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ABSTRACT

In this monograph, the implementation of consumer education topics into the science curriculum of secondary schools is advocated. Not only is the need for such activities explained, but several suggested instructional topics are provided. One area of recommended study is that of product comparison. A model outline of operation is provided, along with an example involving comparisons of shampoos. (CP)

CONSUMER EDUCATION IN THE SCIENCE CURRICULUM

NEW JERSEY

CENTER FOR CONSUMER EDUCATION SERVICES

A Service of the State Department of Education, Division of Vocational Education, in Cooperation with the Edison Township Board of Education

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CONSUMER EDUCATION
IN THE
SCIENCE CURRICULUM

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PREFACE

The Center for Consumer Education Services has been established to develop, promote and implement an interdisciplinary approach to consumer education. One of the means selected to achieve this goal is the development and publication of a series of monographs. This publication is the fourth in this series.

We are grateful to Dr. Kowalski for his efforts in preparing this publication. This consumer approach to the traditional science program is our first effort in providing teachers with specific labels - such as "science teacher" - ideas and suggestions concerning a restructuring of accepted curriculum patterns. Future publications in this series will be devoted to other academic areas of the curriculum.

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Although consumer education is presently enjoying a strong position in the educational hierarchy, little emphasis is being placed on "consumer science." As consumer education is considered as an interdisciplinary activity, science is often times excluded because "science teachers are so busy teaching subject matter that they cannot relate to consumerism." This reaction is unfortunate and highly inaccurate, because any competent science teacher is constantly attempting to make subject matter relevant and pertinent. And what better way to make it more meaningful than to relate to consumer affairs? If "consumer education is education for living," then science may rightfully be considered as "the prime essential of life." And if consumer education must therefore be a very practical kind of education, how can science teachers continue to teach in ways which fail to bring practicality to science education. All too often science students ask "Why do I have to learn that, I don't need it!!" This is especially true of terminal students who need to be better prepared for the cold,

hard world into which they will suddenly, sooner or later, be thrust. It is also true, in many cases, of college-bound students who consider science as foundational course material.

Many educators are constantly and diligently seeking innovative ideas and new approaches to teaching subject matter. Unfortunately, their efforts are focused on the subject matter, or course content, rather than on the students. Better that they seek new ways to stimulate students in the creation or expansion of their desire to learn. We suggest, strongly, that if teachers will make existing courses relevant, then students will react positively. But how does one make a science course relevant for the non-academic student? It is difficult enough to maintain the interest of those who may need or want the science courses - but to those who neither need nor want it, it is almost impossible.

Consumer science, however, becomes the answer to many of the problems suggested above. It is an excellent way to make science relevant, practical, and interesting. It can stimulate the terminal student because he can make use of it without the need for detailed theory. By the same token it can be used to teach theory and principles to academic students so that it may be understood easily and applied immediately. In either approach consumer science is and must be focused on the student.

In making decisions in science, there are invariably

rights and wrongs. But as consumers make decisions, there may well be no real right or wrong for the simple reason that the product must suit the needs of the buyer. Those needs may well vary from one individual to another. What must be emphasized in consumer science is how to evaluate products in light of needs. The goal should be to instigate awareness and relate to self through logical principles of evaluation. Here every consumer uses the so-called scientific method without really being aware of what it is. Scientific method itself need not be taught, but an investigative technique for evaluation of and comparison of consumer commodities is necessary, no matter what it is called. What better way to do this than to analyze, compare and rate in a laboratory program, with each student or team doing his own investigation. From the data which is collected, the student draws conclusions and rates products accordingly. His results are "right" for him, based upon his criteria, his resources, and his capabilities. Here the instructor should not impose his judgement, but instead respect the value system of the individual and merely guide him to sound decisions.

The average consumer usually learns by trial and error, seldom analyzing a product before buying it. He may buy impulsively, he may be motivated by the advertising claims, by the packaging, or simply the price. Yet the teacher cannot impose his own standards upon the class or the individual, he simply sives guidance. By doing, trying, and experiment-

ing; insights into products, their intent, their uses, and their results may be motivated. Now the learner can begin to evaluate for himself.

