or nurse's aide might then demonstrate the proper techniques for bathing, lifting, dressing, and feeding patients.

7. Prejudice--Arbitrarily pick several members of the class to be "aged", possibly the five oldest class members. Have the other students treat these "aged" people as confused, useless, weak individuals in specific situations. For example, use kitchen facilities and instruct the other actors to continually tell the "aged" that they are incapable of certain kitchen tasks, that they are wrong about the amounts of ingredients in a recipe, that they are too slow to be permitted to complete certain tasks. Discuss the simulated situations with the entire class following the completion of the role play situation in terms of feelings of the "aged" participants.

Topic: Rights and Feelings of Older People

Objective: Develop awareness of feelings and problems experienced by older people who must rely on caregivers.

Activity: ROLE PLAYING

ROLE PLAYING

Directions: Everyone chooses or is assigned an incident to act out and the number of people they will need to complete it.

Person 1 is an aide in a nursing home -- Person 2 is a patient.

1. Person 1 feeds person 2 as though you were on a tight schedule and had five more people to feed in ten minutes.

   Both people are residents in a nursing home. (Use a chair as the pretend commode.)

2. Person 1 use the commode sitting in the middle of the room while your roommate, person 2, watches.

3. The door of person 1's (nursing home patient) room is left wide open as person 2 and 3 (nursing home aids) are undressing him to ready him for bed.

4. Person 1 (nursing home resident) is found wet. Person 2 (nurse or nurse's aide) says, "You naughty person! If you do that again, I'll spank your bottom!"

5. Person 1 (nursing home resident) is found wet. Person 2 (nurse or nurse's aide) says, "You naughty person! If you do that again, I'll spank your bottom!"

6. Person 1 (nursing home resident) is talking loud. Person 2 (nurse's aide) tells him to "hush!"

7. Person 1 (nurse's aide) assists person 2 (patient) out of bed and to breakfast table.--doesn't wash face or hands--doesn't brush hair--Doesn't brush teeth even after meal.

7. Person 1 (nurse's aide) takes person 2 (nursing home resident) who is dressed only in backless hospital gown, down the hall for his shower.

DISCUSSION

1. If certain situations were not chosen discuss reasons why they were not chosen.

2. After each individual acts out his part in the chosen situation, have him discuss how he felt and then how a resident would feel in the same situation.

3. Why do these incidents happen?

4. Is there anything they can do to end these type of happenings?

Topic: Attitudes and feelings about nursing home residents

Objective: Identify and clarify feelings about nursing home residents

Activity: Attitude checklist

	STRONGLY AGREE	AGREE	NO FEELINGS	DISAGREE	STRONGLY DISAGREE
1. If I worked in a nursing home, my favorite type of resident would be one who needed no assistance.					
2. Nursing home residents are useless.					
3. Old people need to be treated like children sometimes.					
4. Nursing home residents have no interest in sex.					
5. The nursing home resident's happiness is dependent on the family.					
6. Nursing home residents like being called by their first names and other "pet" names or nicknames.					
7. Nursing home residents like to have everything done for them.					
8. People go to nursing homes because nobody cares about them.					
9. All nursing home residents must participate in the activity program.					
10. Trying to rehabilitate nursing home residents is a waste of time.					
11. Most nursing home residents are in the nursing home because of severe health problems.					
12. Nursing home personnel do not care about older people.					

Topic: Understanding one's own aging

Objective: Develop awareness that growing older happens to everyone

Activity: Future autobiography

Ask the students to write an autobiography projecting themselves into the future. (Have them select some age between 60 and 90 years of age.) They are to consider roles they may play at that future date such as husband, grandmother, father, retired businessman; life style; leisure activities, and disabilities and/or limitations that might be experienced at that stage in life. Family members should be included in the account keeping in mind that everyone will be older. This activity may serve to motivate students to begin to consider their own aging.

Addendum to 1982 Illinois Vocational Home Economics Curriculum Guide

Use of Educational Computers

Prepared by
Mildred B. Griggs
University of Illinois

Developed Under a Grant from the
Illinois State Board of Education/
Department of Adult, Vocational and
Technical Education
1984

Project Staff

Co-Directors:	Charlotte P. Carr, Illinois State University Mildred B. Griggs, University of Illinois
Consultants:	Betty J. Church, Bradley University Dorothy Keenan, Southern Illinois University Barbara Owens, Eastern Illinois University Marian Swisher, Western Illinois University
State Home Economics Consultants:	Susan P. Burge, Illinois State Board of Education Catherine A. Carter, Illinois State Board of Education

Contents

Educational Use of Computers

Computers can be used for instructional and record-keeping purposes.