For example; why do we buy toothpaste? Not only which brand do we buy, but what is it to be used for? A toothpaste is a mild abrasive, is this good or bad? Too much abrasion wears away the enamel over a period of time. Will toothpaste clean as well without abrasives? A toothpaste may contain a bleach as a whitener. Is bleaching of enamel dangerous? Better still, not all teeth are white to begin with. As a matter of fact there are practically no pure white teeth; instead they are shades of white, cream color, or yellow. What about the taste of toothpaste? Can you describe the taste of yours? How does it compare to others? How does it help to determine which one we buy? Do they contain soaps or detergents? Do they foam and how much? Is a mouth wash necessary after brushing? How should the teeth and mouth, yes the mouth, be properly brushed? With these few questions, now explain why you use the one that you use. To answer these questions, an interesting laboratory exercise can be developed which allows students to seek answers to these and others.

Once this new course or approach is developed, its practicality and popularity will spread like wildfire throughout the school. But if it is a voluntary elective, it may need initial appeal such as a new,meaningful title. With the direction toward an interdisciplinary approach, it

may be quite logical in this testing program to utilize all sciences in one composite without teaching principles directly. It may not be essential to know the classical "iodine-clock reaction" and "principles of titration," but to simply use each so that the results may be collected and interpreted into these logical conclusions to arrive at ratings.

All students are exposed to the marketplace, but the "marketplace" normally disappears when students enter the classroom. But the marketplace and its products, advertising and its claims, can come into the classroom - vivid, alive, and ready to be analyzed, criticized, and rated in the consumer approach to science. The stockroom can become a modified department store. This all sounds well and good, but how does the teacher implement this idea.

Teachers generally are hard pressed for time, because of other responsibilities and preoccupation with their own subject matter. They need new ideas. They must have sympathy and understanding for the student and a willingness to try new approaches and techniques. They must be able to approach consumer science from the needs of students rather than self-interests; although if the teacher's interests are similar, it helps. The course itself, even if outlined in detail, is only as effective as the teacher makes it. Because this approach to teaching science is different and out of the ordinary when compared to the so-called traditional, the teacher must develop a commitment to consumer

education. Consumer science cannot and should not be taught as a "one shot" course or as a "fill in" for scheduling purposes.

It will take time for the teacher to acquire background and experience to do an adequate job. But a start must be made. The initial attempt and effort must be exerted. The teacher's vitality, personality, and his expertise are important, so that first rate faculty should be used. The teacher must have the ability to motivate, to capture enthusiasm, and to relate to consumer science activities.

Curricula need to be developed, programs organized, courses written. These sometimes are formidable tasks, but already some schools are deeply involved and committed to the task. Two young teachers at Paramus, New Jersey, are already teaching a Consumer Life Science course, developed by them and the author of this paper. The course has been developed on paper and now is in the process of being implemented. Student interest is overwhelming, parents enthusiasm is encouraging, and the school's administration excited.

Almost a decade ago Montclair State College visualized the need for a practical approach to science elective courses. The author was asked to satisfy this need and the course entitled "Consumer Science" was born. Today it is a three credit science elective taught each semester. The course is so popular that three times as many students are turned away than can be admitted to the class. One student

commented that he had been trying for three years to take the course and finally got into the class in his senior year. He, as many others, describe this course as one of the most meaningful, practical, and useful courses he has taken.

A teacher at New Providence High School is incorporating consumer science into his classes. His interest developed when he was a graduate student at Montclair State. His master's project was the development of a consumer oriented science program.

There may be other programs in process or in incubation stages. These programs may need help or ideas, i.e.what to teach and perhaps how? There are presently ~~no~~ text books available in these areas but publishers are now considering two works by this author. Perhaps in the very near future a text book guide will be available.

In the meantime, some of the things now being done may help to act as a potential stimulus for teachers ready to embark on consumer science.

There is general agreement that certain areas of science must be included in any attempt to develop consumer science. Often times these areas may be tedious and boring to the student as well as to the teacher. For example the teaching of the metric system often seems unrelated and meaningless to the students. However, the need to learn this system becomes urgent when students are made aware that; the rest of the world, except for the few English

speaking countries, now use the metric system of weights and measures; the President and Congress have already signed legislation to convert the United States from the English system to the metric; the education of the public is already in process, other than in school, with metric and English units appearing on cans of groceries. What better way then, to teach metric units, but by relating to the supermarket?

Density may be taught in relation to value and quantity of consumer commodities bought. When buying soap, for example, does one really get more when he gets four bars of one brand for the price of three of another? Is there as much soap in that "floating bar" as in others more difficult to find in the bath tub?