Instructional use of computers - Computer assisted instruction

1. Drills to faster memorization and repetition of content — e.g., measurements, abbreviations
2. Testing for placement and grading purposes
    a. Multiple-choice items
    b. True-false items
    c. Matching items
    d. Short answer/fill in the blank
3. Student directed instruction - review of content previously taught, enrichment for students needing additional help
4. Direct teaching - discovery, application and synthesis of content — e.g., dietary analysis, cost of loans
5. Individualized instruction

Record-keeping capabilities of computers

1. Inventory of supplies, books, equipment, facilities
2. Record of service contracts on equipment and services performed
3. Bookkeeping for department budget
4. Record of student tests, laboratory and homework scores/ computing student grades
5. Lists and mailing labs for correspondence with parents, publishing companies, businesses and industries
6. Maintain address file of former students for follow-up studies
7. Maintain a file of present and potential Advisory Committee members
8. Record minutes of meetings
9. Maintain HERO program records/work experience sites, evaluated information, training plans, etc.
10. Test files

FACTORS TO CONSIDER IN SELECTING A COMPUTER
FOR VOCATIONAL AND PRACTICAL ARTS EDUCATION

1. Will you be doing word processing? If so, choose a computer which will display 80 characters per line, e.g. the Heath/Zenith Stand-alone computer. You can get by with 64 characters per line, e.g. the Radio Shack Model III. Do not select a computer with 40 characters per line, e.g. the Apple II, unless you are prepared to spend more money to increase the line width. Few printed documents have 40 or fewer characters in each line, and if your computer won't display a full line, it is difficult to read. All of the computers listed above can display capital and lower case letters. This capability is also necessary for useful word processing.

2. Do you want color? Color costs money, and good color costs much money. The Apple II and the Radio Shack Color Computer are examples of relatively inexpensive computers with color capability.

3. Do you want to display graphics on the screen? The coarser the graphics, the lower the price. By using a plotter, instead of displaying the graphics on the screen, you can get fine graphics, but you will lose speed. The Apple II has reasonably good graphics, the Commodore Pet has less useful graphics, and the Radio Shack Model III graphics are poorer yet.

4. What is the availability and cost of service? The greatest number of service centers, the quickest time for repair and the lowest cost of service seem to be associated with Radio Shack. All of the computers mentioned this far seem to require service infrequently, though the earlier models of most of them had problems. New computers, as with any other new, complex product, frequently have teething problems.

5. Do you need to connect several computers together? If so, how easily and inexpensively can this be done? Radio Shack computers need only simple wiring to connect as many as 50 computers together on the same site. Other computers cost much more to interconnect. All computers listed above can communicate over telephone lines, though some of them require additional equipment to do this.

6. What is the availability of programs which might be useful to me? Radio Shack and Apple have more programs available than any other inexpensive computers. You will need to check to see what is available for your field. The Illinois Vocational Curriculum Center, Springfield, Illinois has collected a wide collection of programs for Apple, Radio Shack and Commodore. Some are available for loan. Microcomputer programs for home economics developed under the auspices of ISBE/DAVTE are available for purchase from the Curriculum Publications Clearinghouse, Western Illinois University, Macomb, Illinois 61455, 1-800-322-3705 in Illinois, 309-298-1917 outside Illinois).

7. What computers are owned by my friends and other people with whom I will want to exchange programs? It is easy to exchange cassettes and diskettes from identical computers. It is more difficult to exchange from one model to another made by the same manufacturer. It is still more difficult to exchange programs among computers made by different manufacturers. This difficulty is eased somewhat if the different computers use a similar operating system.

Suggested Priority Order for Acquiring Equipment

1. Computer, keyboard, and monitor (a screen which resembles a TV screen). This is the absolute minimum you will need; when you turn off the computer, the program you have been writing will disappear. Cost $400-$1500.

2. Storage (cassette recorder or disk drive), which will enable you to save programs until you need them again, or to exchange them with friends. Cost $50-1000.

3. Printer, to list your programs and to print out computations, letters, etc. Cost $300-2000. The more nearly the print looks like an IBM Selectric, the more expensive the printer.

4. Additional memory. Cost $20-1000. This lets you write longer programs.

5. Additional storage. Cost $300-5000. This lets you save more and longer programs.

6. Plotter, digitizer, modem and other specialized equipment.

All equipment manufacturers provide a discount to educational institutions, but you may have to ask for it. Typical discounts are 20-30%.

Acquiring Software

In the long run, the cost of buying commercial software (programs which tell the computer what to do) will probably exceed the cost of the equipment (hardware). If you write your own programs, and if you are not paid for your time, the cost is quite low. Many programs are available free or on an exchange basis from other educational institutions. Computer magazines and many computer books list programs which can be copied legally. There is a temptation to copy commercial programs, but this is illegal, and copyright infringement penalties are severe.

Courseware is a specialized form of software which is designed for teaching purposes. It is also available inexpensively from other educators. Courseware from commercial sources is rarely designed for use in vocational or practical arts education, except in mathematics, typing and electronics. However, many programs which are designed for business and industry are useful in courses such as drafting, accounting, agriculture, marketing, health occupations, machine shop, and printing. If you are willing and able to revise programs to fit your own computer, you will learn much during the revision process and you will have access to much more material than if you sought only programs designed for your machine.

How Can You Learn To Use A Computer?

It is a general rule that it is very easy to learn how to use computer programs written by other people. Next most difficult is to learn how to revise existing programs to fit your needs. It is more difficult to learn

how to write programs, but even this final step is not very difficult if you are learning how to write programs of the type you are likely to be using. You can be writing simple programs after one or two weeks of instruction.