While involving the student in the use of the metric system, a determination of deceptive packaging may be introduced. Here measurements of actual versus apparent volume may be determined. Does one really get as much as it appears he is getting? Measuring the actual volume content is no problem, but the apparent volume is a little more involved. But with a bottle, for example, by filling it, capping it and then by collecting water of displacement (the law of displacement taught with meaning and practicality) a ratio between apparent and actual volume - thus deception factor - may be easily calculated. There are no laws at present to govern this deception factor but some States do recommend that it should not exceed 1:5, or in other words the public

should not be deceived by more than 50% beyond actual content. Yet there is another deceptive factor to be considered - the size of the cap on the bottle or the size of the box the product comes in.

Every student should be using toothpaste; but why does he, or why should he, use certain kinds and avoid others? Most people are introduced to toothpaste in one of two ways, either it is the brand used at home and therefore available for him, or he is attracted by advertising. Especially effective are advertisements such as; "kissing fresh"; the health approach or "guards against cavities"; "66% fewer cavities"; and "makes your teeth look and feel so clean you would almost think you stepped out of a dentist chair." But in advertising, is there ever reference to the amount or degree of abrasive ingredients or the extent of bleach content?

How many students, as well as parents and teachers, really know how to brush their teeth? Almost every one knows that one should not brush across the teeth. At one time students were taught to brush in a circle, then up and down. Actually one should always brush away from the gums in a downward direction only on the upper teeth and an upward direction only on the bottom teeth. This removes and prevents forcing lodged food under the gums or wedging it between teeth. Experimentation on the teeth obviously should not be done in class, but by using glass microscope slides, (glass being only slightly harder than tooth enamel)

the scratching effect may be determined easily. There are toothpastes that actually make deep scratches on the glass. The amount of bleaching effect may be dramatically shown on poster paper. The degrees of each may be compared, and the toothpastes rated. Do not overlook the personal preference factor as well. This project becomes interesting because the students invariably have never really compared the taste of the various brands. Students may literally taste each, and rub a small amount between their fingers. (There is some danger here, as some toothpastes taste pretty good and may be consumed by the students.) The acid or base content is also significant and may be found by a simple use of pH paper. The pH scale can be introduced to show neutrality, acid and base, and increasing acidity and basicity farther away from 7. The pH of the mouth can then be compared to the toothpastes and recommendations made.

Various commodities can be tested in as much depth as the toothpaste experiment outlined above. Suggestions for laboratory ventures in the classroom follow:

> Evaluation of cigarettes by setting up a smoking device hooked to an aspirator to collect tars, to determine quantity of smoke produced, to collect products upon the filter, mouth end and tobacco end. By collecting tars from smoked cigarettes, tests can be devised to determine their effects upon the skin of small animals such as mice, or upon the germination of seeds. By collecting the smoke in a plastic bag and placing a small plant in the bag, students can determine the effects of the smoke on that plant.
>
> Vitamins as a part of the diet can be compared in various foods. A comparison of the vitamin C content of fresh and canned juices is quite dramatic.

Vitamin charts may be used to determine the amounts and types of vitamins present in various food and to determine a balanced diet.

Utilization of vitamins by the body may also be determined.

Calorie content of food determined by heat output is quite effective for demonstrating what calorie count means.

An analysis of various foods can easily be accomplished; such as the water content of various meats, specifically hamburger and hot dogs (the staple of the teenage diet). An interesting comparison can be made between butter and margarine.

Detergents can be tested to determine biodegradeability. The effects of dishwashing detergents upon the housewife's lovely soft hands may be easily tested by determining harshness. Residue on clothing from clothes washing detergents have a distinctive effect upon baby's tender skin. The harshness and residue can be determined by a pH test after rinsing. Sudsing qualities may easily be compared by students determining quantity of detergent needed to produce a "head" of suds. These may be compared to the so-called "non-sudsing" and "low-sudsing" products.

Simple blood typing can be done.

A urinalysis can be done.

Oil content of foods may be shown.

Flammability of aerosol products is an effective demonstration.

Various common narcotics such as; caffeine in coffee, tea, and colas, may be shown and compared. The effects of these products upon the body may be obvious from a pulse rate determination before and after consumption.

Adhesive strips may be compared, utilizing some of the television gimmicks such as holding an egg in boiling water. Students can readily compare the "ouchless" effect and even irritation upon the skin.