In order to write programs, you need to learn a new vocabulary (language) of about 100 words and you need to learn how your computer uses this language. All microcomputers use a language named BASIC. Many other languages are also available, but BASIC is probably the one you will want to learn first. Courses in BASIC are available from most community colleges and local computer stores.

If you can touch type you can write programs more rapidly on a computer, but "hunt and peck" methods work on a computer just as they do on a typewriter.

SOFTWARE EVALUATION FORM

Program Title: _____ Cost: _____

Hardware or System Requirements: _____

Type of Media: 5" Floppy Disk
Cassette Tape

Skill/Ability/Grade Level: _____

Producer/Date: _____

Type of Program: Tutorial (Developing Concepts)
Drill and Practice
Entertainment
Other. Specify _____

Content Area: _____

PART B: INSTRUCTIONAL PURPOSE	YES	NO
1. Are instructional objectives specified?	O	O
2. Are the objectives stated clearly?	O	O
3. Do the objectives fit in with the existing educational objectives established by the teacher, school district or program?	O	O
4. Can the objectives be easily adapted for specific individualized instructional purposes?	O	O
5. Are the objectives significant or extensive enough to warrant the expenditure of funds?	O	O
6. Have the objectives been developed to meet the needs of specific student populations? If "yes," specify population: _____	O	O

PART C: CONTENTS	YES	NO
1. Is the content appropriate for meeting the specified objectives?	O	O
2. Is the content appropriate to the students' maturational level(s)?	O	O
3. Is the length of the program appropriate to the students' maturational level(s)?	O	O
4. Is the content motivating, interesting, attention-getting and enjoyable?	O	O
5. Is the content attractive, colorful, and otherwise aesthetically pleasing?	O	O
6. Does the content foster positive attitudes, values and behaviors towards others?	O	O
7. Is the content free of any race, culture or sex bias?	O	O

PART D: FEATURES	YES	NO
1. Is there a record keeping system which records students' responses?	O	O
2. Does the program provide for the assessment of and programming for instructional needs of students?	O	O
3. Does the program provide practice for remediation purposes?	O	O
4. Is the program adaptable for small groups as well as individual use?	O	O
5. Can the program be run with or without sound, depending on the requirements of the instructional setting?	O	O
6. Will the program load, boot and/or run without extensive user knowledge of the use of microcomputers?	O	O

PART E: DOCUMENTATION	YES	NO
1. Are the program authors/developers identified?	O	O
2. Are the authors respected educators?	O	O
3. Do the authors have the knowledge and expertise in the area for which the program has been developed?	O	O
4. Is there an instructional manual accompanying the program?	O	O
5. Does the manual provide information relating to:		
A. Field testing?	O	O
B. Program objectives?	O	O
C. How the program works?	O	O
D. Suggestions for helping students with the program?	O	O
E. Possible follow-up activities?	O	O

PART F: OTHER CONSIDERATIONS	YES	NO
1. Are purchasing procedures clearly stated?	O	O
2. Are all guarantees and warranties specified in writing?	O	O
3. Is the making of a backup disk permitted?	O	O
4. Are the materials of a high quality and well-labeled?	O	O
5. Is the program adequately packaged for storage and durability?	O	O

	YES	NO
8. Is this program a more effective way of presenting material than has been traditionally offered to the students?	O	O
9. Are all of the instructions accessible within the program as needed?	O	O
10. Are the program instructions easy to follow without extensive referral to the manual?	O	O
11. Is information provided on how to "escape" from the program at any time?	O	O
12. Is the vocabulary appropriate for the intended user's reading ability?	O	O

SUMMARY

OVERALL QUALITY:

- O Excellent
- O Very Good
- O Average
- O Fair
- O Poor

RECOMMENDATION:

- O Purchase immediately
- O High priority as funds become available
- O Do not purchase
- O Other. Specify _____

SIGNATURE OF EVALUATOR: _____ DATE OF REVIEW: _____

BASIC Beginners All-Purpose Symbolic Instruction Code. It is an easy to learn, and easy to use language. Very popular with microcomputer users.

CAI Computer Assisted Instruction, a means to set the computer to interact as a teacher on a particular topic.

COMPUTER A general purpose machine for computing that contains a CPU, memory, i/o devices, cables, and cabinet. The machine does many other tasks otherwise done by hand.

CPU Central Processing Unit, the heart of the computer system used for setting, decoding, and executing instructions. It incorporates the control unit, the arithmetic logic unit, and related facilities.

CRT Cathode Ray Tube, a television tube used to display pictures or characters used frequently with computer terminals.

DATA Information that is read from or written into a computer system for processin

DATA BASE Systematic way of storing data files for later processing.

DEBUGGING The means for correcting errors in computer programs.

DOS Disk Operating System, the controlling computer system that controls the disk system of the computer and sometimes other computer environmental factors.

FLOPPY DISK Mass storage device that is flexible like a soft record, yet stores a large amount of data or programs.

HARD COPY Computer output which is printed on paper.

HARDWARE The computer components including all its nuts, bolts, cable, chips, CPU, printer, disk drives, printer, etc.

KEYBOARD A collection of keys and buttons similar to a typewriter with added keys to control the functions of a terminal/or computer. Information is entered into the computer directly through a keyboard.

MEMORY The storage area in the computer for the program and data, the RAM and ROM chips.

MICROCOMPUTER Complete computer system which includes the CPU, memory, i/o interfaces, power supply, and some means to display the information on a screen.

PERIPHERAL A device that is attached to the computer such as a CRT, disk drive, or printer. It is a device that is not part of the main computer system.

PROGRAM Set of instructions that tell the computer what to do in what order. User types in the way certain things are to be done by the computer to generate the final results in "reports" or other user oriented uses.

RAM Random Access Memory. Memory that is used for programs and data. Varies per each application. Program is lost when computer power is turned off.

ROM Read Only Memory. A program that is written into memory only once at the manufacturer and cannot be changed.

SOFTWARE The computer programs that run on the computer.

Sources of Home Economics Related Computer Software

Catalogues:

1. EMC Publishing/Changing Times Education Service, 300 York Avenue, St. Paul, Minnesota 55101 (1-800-328-1452).
   Programs on nutrition, budgeting, personal finance, contemporary living and personal consumerism.

2. 83-84 Home Economics: Food and Nutrition. Learning Seed Company, 21250 Andover, Kildeer, Illinois 60047.

3. Orange Juice Software Systems, 222 S. Washington Avenue, New Richmond, Wisconsin 54017 (1-715-246-3588).
   Programs on design elements and principles, pattern selection and use, and sodium analysis. A free 10 day previewing trial on all programs.

4. Dietary Data Analysis, P.O. Box 26, Hamburg, New Jersey 07419 (1-201-764-6677).
   Programs are all on food and nutrition.

5. Clo's Line, Software for the Home and Home Economist, Volborg, Montana 59351 (1-406-786-2280).
   Programs in food, nutrition and consumer education.

6. Curriculum Publications Clearinghouse, Western Illinois University, 46 Horrabin Hall, Macomb, Illinois 61455 (1-800-322-3905 toll free in Illinois, or 1-309-298-1917 from outside Illinois).
   Available in inexpensively priced sets which include programs in interior design, nutrition, consumer education, clothing, stain removal, housing, personal budgeting, decision-making, and foods.

7. Microcomputer Educational Programs, Banana Education Software, 3400 Exel Parkway, POB 2868, Toledo, Ohio 43606.
   Programs on consumer education and home safety.

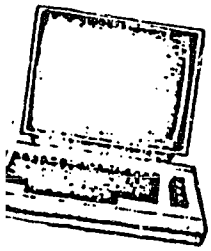
8. Telephone Computer Programs, Cooperative Extension Service, Michigan State University, East Lansing, Michigan 48824.
   Programs on nutrition, food buying and health.

9. Consumer Relations - 3286, Pillsbury Company, Pillsbury Center, Minneapolis, Minnesota 55402.

10. Personal Software, 1330 Bordeaux Drive, Sunnyvale, California 94086.
    Programs on health and drugs.

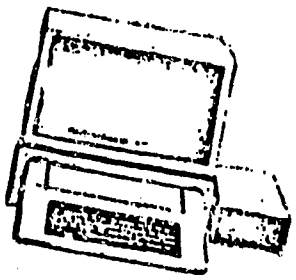
Bibliography of Home Economics Computer Programs:

1. Jeff Lake, Illinois Vocational Curriculum Center, Sangamon State University, E-22, Springfield, Illinois 62708 (217-786-6375).
   Some programs available for loan; others can be previewed at the center.