Cellophane tapes are abundant on the market. Compare them for holding, strength, tearing, ease of writing upon, and water and heat resistance.

Test mouth washes for bactericidal effect. Compare their pH to your own mouth.

Test various antibacterial or germicidal household cleaners.

Compare the effectiveness of deodorants and antiperspirants for the job intended.

Compare freezing points of antifreeze; pour points of motor oil, and test protection properties of oil additives.

Test and compare various textiles, natural as well as synthetic. Determine their flammability and other characteristics.

Compare antiacids with attention to buffering effect.

Compare the size and bounce of official league balls to those sold over the counter.

It soon becomes obvious that there is an untold list of products that can be tested in a science laboratory. One major problem, however, is the usual lack of equipment and facilities. Fortunately, the practical approach utilizes minimal equipment and many home exercises can be conducted using kitchen utensils and glassware. Students can test and experiment on their own. They can visit supermarkets to compare prices, sizes, packages and shopping appeal. Newspaper, magazine, radio and television advertising may be observed, analyzed and where specific claims are made, can actually be tested. Some television commercials even give good ideas for potential laboratory exercises, such as; water running on a bar of soap to determine how long it takes for a hole to wear through; adhesive tape with an egg stuck to it, immersed in hot water; a wet paper towel with

the weight of a cup of coffee on it. Innovative ideas develop from the originality of the teacher and interest engendered by the student. It is amazing how ingenious students can be when stimulated and motivated, sometimes creating ideas, topics, products and testing approaches.

The intent of this approach to consumer science should be based upon open-ended laboratory evaluations with applications expressed or implied to the individual. The prime motivation is the immediate application for the student, his family, and the teacher. By the basic intent and very nature of the program, it can serve a majority, if not all of the students. As an introductory science course it can become a foundational course to introduce principles and technology, setting the stage for future technical courses. It can help the terminal student prepare for his life functions as a consumer. All students will benefit by receiving an enlightenment into some consumer commodities and buying principles; but more important the process of decision making.

Since as much as 50% of the consumer dollar is controlled, handled, or manipulated by the teenager, directly or indirectly, the need for students being informed is obvious. Until now there has been little real attempt to apprise the young of consumer relationships through a science oriented approach.

To a teenager there is little that is more important, or as important, as those things which relate to him, to his life, and to his physical well-being, growth and maturity.

A program predicated upon the investigation of personally used consumer products will enable the student to realistically relate science principles to everyday life. Emphasis should be placed upon "investigating" a problem, and through testing, accurate observation and analysis of collected data, logical conclusions can be drawn and final ratings made.

To prepare usable materials for a high school class, a basic format is essential.

1. A testable product should be selected with an introduction to the product based, perhaps, upon some well known advertising claims.
2. A discussion of the product and its function as related to the basic science concepts is of utmost importance.
3. A laboratory investigation, gathering of data, an interpretation of data and a drawing of conclusions with a rating should then evolve as a summation of the topic.

Following is a suggested outline which may prove helpful to the science teacher in determining and establishing procedure for a scientific product comparison exercise in a "consumer science" class.

SUGGESTED OUTLINE

A. Product and Use

1. Introduction

a) Advertising phrases
b) Sales pitch

2. Uses of the product

a) How?
b) Why?

3. Where the product is to be used?

   a) Science of its use.
   b) Science of where to be used.

4. Effects of its use.

   a) Normal effects and results.
   b) Side effects.
   c) Potential dangers.

B. In-class Laboratory Investigation

1. Introduction

2. Listing of equipment

3. Procedure

4. Suggested data charts

5. Question pertinent to the lab

6. Laboratory report in outline form

   a) Purpose
   b) Equipment
   c) Procedure
   d) Data
   e) Calculations
   f) Conclusions
   g) Rating
   h) Answers to questions

C. Home investigations

D. Advertising investigation

1. Television
2. Radio
3. Magazines
4. Newspapers
5. Other

E. Supermarket investigation

1. Prices
2. Packages
3. Location

One of the problems which the science teacher may face

in a consumer oriented science program is that of assigning grades to students. With a consumer approach it may be difficult to evaluate student efforts on the traditional basis of academic achievement. Evaluation may better be based on a determination of how well the student can apply his new found knowledge in a practical situation and how impressed he is by the development of a new method of thinking,i.e. a comparison of products based upon data collection techniques.