COMPUTER SOFTWARE FOR HOME ECONOMICS

Compiled by Tena Matas, MacArthur High School, Decatur, Illinois



November, 1983

SOFTWARE FOR HOME ECONOMICS

SUBJECT AREA: ADULT LIVING

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Alcohol	Teck Associates P.O. Box 8732	Determines the physiological effects of alcohol on the body based on information supplied by the user concerning body weight, kind of alcohol, number of drinks, and hours spent drinking.	Apple	19.95
Animal Reproduction	Carolina Biological Supply Co. 2700 York Road Burlington, NC 27215	Covers development of sperm, egg, and fertilization.	Apple; 48K	28.00
Birth Control	Personal Software 1330 Bordeaux Drive Sunnyvale, California 94086	Includes an audio cassette discussion regarding conception and methods of birth control plus computer exercises consisting of questions generated from material presented.	Apple	19.95
Career Scan IV	Careers, Inc. 1211 10th Street, SW Post Office Box 135 Largo, Florida 33540	A career search program. Helps user find occupations related to school subjects, abilities, training or education, lifestyles, values, and job characteristics.	Apple; 48K	169.00
Drinking and Drugs	Personal Software 1330 Bordeaux Drive Sunnyvale, California	Program includes an audio cassette which explains the physical, mental, and emotional effects of alcohol and drugs. Student then loads the program and takes the quizzes which test [illegible] alcohol and drug knowledge.	Apple; 16K	19.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
First Day on The Job	MCE, Inc. 157 S. Kalamazoo Mall Kalamazoo, MI 49007	Designed to provide information about how to prepare for and what to expect the first day on the job. The first part is instructional and the second includes a simulation using that knowledge.	Apple	44.95 17.50 backup
Forming Positive Behavior	PLATO Educational Courseware Control Data Pub. Co. P.O. Box 261127 San Diego, CA 92126	A comprehensive program presented in two segments: Recognizing Self-Defeating Behavior and Working Toward Winning Behavior. It includes such topics as taking a look at yourself, how to make choices, prices, and rewards for behavior, and getting along with others.	Apple	?
The Graduation Dilemma	Career Development Software, Inc. 207 Evergreen Drive Vancouver, WA 98661	Simulation of critical decisions confronting the student or employee.	Apple	150.00
Growing Up	Personal Software 1330 Bordeaux Drive Sunnyvale, California 94086	Concerns changes in adolescent behavior and their causes. Package includes an audio cassette which explains puberty, contraception, sex and love, the risk of pregnancy, and sexual desire. In conjunction with the audio tape is a program which generates questions concerning the above-mentioned topics.	Apple; 16K	19.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Health Awareness Game	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	This program includes information on coronary risk, why do you smoke, exercise and weight, life expectancy, and lifestyles. Order # HRM 511 00 MSA.	Apple; 48K	99.00
I Can--Stress Management Options	Micro Power & Light Co. 12820 Hillcrest Road Suite 224 Dallas, Texas 75230	Program promotes an awareness of the kinds of options available to all of us, as we try to better manage stress in our lives.	Apple	29.95
The Micro Art of Interviewing	Career Development Software, Inc. 207 Evergreen Drive Vancouver, WA 98661	Designed for students ready to enter job market.	Apple	150.00
Relationship Life Dynamic	Avant Garde Creations, P.O. Box 30161 Eugene, Oregon 97403	Purpose of this program is to make you aware of how well you handle your relationship with others. Program begins with a game called, "Will you get off in time?" You are riding in an elevator; to the left of the elevator are relationship problems, and to the right are solutions. The elevator goes up and down five floors. The floor you try to get off on will be the one containing the solution.	Apple; 48K	19.95
Talking About Sex	Personal Software 1330 Bordeaux Drive Sunnyvale, California 94086	Program provides information regarding myths and misconceptions concerning sex is especially helpful to those individuals experienc-	Apple; Integer	19.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
The Age of Responsibility	Aquarius Publishing Co. P.O. Box 128 Indian Rocks Beach FL 33535	Helps students explore the age of responsibility: voting, drinking, driving and many other privileges.	Apple	29.95

SOFTWARE FOR HOME ECONOMICS

SUBJECT AREA: CLOTHING AND TEXTILES

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Calculating Yardage for Making Curtains or Pleated Draperies	Carolyn S. Carter/ Caroline Daigle Knapp Hall, LSU Baton Rouge, LA	To help individuals purchase the correct amount of fabric.	TRS-80	
Microcomputer Applications In Vocational Education	Western Illinois Univ. Curriculum Publications Clearinghouse Macomb, Ill 61455	This program contains an Assortment of Home Ec programs. Programs in this area include: Fiber Care Program, Clothing Figure Analysis, Stain Removal.	Apple; 48K	8.25

SUBJECT AREA: CONSUMER EDUCATION

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Advertising Techniques	Educational Audio Visuals, Inc. Pleasantville, NY 10570	Describes four techniques: Join the Crowd, Decide for Yourself, Remember Me and Act Now. Instruction plus examples are used. At the is a mastery quiz. Catalog #N2AD 1647	Apple; 32K	25.00
Analyzing an Ad	Teaching Aids, Inc. P. O. Box 1798 Costa Mesa, CA 92626	Explore dynamics and mechanics of advertising and learn to avoid exploitation. Order # MCE-AP2221D.	Apple; 48K	49.00 19.50 (backu
Becoming an Informed Shopper	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Learn to make informed decisions about shopping. A simulation provides practice in applying these skills to furnish an apartment. Order #MCE-AP162.	Apple; 48K	49.50 19.50 (backu
Budgeting	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	First part teaches through case study. Second part is a simulation where students work on a budget for a real-life problem. Order #CT98948S.	Apple; 48K	172.00
Budgeting	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Tutorial on budgeting. Gives students practice at putting budgets together. Order #EMC-95931 for disk & EMC 96911 for backup. and disk.		55.00 25.00(backup)

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Budgeting On Microcomputer	EMC Publishing Changing Times Educ. Service 300 York Avenue St. Paul, Minn. 55101	Teaches facts of budgeting and contains a simulation game. Order #98947F for disk or #98947FB includes disk and backup disk.	Apple; 48K	98.00 144.00(disk + backup
Budgeting Simulation	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	While student works on an annual budget, real-life problems are presented for the student to solve. EMC-93933 for disk or EMC-96913 for disk + backup.	Apple	55.00 80.00(disk + backup
Buying Wisely	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Allows students to determine items to be purchased based on individual living situations. MCE-AP161D backup and #MCE-AP161 for disk.	Apple; 48K	49.50 19.50(backup
Comparative Buying	Interpretive Education Inc. 157 S. Kalamazoo Mall P.O. Box 3176 Kalamazoo, MI49003-3176	Explains the concepts of comparative buying. Provides learner with interactive experiences in determining items to purchase.	Apple; 48K	225.00(disk+ backup
Cash Versus Credit Buying	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Helps students see real cost of items bought by credit vs cash. Order #MCE-AP164 for disk and MCE-AP164D for backup.	Apple; 48K	49.50 19.50(backup
Consumer Education I Traveling and Shopping Vocabulary	Teaching Aids, Inc. Post Office Box 1798 Costa Mesa, CA 92626	2 disk program to help with vocabulary in reading and interpreting ads, labels, maps, coupons. Also helps one identify sales items and understand unit pricing.	Apple; TRS-80	79.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Comsumer Education II Banking Policies & Contracts	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Contains receiving & spending, checking in & out, saving for security, income tax, insurance, real estate.	Apple & TRS-80	79.95
Consumer Series: Decision Making Consumerism & You Consumer Help Understanding Labels The Law Reading Advertisements Shopping in a Comparative Way	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	Helps student obtain skills in each of the listed areas. Order #PREADCSS for Apple and #PRETDCSS for TRS-80.	Apple; 48K TRS-80	29.95 ea. 189.00 series
Daily Living Skills Classified Ads & Telephone Directories	Encyclopoedia Britannica Educ. Corp. 425 North Michigan Ave. Chicago, Ill 60611	Instructions on using & understanding ads & the Yellow Pages.	Apple; 48K	74.00
Daily Living Skills Prescription Medicine & Product Skills	Encyclopoedia Britannica Educ. Corp. 425 North Michigan Ave. Chicago, Illinois 60611	Deal with labels & appropriate consumer information.	Apple; 48K	74.00
Decision Making	Aquarius Publishers, Inc. P.O. Box 128 Indian Rocks Beach, FL 33535	Learn how to make rational decisions and learn how to apply the decision making system to the consumer world.	Apple	29.95
Electric Bill	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Learn how bills are computed and how to read the bill. Order #HRM-534-00MSA for	Apple; 48K TRS-80; 32K	25.00

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Energy Miser	McKilligan Supply Corp. 435 Main Street Johnson City, NY 13790	Complete heating/cooling analysis of home or office. Will calculate heat loss due to doors, windows, and etc. Order # E0342	Apple	29.95
Enterprise Sandwich Shops: A Marketing Simulation	Gregg/McGraw-Hill P.O. Box 996 Norcross, GA 30091	Simulation using a fictional company of sandwich shops to stimulate student interest in marketing, retailing, management, and entrepreneurship.	Apple	199.00
Financing A Car	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Teaches about credit and purchasing. Order #MCE-AP231 for disk and MCE-AP231D for backup.	Apple; 48K	49.50 19.50(backup)
Heat Loss	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	Learn to conserve energy while practicing arithmetic, measurement, estimation, geometry & problem solving. Order #SB 1089	Apple; 48K Printer necessary	39.00
Home Energy Savings	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Game: Task is to make sensible investments that will conserve energy in the home. Order #HRM53200MSA for Apple and HRM53200MST3 for TRS-80.	Apple; 48K TRS-80	35.00
Income Meets Expenses	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Student completes a budget using a worksheet. Learn what to do if expenses exceed income. Order # MCE-AP110 for disk and MCE-AP110D for backup.	Apple; 48K	374.00 132.00(backup)

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Managing Your Time	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Teaches time management. Order #MCE-AP211 for disk #MCE-AP211D for backup.	Apple; 48K	49.50 19.50(backup)
Money Decisions	Meta Technoligies Corp 26111 Brush Avenue Euclid, Ohio 44132	34 of the most frequently needed business and financial problem solvers.	Apple	199.95
Math Around the House	Queue 5 Chapel Hill Drive Fairfield, CT 06432	Apply basic skills to realistic situations such as cooking, papering, buying carpet, and etc.	Apple TRS-80	29.95
Math for Everyday Living	Educational Record Sales 157 Chambers Street New York, NY 10007	2 disks that include making change, working with sales slips, unit pricing, computing gas mileage, figuring sales tax, working with wages, earning overtime, earning with piecework, working with time, and understanding paycheck.	Apple	85.00
Micro Survival Math	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	Gives 4 simulations--student must make judgment using math: Smart Shopper Marathon, Hot Dog Stand, Travel Agent Contest, Foreman's Assistant. Order #SB1084--Commodore SB963--Apple, SB965 TRS-80.	Apple; 32K TRS-80 Commodore 64	50.00
Microcomputer Applications in Vocational Education--Home Economics	Curriculum Publications Clearinghouse Western Illinois Univ. Macomb, Ill. 61455	Program contains programs in various areas of home economics. Included in this area are: Decision Analysis, Consumer Math I & II Home Loan Analysis, Personal Budget, Utilities.	Apple; 48K	8.25