It is important to remember that from a consumer's point of view, there may not be only one right answer or only one best product for each use. Each consumer has different objectives and goals, as well as different needs. Based on these objectives and needs, the student, as consumer, can collect data and evaluate it accordingly, and determine his "right answer," or "number one" rated product. Student evaluation is accomplished, then, by observing and recording the development of the student and his involvement in the decision making process, rather than on intellectual capabilities which vary innately. The decision making process must be based on sound reasoning related to preset values.

Once the student has reached a decision concerning a product, this decision must be accepted by the teacher, assuming that the decision is based on sound reasoning exhibited in evaluation, ratings and explanations which show clear thinking and an understanding of why these decisions

have been made so conclusively. On some occasions the student will find it almost impossible to reach a final decision because the data may not be pertinent to his objectives. When faced with this situation, the student may return what he believes to be expected as a "right answer" by the teacher. Although this response is not unusual in other courses, here it merely points out that the student understands the teacher's goals and objectives and seems to have no choice but to agree with them. It is the opinion of this writer that a more ideal manner of dealing with student evaluation, would be to put the course on a "pass-fail" basis. Actually all students should become involved with this type learning situation and involvement is essentially guaranteed when interest is engendered by a "livewire" instructor.

SAMPLE UNIT OF INSTRUCTION

Note: In an effort to provide the reader with a detailed plan for executing a unit of instruction in a consumer oriented science course, the sample unit below is included. The reader may wish to refer to the outline presented previously on pages 14 and 15.

UNIT TOPIC: HAIR PREPARATIONS - SHAMPOO

The Product and Its Use:

"A new twist for girls who like to shine," "Leaves hair soft and manageable," "The new look," "The soft look." Today's consumer market exhibits hundreds of shampoos, each claiming to be the best for you. Each claims to be the ideal hair cleaner, with many side benefits. With well over 250 brands to choose from, how does one make a decision? What influences the buyer? Is it advertising, price, color, aroma, performance, or past experience? Why should an individual use shampoo rather than a bar of soap? First, let's take a look at the basic purpose for shampooing hair.

By looking at others, you can notice many hair colors

and textures, The color of hair depends on the amount of pigment it contains (for example black or brown hair) or on the presence of air in the center of the shaft (white hair). Straight hair and curly hair differ in the shape of the shafts; straight being round, curly slightly flattened.

The root of the hair is called a follicle. This follicle is embedded in the skin. The shaft, or the part of the hair outside the skin, is a dead elastic strand which projects outward from the skin. The hairs of the scalp grow continuously for several years. Some hair grows for a short period of time, after which the follicle goes into a resting stage. An example of this would be the hair on your arms or eyelashes and eyebrows. Eventually new hair begins to grow and old hair is shed (drops out). Hair is constantly falling out and being replaced. When the rate of loss exceeds the rate of replacement, balding occurs.

Why do you have to wash your hair? As with other areas of the body, hair accumulates dust and dirt particles from the environment. Dead skin (dandruff) and natural oils, produced in your scalp to keep the hair shaft flexible, also collect dirt and dust, making the appearance of hair unattractive.

The natural oils, Sebum, (produced by Sebaceous Glands in your skin) can make hair dull and greasy looking; certainly not aesthetically appealing. More than likely we have all seen dandruff. Dandruff is flakes of dead scalp which tend to become trapped in the hair, where they also

collect oil from the scalp. While the amount of dandruff may vary from person to person, its existance is quite normal. Dandruff is an esthetic rather than a medical problem, except in a few isolated cases. There is no satisfactory evidence that dandruff is caused by germs, and normal dandruff is not a warning of baldness.

One cannot stop normal or simple dandruff from forming, but it can be kept under control. Any good shampoo used once or twice a week will probably suffice, even if it makes no dandruff-control claims. Daily brushing will also help control simple dandruff. Grandmother's "100 strokes a night" is quite effective.

Dandruff, however, isn't always simple. Abnormal scalp conditions such as seborrheic dermatitis, psoriasis, exema and ringworm are often accompanied by severe dandruff-like symptoms, as well as by redness, itching and other skin changes. Severe dandruff conditions are fairly common. They require medical treatment and should not be treated at home with shampoo.

Now that we have surveyed the problem, let us try to answer one of our previous questions, "Why use a shampoo,why not use a bar of soap?"

Regular soap leaves a residue that is difficult to rinse out (unless you live in an area having very soft water). The main virtue of most shampoos is that their synthetic detergents operate without forming a film in hard water.