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Personal Consumerism	Aquarius Publishers, Inc. P.O. Box 128 Indian Rocks Beach, FL 33535	Provides information on the following: Buying a used car, reading ads, consumerism, shopping in a comparative way, laws, consumer fraud, consumer helps, and labels. Contains 8 disks.	Apple	235.00
Personal Checking for the Microcomputer	C. W. Publications 1313 5th Avenue Sterling, IL 61081	Teaches students to maintain their checking accounts. Order #1070	Apple	45.00
Profit and Loss: A Microcomputer Simulation	McGraw-Hill P.O. Box 996 Norcross, GA. 30091	Simulation that provides introduction to economic concepts.	Apple	99.00
Personal Investing for the Microcomputer	C. W. Publications 1313 5th Avenue Sterling, IL 61081	Teaches principles of investing. Each student analyzes economic news & makes investment decisions. Order #1090.	Apple	45.00
Programs for Home	McKilligan Supply Corp. 435 Main Street Johnson City, NY 13790	A series of comprehensive programs--recipes, bill paying, filing tax records, diet planning, gas mileage, lawn and plant care, supermarket list, currency conversions, health records, inventory and more. Order #E0348.	Apple	24.95
Shopping By Mail & In Person	Teaching Aids, Inc. P. O. Box 1798 Costa Mesa, CA 92626	2 disks to help develop shopping skills. Learning about catalogs, locating items in index, paying for order, budgets, using consumer reference, reading ads and deciding what to buy. HP5619AD-Apple, HP5619TD-TRS-80	Apple TRS-80	79.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Survival Mathematics	Careers, Inc. 1211 10th Street, SW P.O. Box 135 Largo, Florida 33540	Daily skills are introduced and practiced. 3 discs include: Real cost, Understanding checkbooks, Fractions percents, and decimals. Series ADS314--Apple, TDS 314 TRS-80	Apple TRS-80	85.00 Series 29.95 Ea.
Understanding Sales Buying	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Discover how to tell a real sale and determine how much they save. Order #MCE-AP163 for disk and MCE-APa63D for backup.	Apple; 48K	49.50 19.50(backup)
Work Series	Aquarius Publishers, Inc. P.O. Box 128 Indian Rocks Beach, FL 33535	6 disks that include: How to get and hold a job, the job and you, self-concept and your work part-time jobs, new on the job, interviewing.	Apple	175.00 series 29.95 ea
You Can Bank On It	Teaching Aids, Inc. P.O. Box 1798 Costa Mesa, CA 92626	Shows how to open accounts, execute paperwork, maintain accounts, practice in check writing and keeping account balanced. Order # MCE-AP-120. 6 disks.	Apple, 48K	313.50

SOFTWARE FOR HOME ECONOMICS

SUBJECT AREA: FOODS AND NUTRITION

TITLE	DISTRIBUTOR	DESCRIPTION	COMPUTER MODEL	PRICE
Apple Menu Cookbook	Progressive Software P.O. Box 237 Plymouth Meeting, PA 19462	Allows storage and retrieval of recipes.	Apple; 16K	19.95
Computing Your Way to Better Nutrition	Career Aids, Inc. 8950 Lurline Ave, Dept NE Chatsworth, CA 91311	Program gives information on four topics: Cereals-compares sugar content; Chemicals-lesson & quiz; Fast foods-nutrients on graph; Vitamins-lesson & quiz. Order #SB1035VM--Disk w/backup and guide.	Apple; 32K	35.00
Dietcalc	Savant Software PO Box 42888, Suite 164 Houston, Texas 77042	Program helps with diet planning. It allows a person to enter information about himself and his diet. The program will then calculate number of calories necessary to maintain weight or lose weight. It also personalizes dietary needs for that person.	Apple	16.95
Diet Analysis	Apple Computer Inc. 10260 Bandley Drive Cupertino, Calif 95014	Allows one to analyze ones diet for carbohydrates, calories, protein, vitamins, minerals, saturated fats, fiber and etc. This can be done daily, weekly or monthly. Package includes disk w/backup, manual, and diet analysis composition disk.	Apple; 48K	45.00

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Dietician	Dietware P.O. Box 503 Spring, Texas 77373	Allows one to make menues with specified content of calories, carbohydrates, proteins, fats, cholesterol, and sodium.	Apple	59.95
Digestion	J&S Software 140 Reid Avenue Port Washington, N.Y. 11050	Questions dealing with nutrients, digestion in simple organisms and in man.	48K	25.50
Dinner on a Disk	The Computerized Shopper 683 Towle Way Palo Alto, Calif 94306	Automated cookbook	Apple II	14.95
Eat Smart	The Pillsbury Company 3286 Pillsbury Center Minneapolis, Minn. 55402	Analyzes diet for one day. Adjusts RDA's for age, sex, pregnancy, and nursing.	Apple II, 48K	19.75
Elementary Volume 13--Nutrition (MECC)	Scholastic Inc. 904 Sylvan Avenue Englewood Cliffs, New Jersey 07632	Contains three programs: 1) Calorie bank--animation demonstrating need to choose foods wisely. 2) Nutrients--Analyzes diet for a day. 3)Calories--Compares caloric intake with exercise to indicate weight gain or loss.	Apple; 32K	39.95
Fast Food Micro-Guide	Learning Seed 21250 Andover Kildeer, Il 60047	Student selects meal from menu of well known restaurants. Computer prints out nutritional analysis.	Apple II TRS-80	36.00

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Feeling Great	Career Aids, Inc. 8950 Lurline Ave. Dept HE Chatsworth, CA 91311	Designed to raise health consciousness of students. Color graphics. Information includes energy needs, heart attacks, nutrients, and toxicity. 1 disk w/backup and guide.	Apple; 32K	35.00
Health-Aide	Knossos, Inc. 422 Redwood Avenue Corte Madera, Calif. 94925	Comprehensive analysis of ones health. Analyzes diet and helps menu planning. Allows storage of 10 items of personal information such as blood pressure.	Apple II; 48K	79.00
Labels & More Labels	Teaching Aids, Inc. Post Office Box 1798 Costa Mesa, CA 92626	Information about unit and label prices, nutritional information, poison warnings, directions for machines, analyzing instructions & etc. Order # for Apple HP-5618AD, TRS-80 HP-5618TD	Apple II TRS-80	79.95
Menu II	C & H Video 110 West Caracas Avenue Hershey, PA. 17033	Lets you store your favor-recipes, write daily menus for up to a two-week period, and generate shopping lists.	Apple II; 48K	39.95
Menu Planner	Progressive Software P.O. Box 273 Plymouth Meeting, PA 19462	Has many types of dishes, counts calories for each entry.	Apple; 16K	19.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Micro Cookbook	Career Aids, Inc. 8950 Lurline Avenue Chatsworth, CA 91311	Cookbook allows you to add or delete recipes. Tell it what foods you have and what you like, and it will select recipes.	Apple; 48K	40.00
Microcomputer Applications in Vocational Education	Curriculum Publications Clearinghouse Western Illinois Univ. Macomb, Ill 61455	An assortment of home ec programs. Programs in foods are Pounds Away, Nutrition Analysis, Measurement Conversion, and Recipe Analysis.	Apple; 48K	8.25
Nutri-Calc	PCD Systems, Inc. P.O. Box 143 Penn Yan, New York 14527	Designed to meet the needs of the dietician. Contains information on 730 common foods. Allows one to add information or combine foods to make calculations less complex.	Apple	350.00
Nutrition	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	There are two parts to this program: 1) teaches about food groups, RDA, nutrition, calorie intake, labels. 2) allows students to construct menu.	Apple; 48K	172.00
Nutrition--A Balanced Diet	Educational Audio Visual Inc. Pleasantville, NY 10570	Analyzes various daily diets and compares them to RDA's.	Apple TRS-80	31.50 33.50
Nutrition Simulation	Computer Courseware Services 300 York Avenue St. Paul, Minn 55101	This simulation allows students to construct a menu for several days. The computer will rate the menu according to nutritional facts.	Apple II	55.00

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
Nutritionist	N-Squared Computing Analytic Software 5318 Forest Ridge Road Silverton, Oregon 97381	Analyzes diet and helps plan diets to meet individual needs	Apple	145.00
The Pizza Program	Gourmet Software 671 Eden Ave San Jose, Calif 95117	You select foods you enjoy from pre-selected food groups, indicating how often you like to eat them. The program plans menus for you and will also print a shopping list putting foods in order for your favorite store.	Apple	36.50
Recipe File	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	Allows you to store recipes and will convert recipes to feed larger or smaller groups. Catalog # MWRFA--disk w/backup and guide.	AppleII; 32K	29.95
Snackmaster--A Nibbler's Dilemma	Learning Seed 21250 Andover Kildeer, IL 60047	Game in which player selects between-meal treats. Ten selections that total less than 1200 calories is a winning play.	Apple II TRS-80	36.00
Shopping List	Progressive Software P.O. Box 273 Plymouth Meeting, PA 19462	Creates a list that can be saved and used to create a shopping list.	Apple; 16K	19.95
Supermarket Shopping Organizer--Grocery List	Computerized Management Systems 1039-S Cadiz Drive Simi, Calif 93065	Scan a file of 500 items selected by user. Will print a list organized by department.	Apple Printer needed	24.95

TITLE	DISTRIBUTOR	DESCRIPTION	MODEL	PRICE
The Menu	C & H Video 110 West Caracas Ave. Hershey, PA 17033	Plans menus and writes shopping lists. Stores 399 recipes.	Apple; 48K Printer needed	39.95
Watch Your Calories	Career Aids, Inc. 8950 Lurline Ave. Chatsworth, CA 91311	Helps students analyze caloric value of foods. Order # SB1038VM	TRS-80; 16K	19.95
Weight Control and Nutrition	Educational Audio Visuals Inc. Pleasantville, NY 10570	Assists in creating balanced diets to help improve fitness.	Texas Inst.	60.00
What Did You Eat Yesterday	Learning Seed 21250 Andover Kildeer, IL 60047	Diet analysis.	Apple II TRS-80	39.00

BIBLIOGRAPHY*

Dillion, Nancy F. Computer software for home & home economics, 1983 update. Strictly Software, 1983.

Dillion, Nancy F. Computer software for home & home economics, apple edition. Strictly Software, 1982.

_____. Software reviews. Forecast. Scholastic, Inc, September 1983.

* Sources also included many advertisement publications from a variety of companies selling computer software.

Strictly Software
4321 N 39th Street
Phoenix, Arizona 85018