As mentioned before, what do you look for in shampoo? Generally, the criteria for shampoo selection include:

1. Cleans hair safely and pleasantly.
2. Cleans without much effort.
3. Avoids leaving hair limp, drab, harsh, sticky or tangled.
4. Has little or no side effects.

Aside from the cosmetic reasons for selecting a shampoo, there are other more practical reasons which should be considered. Does the shampoo come in a glass bottle or jar or is it packaged in a convenient plastic container? A glass container becomes slippery in wet hands. Shattered glass is obviously unsafe and therefore an undesirable trait of some packages. Plastic containers may crack after being dropped, but little safety hazard results.

Have you ever gotten shampoo in your eyes? Then you might expect the manufacturers to include a warning on the label in reference to eye irritation. Consumers Union tested the effect of shampoo on the eyes of rabbits. The researchers placed a small measured amount of each shampoo into one eye of several healthy rabbits, the untreated eye served as a control. The eyes of two groups of rabbits were flushed out. When not washed out, all the shampoos caused some redness, swelling or discharge in the membranes around the eye. These effects were minor and usually cleared up in less than a week. In the case of a few shampoos, however, an irritation of iris and cornea, portions of the eye that are directly involved with vision, were noted to be very unacceptable.

While one cannot be sure that the human eye would react

the same, the tests do show that most shampoos would not seriously harm the eye. But they do point to the necessity of keeping shampoo out of the eyes and of rinsing the eyes promptly if some does get in, to avoid minor irritation.

Now that the reasons for shampooing hair have been surveyed, test several brands and see which would be the most desirable for individual use.

In-class Laboratory Investigation:

"Leaves your hair soft and manageable." "Adds body to your hair." The success of any shampoo is based on how well it rinses out of your hair. Any residue left behind can coat your hair giving a dull, stringy appearance. Many other characteristics may also influence you in your purchase of shampoo.

Equipment:

Beakers, several popular brands of shampoo, locks of hair or a human hair wig or fall, water and a bead or marble.

Procedure:

Place all results in tables

A. Evaluate general characteristics

1. Rate the color of each shampoo as appealing(+), Good (G), unappealing (-).
2. Smell a portion of each shampoo, and rate as above.
3. Rub a small amount of each shampoo between the fingers and compare consistency to the touch.
4. Examine the consistency of the shampoos and record results. (Drop a small bead or marble into the sample.)

5. Read the labels of the container. How much shampoo does the manufacturer recommend? Record amounts.

TABLE NO. 1

BRAND	COLOR	SMELL	CONSISTENCY	MANUFACTURER'S RECOMMENDED AMT.

B. Irritation

Place a small amount of each shampoo on your inner forearm (mark each sample), leave on for about 10 minutes, rinse off with water. Note if any irritation or reddening occurs.

C. Lathering and rinsing

1. Divide the wig, fall or hair samples into portions for each shampoo. On the firmly secured moistened strands of hair, apply a very small amount of shampoo - work into a lather. Record relative ease in obtaining a "rich" lather. Repeat on second group of hair swatches. (Do not rinse this group.)

2. Using a beaker to rinse the hair, measure the amount of water needed to "thoroughly" rinse hair.

3. After several minutes (5 minutes) examine the unrinsed strands of hair. Record your observations.

TABLE NO. 2

BRAND	LATHERING	RINSING	IRRITATION	APPEARANCE OF UNRINSED HAIR

D. Label and container

1. Examine the labels of each shampoo container. Record advertising strengths and weakness.

2. Are the contents of the shampoo listed? Record observations.

3. Warning - for eyes and nasal passages or children included.

4. Directions for use - are they present?

5. Is the bottle glass or plastic? Record.

6. Is the shape of the container convenient for holding securely in wet hands?

TABLE NO. 3

BRAND	LABEL STRENGTHS	WEAKNESS	CONTENTS	WARNING	DIRECTIONS	COMPOSITION	CONT. SHAPE

DISCUSSION QUESTIONS:

Do you think that the odor and color of a shampoo greatly influence the average consumer? Explain your answer.

Why is the consistency of a shampoo important to the economy-wise shopper? Explain.

Why is the degree of rinsing more important than the amount of lather? Explain.

Why is the shape of the shampoo container important to consider when making a purchase?

Why is the material used to make the container also important?